

**AN INTEGRATED FRAMEWORK FOR PERFORMANCE MEASUREMENT
STRATEGIES IN SMALL AND MEDIUM ENTERPRISES: THE CASE OF CAPE
METROPOLE, SOUTH AFRICA**

by

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DECLARATION

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I, Lindiwe Albertina Mabesele, declare that AN INTEGRATED FRAMEWORK FOR PERFORMANCE MEASUREMENT STRATEGIES IN SMALL AND MEDIUM ENTERPRISES: THE CASE OF CAPE METROPOLE, SOUTH AFRICA is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the thesis/dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.



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ABSTRACT

Performance measurement has been in existence and the subject of research for at least two decades. However, it would appear that the Small and Medium Enterprise (SME) sector lags behind other industries in terms of harnessing performance measurement with strategies that call for design skills, such as design thinking. Scholars in developed economies have given only limited attention to the contributing role of design thinking in performance measurement and improvement. Most research in these disciplines focuses primarily on using design thinking during the design phase rather than integrating it throughout the performance measurement processes. However, integrated performance measurement is now receiving increasing attention within the SME context internationally due to the potential benefit of design thinking for strategy. However, while research on performance measurement within South African SMEs is growing, it nevertheless lacks practical perspectives. This is cause for concern, as an absence of knowledge about and understanding of processes followed during performance measurement could deprive the SME sector of the benefit of integrating design thinking for organisation sustainability.

Empirical data were collected from fourteen SMEs using semi-structured interviews, case and documentary analysis and focus group discussions conducted with owner-managers, and analysed. The findings indicate that both contextual and conceptual factors contribute to enterprise performance, and that understanding the processes, performance and execution and tracing their effect on performance measurement are vital. Four process phases of an integrated performance measurement framework emerged from the analysis, namely pre-strategy planning, strategy planning, strategy implementation and post-strategy implementation. These trigger actions which guide and support interaction between leadership and stakeholders and encourage iteration between thinking, trying and the actual discovery of key drivers to monitor, improve and change performance. The findings suggest that the integration of performance measurement is possible with some balanced scorecard and design thinking-related principles engendered in whichever process is deemed natural to configure, improve and evolve by this iteration between thinking and acting. The implications, therefore, include the need for commitment by SMEs to facilitating performance measurement initiatives within their current practices. In addition, the owners or managers and policymakers need to consider ways to assist and play a role in promoting and

enhancing the ability of SMEs in performance measurement integration for sustainability.

Keywords: Balanced Scorecard, Design Thinking, Performance Measurement, SME, Strategy

OKUCATSHANGIWE

Isilinganiso sokusebenza besikhona futhi besiyisihloko yocwaningo okungenani amashumi amabili eminyaka. Kodwa-ke, kuzovela ukuthi umkhakha Wamabhizinisi Amancane Naphakathi (SME) usalela emuva kwezinye izimboni maqondana nokusebenzisa isilinganiso sokusebenza ngamasu adinga amakhono wokuklama, njengokucabanga kokuklama. Izazi emnothweni othuthukile zinikeze ukunakwa okulinganiselwe kuphela endimeni ebambe iqhaza ekucabangeni kokuklama esilinganisweni sokusebenza nokwenza ngcono. Ucwaningo oluningi kulezi zimiso lugxile kakhulu ekusebenziseni ukucabanga kokuklama ngesikhathi sesigaba sokuklama kunokuluhlanganisa phakathi kwezinqubo zokulinganisa ukusebenza.

Kodwa-ke, isilinganiso sokusebenza esihlanganisiwe manje sithola ukunakwa okwandayo ngaphakathi komongo wama-SME emhlabeni jikelele ngenxa yenzuzo engabakhona yokucabanga kokuklama kwesu. Kodwa-ke, ngenkathi ucwaningo lwesilinganiso sokusebenza ngaphakathi kwamaSME aseNingizimu Afrika lukhula, kodwa-ke luswele imibono ebonakalayo. Lokhu kuyimbangela yokukhathazeka, njengoba ukungabi bikho kolwazi nokuqonda izinqubo ezilandelwe ngesikhathi sokulinganisa ukusebenza kungancisha umkhakha wama-SME inzuzo yokuhlanganisa ukucabanga kokuklama ukuze kube nokusimama kwenhlangano.

Ulwazi oluqhamuka ocwaningweni laqoqwa kuma-SME ayishumi nane kusetshenziswa izingxoxo ezihleleke kancane, ukuhlaziywa kwamacala kanye nokuqoshwa kwemibhalo kanye nezingxoxo zamaqembu okugxila ezenziwa nabaphathi babanikazi, kwahlaziywa. Okutholakele kukhombisa ukuthi zombili izinto ezingokomongo nezingokomqondo zinomthelela ekusebenzeni komkhakha wamabhizinisi, nokuthi ukuqonda izinqubo, ukusebenza nokwenziwa kanye nokuthola imiphumela yazo esilinganisweni sokusebenza kubalulekile. Izigaba ezine zenqubo zohlaka lokulinganisa ukusebenza oluhlanganisiwe luvele ekuhlaziyweni, okungukuthi ukuhlela kwangaphambi kwamasu, ukuhlela amasu, ukuqaliswa kwamasu nokuqaliswa kwesu langemva kwesu. Lezi zenzo ezibangela ukuhola nokusekela ukuxhumana phakathi kobuholi kanye nababambiqhaza futhi zikhuthaza ukuphindaphinda kwenqubo phakathi kokucabanga, ukuzama kanye nokutholakala kwangempela kwabashayeli ababalulekile ukuqapha, ukwenza ngcono nokushintsha ukusebenza. Okutholakele kuphakamisa ukuthi ukuhlanganiswa kwesilinganiso sokusebenza kungenzeka ngekhadi lamaphuzu elilinganisiwe kanye nezimiso

ezihlobene nokucabanga ezifakiwe kunoma iyiphi inqubo ethathwa njengeyokwemvelo yokulungisa, ukwenza ngcono nokuguquka ngaloku kuphindaphinda kwenqubo phakathi kokucabanga nokwenza. Imiphumela, ngakho-ke, ifaka isidingo sokuzibophezela kwama-SME ekusizeni izinhlelo zokulinganisa ukusebenza ngokwenziwa kwazo kwamanje. Ngaphezu kwalokho, abanikazi noma abaphathi nabenzi benqubomgomo kudingeka bacabangele izindlela zokusiza nokudlala indima ekukhuthazeni nasekuthuthukiseni ikhono lama-SME ekuhlanganisweni kwesilinganiso sokusebenza ukuze lisimame.

Amagama asemqoka: Ikhadi lamaphuzu elilinganisiwe, Ukucabanga kokuklama, Isilinganiso sokusebenza, Umkhakha Wamabhizinisi Amncane Naphakathi, Isu

ABSTRAK

Prestasiemeting bestaan reeds, en is ook die onderwerp van navorsing, vir minstens twee dekades. Nogtans lyk dit asof die sektor vir Klein en Middelslagondernemings (KMO's) 'n agterstand teenoor ander nywerhede het wat betref die benutting van prestasiemeting met strategieë wat gebruik maak van ontwerpvaardighede soos ontwerpdenke. Navorsers in ontwikkelde ekonomieë het slegs beperkte aandag geskenk aan die bydraende rol van ontwerpdenke in prestasiemeting en -verbetering. Die meeste navorsing in hierdie dissiplines fokus tydens die ontwerpfase hoofsaaklik op die gebruik van ontwerpdenke, in plaas daarvan om dit deurgaans met die prestasie-metingsprosesse te integreer. Geïntegreerde prestasiemeting geniet egter nou toenemende internasionale aandag binne die KMO-konteks, weens die moontlike strategiese voordele van ontwerpdenke. Terwyl navorsing oor prestasiemeting egter in Suid-Afrikaanse KMO's groei, ontbreek daar nogtans praktiese perspektiewe. Dit is kommerwekkend, aangesien 'n gebrek aan kennis oor en begrip van prosesse wat tydens prestasiemeting gevolg word die KMO-sektor kan ontnem van die voordele van geïntegreerde denke vir organisatoriese volhoubaarheid.

Empiriese data is van veertien KMO's ingesamel deur die gebruik van semi-gestruktureerde onderhoude, gevalle- en dokumentêre-ontleding, asook fokusgroepbesprekings wat met eienaarbestuurders gevoer en daarna ontleed is. Die bevindinge dui aan dat beide kontekstuele en konseptuele faktore tot prestasies van 'n onderneming bydra en dat begrip vir die prosesse en werksverrigting, asook die uitvoering en opsporing van die uitwerking daarvan op prestasiemeting, noodsaaklik is. Vier prosedurefasas van 'n geïntegreerde prestasie-metingsraamwerk het uit hierdie ontleding het na vore gekom, naamlik pre-strategiebeplanning, strategiebeplanning, strategie-implementering en post-strategie implementering. Hierdie fases veroorsaak aksies wat interaksie tussen leierskap en belanghebbendes lei en ondersteun, en moedig iterasie tussen denke, strewende en die werklike ontdekking van sleuteldrywers aan om prestasie te monitor, verbeter en verander. Die bevindinge dui daarop dat die integrasie van prestasiemeting moontlik is met 'n tipe gebalanseerde telkaart en sommige ontwerpverwante denkbeginsels wat aangekweek word in watter proses ook al beskou word as die natuurlike om te konfigureer, verbeter en ontwikkel deur hierdie iterasie tussen denke en aksie. Die implikasies sluit dus die behoefte in van 'n onderneming deur KMO's om prestasie-metingsinisiatiewe in hul huidige praktyke te

fasiliteer. Daarbenewens moet die eienaars of bestuurders en beleidmakers oorweging skenk aan maniere om te help en 'n rol te speel in die bevordering en verbetering van KMO's se vermoëns om prestasiemeting vir volhoubaarheid te integreer.

Sleutelwoorde: Gebalanseerde telkaart, ontwerpdenke, prestasiemeting, KMO, strategie

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LIST OF ABBREVIATIONS

BSC	–	Balanced scorecard
CCoC	–	Cape Chamber of Commerce
CMSA	-	Cape Metropole in South Africa
CSF	–	Critical success factor
CRM	–	Customer relationship management
DT	–	Design thinking
DTI	–	Department of Trade and Industry
FCB CfE/RI	–	False Bay College Centre for Entrepreneurship and Rapid Incubator
GDP	–	Gross Domestic Product
GEM	–	Global entrepreneurship monitor
HBR	–	Harvard Business Review
IC	–	Intellectual Capital
ISO	–	International Standards Organisation
KPA	–	Key Performance Area
KPI	–	Key Performance Indicator
NDP	–	National Development Plan
NGO	-	Non-Government Organisation
NSB Act	–	National Small Business Act
OECD	–	Organisation for Economic Co-operation and Development
POPI Act	–	Protection of Personal Information (POPI) Act
PMBOK	–	Performance Measurement Body of Knowledge
Q1 or Q4	–	Quarter 1 (January – March) or Quarter 4 (October – December)
SA	–	South Africa
SEDA	–	Small Enterprise Development Agency
SME	–	Small medium enterprise
UK	–	United Kingdom
UNISA	–	University of South Africa
US	–	United States

LIST OF DEFINITIONS

Balanced scorecard: A strategic management system, developed by Kaplan and Norton (1992) based on a method for alignment of organisational activities to strategy, measurement and monitoring of performance (financial and non-financial) of short- or long-term strategic goals (Balanced Scorecard Institute, 2017: Online; Kaplan & Norton, 2015).

Design thinking: A customer-centred process that encourages a culture of a collaborative effort with various useful metrics. It uses design principles for solving complex problems and is recognised for its ability to help an enterprise identify growth opportunities and unlock innovation for improved enterprises and financial performance (Follett & Treseler, 2017; Brown & Martin, 2015; Brown, 2008).

Integrated PM framework: A logical structure integrating various systems and processes to classify and organise complex organisational performance measurement information (Author's own, based on the results of this study).

Performance as a term is about focusing on the enterprise as a whole system including factors such as culture, mission, work-flow, processes and events, goals, environment, knowledge, and skills (individuals or groups) all working together to produce something that is valuable to the client and outputs to fulfil its goals and objectives (Darus, Yunus & Rahman, 2017:164; Ates, Garengo, Cocca & Bititci, 2013; Barreiros, 2013:4; Dudley, 2010).

Performance measurement (PM) as a process, is associated with methods or systems to solve general problems by financial and non-financial measures from four perspectives to measure business performance devoid of the systems to adopt and challenges related to structure (Kaplan & Norton, 2015).

Performance measurement system (PMS): A set of performance measures used to determine the efficiency, effectiveness or both of an existing system, or to compare competing alternative systems (Tundys & Wiśniewski, 2018:7).

SMEs: Refers to small and medium enterprises. They vary in size and are often defined according to their turnover and number of employees. The National Small Business Act (NSB) No 102 of 1996 (South Africa, 1996) and Amendment Act of 2003 (South Africa, 2003), 2004 (South Africa, 2004) and 2019 (South Africa, 2019a) subdivide these enterprises into small, micro and medium categories.

Strategy: It is a management technique to give an enterprise direction and refers to holistic actions that are tailored to actualising the future and achievement of objectives (Palladan & Adamu, 2018; Mainardes, Ferreira & Raposo, 2014).

Strategic management: The concept explains an enterprise as a whole system in which its economic resources are coordinated and applied effectively within functions and activities to generate profit. It is a method used for formulation and implementation of long-term plans widely and flexibly to achieve set goals (Qehaja, Kutllovci & Pula, 2017; Omsa, Ridwan & Jayadi, 2017:72).

Strategic performance measurement systems: Operationalise enterprise strategy with a set of measures (van Zyl, 2020:22; Artz, Homburg & Rajab, 2012) and influence the behaviour of the enterprise's individuals (Bäumli, 2014; de Leeuw & van den Berg, 2011:231).

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION TO THE STUDY

Performance measurement (PM) pervades all enterprises today (van Zyl, 2020:4). It has significant implications for small and medium enterprises (SMEs) when their success is set to a realisation of objectives in national and global economies (OECD, 2020b:3; SME South Africa, 2018:4). Despite their well-recognised role, the areas of performance and the undesirable phenomena of failing SMEs remain a challenge not only for these enterprises but also the economic development of countries (World Bank, 2019:106-110; OECD, 2018). By definition, performance entail focusing the contextual, conceptual, knowledge and procedural resources of an enterprise working together to produce products or services for clients towards fulfilment of set goals and objectives (Darus, Yunus & Rahman, 2017:164; Ates, Garengo, Cocca & Bititci, 2013). Generally, the performance of enterprises is subject to pressures and vulnerabilities due to an ever-changing environment. In times of disruption, many successful enterprises (including SMEs) seem motivated to advance their efforts to introduce better innovation and integrate strategies predominantly to leverage competitiveness and strengthen sound understanding to monitor and measure whether they contribute to the desired performance (van Zyl, 2020:4; Pierre & Fernandez, 2018:146; Basuony, 2014). The SME sector, on the contrary, is generally behind other industries in harnessing the strategies that encourage innovation to measure and improve enterprise performance in an integrated manner.

1.1.1 Goals of the chapter

In this chapter, the literature of the terms and concepts featured in this thesis provides the foundation to underpin the research problem and the motivation for the study.

1.1.2 The layout of the chapter

Section 1.2 discusses the background and foundation, leading to the research problem. In Section 1.3, the rationale for the proposed study and the gaps identified to motivate the study are discussed. The research questions, objectives and the need for the study are identified in Section 1.4. The contribution of the study is presented in Section 1.5. Section 1.6 briefly presents the research design and methodology followed in this thesis. An outline of all chapters is presented in Section 1.7 and, finally, Section 1.8 provides a summary to conclude the chapter.

1.2 BACKGROUND OF THE RESEARCH PROBLEM

The concept of PM has been debated for at least two (2) decades by researchers in diverse disciplines (Taticchi, Balachandran & Tonelli, 2012:42; Wu, 2009:9). For purposes of this current study, an overview to clarify what is meant by PM is imperative. Most scholars define PM in terms of the features (Rompho, 2011), with emphasis on the use of financial and non-financial performance measures (Tundys & Wiśniewski, 2018; Kaplan & Norton, 2015, 1992). From its role perspective, researchers underscore the importance as a means to translate organisational strategy into a deliverable (financial and non-financial performance) for short- or long-term strategic goals and competitive advantage (Balanced Scorecard Institute, 2017; Gotore, 2011; Cocca & Alberti, 2010).

Other scholars use the elements that compose the PM processes, frameworks/systems and integration in their definition to include assessment, implementation, alignment and review processes; or to imply the comprehensiveness of measures and their consistency in line with the enterprise' strategy in terms of framing and integration of systems (Bititci, Bourne, Cross, Nudurupati & Sang, 2018; Zakari, 2017; Giovannoni & Maraghini, 2013; Bentes, Cerneiro, Ferreira da Silva & Kimura, 2012; Monte & Fontenete, 2012; Taticchi, Cagnazzo & Botarelli, 2009). On the basis of the different perspectives used, the extant literature lacks a universal definition (Wu, 2009:9), therefore, creates incoherence and limiting potential researcher(s) to compare different studies in the PM field.

Nonetheless, studies have demonstrated that PM is a requisite for any sized enterprise for development and sustainability (van Zyl, 2020:30). Ndevu and Muller's (2018:7) study on PM inquired about its usefulness and how it developed in SMEs. They established increased enterprise effectiveness and improved competitive advantage as some of the benefits of using PM. Similarly, Monte and Fontenete (2012:268) demonstrated the process of implementing PM suggesting strategic phases leading to developing such a framework. On the contrary, studies have identified problems in the identification and implementation of the critical aspects and concepts of PM (Ndevu & Muller, 2018). Ferreira and Otley (2009:263) on the other hand argued that researchers have a tendency to focus only on specific aspects of the PM concept as opposed to adopting a more comprehensive and integrated approach.

For an enterprise the size of an SME with limited resources and capabilities, lacking knowledge of PM concepts and related processes are among the many problems that threaten their survival (Seiler, 2016:29; Kirsten, Vermaak & Wolmarans, 2015:13; Harif, Hoe & Ahmad, 2013:87; Fauske, Busi & Alfnes, 2009: Online;), means being vulnerable and without the prerequisites to help managers to identify skilful performance and indicators to management of when it is necessary to intervene in times of business performance deterioration or disruptive changes (Ladzani, Smith & Pretorius, 2013:3989). These impediments often lead to increased business closures, high failure rates and a worsening of the low success rate (Timm, 2015) with adverse effects on the national objectives and role of growing the economy by the SME sector.

1.2.1 SME current status (significance and contribution)

It is well reported that SMEs continue to receive significant recognition for their role in the economic development of various countries (GEM, 2018; Kumar, 2017). In contrast, their performance is a growing problem in many economies, despite inconclusive arguments on the accurate rates of failure or survival (Diabate, Allate, Wei & Yu, 2019). In many developed economies, including the United States (US) and other European countries, the performance of SMEs is reported to be decreasing annually (OECD, 2018). In developing countries, including crucial economies in Africa, the declines are worrisome, with some SMEs failing to take off, notwithstanding promising prospects (OECD, 2018). In all economies, a lack of skills in enterprise management and many areas of performance are found to be a major impediment to the performance of SMEs (including South Africa) (Bushe, 2019:10; Ndiaye, Razak, Nagayev & Ng, 2018; Wentzel, Smallwood & Emuze, 2016:147).

1.2.2 SMEs' significance in the economy: A South African perspective

In the context of South Africa, the World Bank (2018) found that most jobs are created by SMEs (particularly, those with fewer than 50 employees) and are, therefore, critical contributors to the reduction of inequalities and provide an entry point to the labour market for young people. Hence, with government-related support and programmes, these enterprises are currently in a good position to survive and thrive (Quartey, Turkson, Abor & Iddrisu, 2017). South Africa is no exception to the adverse performance of SMEs, with the majority failing within five years of starting up and reports indicate a steady decline from the sector with weak net job creation in the last decade (World Bank, 2019:106-110; World Bank, 2018; OECD, 2018; SEDA, 2018:17;

Timm, 2015). These outcomes remain an issue in the national goals and objectives due to the country's dependence on SMEs which represent at least 40% of all businesses and particularly when 90% of all new jobs are projected to be created by the sector by 2030 (SME South Africa, 2018:4; South Africa, 2012).

1.2.3 SMEs in the Cape Metropole economy in context

The Small Enterprise Development Agency (SEDA, 2018:17) compared the performance of SMEs across the nine (9) provinces of South Africa. The Western Cape province, where the Cape Metropole in South Africa (CMSA) is located, showed a decreased unemployment rate to below 20% in the fourth quarter of 2017 and the first quarter of 2018. While the figure appears very high compared to global figures (OECD, 2018), provincially it indicates the ability of the SMEs to avoid reducing the number of jobs, and their contribution to the Western Cape's job numbers remained steady in the first quarter of 2019 (South Africa, 2019b). These figures are further complemented by their contribution of 14% to the national Gross Domestic Product (GDP). The SMEs in the CMSA contributed a significant 70% of the Western Cape province's GDP (IHS Markit, 2018), which seems to indicate their resilience and prospects for growth. Scaling up remains a problem for most of their counterparts in South Africa due to constraints in strategies and skills to facilitate performance and surpass the competition that most SMEs may not possess (OECD, 2020a).

1.2.4 The challenges with skills concerning SMEs

As in many countries, the performance of South African SMEs is plagued by skills shortages, limited resources and many other factors (Department of Trade & Industry (DTI), 2016; Koumar, 2016:147). In the current competitive age, SMEs are exposed to bigger threats due to the scarcity and difficulty of access to information and financial resources (Pierre & Fernandez, 2018:152; Ledwaba & Makgahlela, 2017; Koumar, 2016:147; Ramukumba, 2014; Ropega, 2011:476); lack of developing strategies to innovate continuously (Matthews & Bucolo, 2011:696); inadequate use of strategic managerial tools (Olawale & Garwe, 2010; Martin & Staines, 2008:23-34); the inability to find newer strategies (Matthews, Bucolo & Wrigley, 2011:302); lack of managerial knowledge and no PM (Ledwaba & Makgahlela, 2017; Kirsten *et al.*, 2015:13); and the use of inappropriate performance measures (Seiler, 2016:29; Harif *et al.*, 2013:87). Fauske *et al.* (2009: Online) attribute their failure to succeed to a lack of knowledge of PM concepts. In today's volatile markets, deficiencies in critical aspects of enterprise

survival imply a lack of understanding of the important challenges or systems to use to establish and preserve competitive advantage as suggested by the Baldrige Performance Excellence Framework 2019-2020 (National Institute of Standards and Technology, 2019: Online).

1.2.5 The challenges with PMs concerning SMEs

In the context of SMEs, PM is primarily focused on reaching financial goals and objectives (Maziriri, 2020:2; Brownhilder, 2016; Franco-Santos, Lucianetti & Bourne, 2012:94; Ismaila, 2011:4; Halabi, Barrett & Dyt, 2010:163-179; Chavan, 2009:395). While financial goals are necessary for the performance of every enterprise, emphasis on them is criticised by many researchers. The arguments in the literature demonstrate that performance using traditional PM systems is often viewed in narrow, one-dimensional terms and is akin to developing a financial measurement or economic system (Carneiro-da-Cunha, Hourneaux & Corrêa, 2016:229). Pourmoradi, Niknafs and Abdollahia (2016:52-56) argued that business today is changing rapidly and thus PM based solely on financial measures will not meet the needs of the contemporary business environment.

Other researchers criticised the one-sided PM methods as inadequate with limitations, lagging measures with a focus on past performance, failing to capture long-term benefits and reporting their value to the enterprise, and undermining internal decision-making in areas relating to innovation and quality (Porporato, Tsisis & Vinuesa, 2017:339; Basuony, 2014:14; Giannopoulos, Holt, Khansalar & Cleanthous, 2013:3; Kaplan, 2012; Raj & Seetharaman, 2012:465-474; Ismaila, 2011). These studies cautioned that many hard lessons had been learnt by enterprises when the PM focus is on cost savings alone. The tendency of steering an enterprise by one dimensional PM is not new, having been researched for more than two (2) decades, yet financial measures are still the preferred way applied in SMEs and, hence, PM remains a problem (Franco-Santos *et al.*, 2012:94; Halabi *et al.*, 2010:163-179).

Follett and Treseler (2017) argued that traditional PM alone does not bring success to enterprises since ideas may be the catalyst to drive competitive advantage in today's rapidly changing environment. Studies on successful SMEs argue that part of the strategies for improved financial performance should be the use of information to enhance and accelerate decision-making and identifying opportunities presented by disruptions due to the changing business environment (Oxford Economics, 2017:12).

Contemporary views hold that non-financial performance measures are a better complement to financial data as they allow the understanding of strategic decision-making issues and assist with the prediction of long-term goals for growth (Gallani, Kajiwara & Krishnan, 2015; Chenhall & Langfield-Smith, 2007:267).

Current literature indicates that financial resources are scarce and difficult to access and SMEs should, therefore, look within their inherently flexible environment to compensate for these deficiencies (Pierre & Fernandez, 2018:152). Furthermore, in times of scarce financial means, successful SMEs tend to integrate strategies and tools to update their set of innovation capacities, innovation strategy, process and organisation constantly.

1.3 THE PROBLEM STATEMENT

There are numerous issues on PM that have emerged despite diverse research across various fields and this is the background setting of this study. The wide-ranging research covered has led to some confusion, inconsistencies and multiple contradictory meanings because of the numerous definitions of PM, its characteristics, main components and approaches (van Zyl, 2020; Naslund & Norrman, 2019; Taticchi *et al.*, 2012:42; Wu, 2009; Franco-Santos *et al.*, 2007). Therefore, little consensus exists among researchers on the various aspects of PM. Scholars have questioned the tendencies to focus on different aspects of PM concepts or systems in contrast to the adoption of a more comprehensive and integrated approach (Ferreira & Otley; 2009:263; Neely *et al.*, 1995).

When examined from the actual framework perspective, Naslund and Norrman (2019) pointed out that there are only a few PM related conceptual frameworks that exist in the literature. These frameworks are not without challenges in their design and processes (Rompho, 2011:40). For example, Neely *et al.* (2000) described four (4) phases of processes consisting of design, implementation, use and the evaluation to maintain. On the contrary, the design phase is most prominent (Naslund & Norrman, 2019; Neely *et al.*, 1995), while, the literature describing its application, implementation and other phases, is inadequate (Franco-Santos *et al.*, 2012).

These issues are imperative for any enterprise, including SMEs in South Africa whose knowledge of PM aspects and their preference to use traditional financial performance measures has been questioned. There is a void between academic research and

practical realities on learning and understanding what and how the characteristics and approaches of PM should be organised in general as well as the integration of other strategies (Naslund & Norrman, 2019). The existing void in research limit the understanding of which fundamental insights are possible, as well as undermine the SMEs' understanding and ability to leverage existing resources and processes to facilitate enterprise PM and sustainability. The questions to address in this study are as follow: How can SMEs in South Africa benefit from PM and related systems, if the characteristics and processes are not properly understood? Do SMEs in South Africa lag behind their international counterparts and thereby their ability to be sustainable and grow are limited? This study argues that traditional PM strategies only contribute little to facilitate the sustainability and financial viability of SMEs in South Africa. Furthermore, it is important to gain clarity over the many aspects or concepts of PM and also to understand and document the processes that is integrated in PM.

1.4 RATIONALE FOR THE PROPOSED STUDY

The recent decades have seen a move from uni- to multi-dimensional PM that seeks to address business performance and overcome the shortfalls of traditional frameworks (Sethibe & Steyn, 2016:1-12; Neely, Adams & Crowe, 2001:6-13; Chennell, Dransfield, Field, Fisher, Saunders & Shaw, 2000:96-103; Cross & Lynch, 1999:23-33; Kaplan & Norton, 1992:71-9).

1.4.1 Prevalent PM frameworks

Developments in the PM arena have progressed to methods and frameworks that evaluate enterprise performance from multiple perspectives with common features such as being well-selected and balanced and using integrated and holistic approaches found in the classic PM systems (Micheli & Mura, 2017; Pavlov, Mura, Franco-Santos & Bourne, 2017; McAdam, Bititci & Galbraith, 2017; Yadav, Sagar & Sagar, 2013; Bititci, Suwignjo & Carrie, 2001). These frameworks are lauded for comprehensively and consistently yielding guidelines of select criteria for the most appropriate measures that align strategy with performance across various enterprise aspects. Included are those outlined by Taticchi *et al.* (2012:44), the Performance Pyramid; Balanced Scorecard (BSC); Activity-Based Costing (ABC); Specific Measurable Achievable Realistic and Timely (SMART) objectives; and the Performance Prism, all with advantages and disadvantages.

1.4.2 Benefits of PM frameworks

PM systems are fundamental tools used in enterprises for a wide array of reasons and potential benefits to organising, facilitate learning, improve controls and communication, understand business processes, reflect the organisation's overall strategy, provide information on strategy implementation, strategic alignment of objectives and support goal achievement (Altin, Koseoglu, Yu & Riasi, 2018; Bititci *et al.*, 2018; Franco-Santos *et al.*, 2012; Kaplan & Norton, 2001; Neely, 1999). PM systems also assist with a fast response to internal and external environmental issues and changes (Seiler, 2016:24). Laury, Matondang and Sembiring (2019) pointed out that PM may appear simple; however, they advised caution as processes involved are often complicated with hurdles due to various factors.

1.4.3 Challenges with PM frameworks and their criticism

The common criticism levelled is that these frameworks were mostly developed in the larger enterprise environment (Wu, 2009:1). It has been argued they are not suitable in an SME context (van Zyl, 2020:80; Waśniewski, 2017; Bahri, St-Pierre & Sakka, 2017; Carlyle, 2013; Brem, Kreusel & Neusser, 2008). Other reported problems on these PM systems currently cover aspects such as:

- Incomplete and inconsistent PM and metrics.
- Failure to represent a balanced framework of financial and non-financial sets of measures.
- Complexity and difficulty in identifying a few critical measures from a large number of metrics which include some that may be insignificant.
- Failure to connect strategy with measurement.
- Focusing on financial metrics and inward-looking, excluding external metrics (Franco-Santos & Otley, 2018; Susilawati, Tan, Bell & Sarwar, 2013:51-53; Akyuz & Erkan, 2010:5150).

The highlighted benefits and problems confirm the findings of Mathur, Dangayach, Mitta and Sharma (2011:79-90) that no single PM system can serve the purpose of all enterprises all the time. As a result, this study considers that PM systems need to be tailored and designed to fit the specific circumstances of enterprises and must to be strategy-oriented, balanced, integrated and have multiple perspectives (Guenther & Heinicke, 2018; Buh, Kovačič & Štemberger, 2015).

1.4.3.1 *PM framework design and implementation issues*

Bezerra and Gomes (2016:1029) argue that the current issues in empirical research relate to the design and implementation of PM systems, including the integration of PM with the enterprise's strategic management practices and culture (Bourne, Melnyk, Bititci, Platts & Andersen, 2014; Choong, 2014; Franco-Santos *et al.*, 2012; Nudurupati, Bititci, Kumar & Chan, 2011). Rompho (2015) established that various ways, models and attributes are crucial for determining the design and implementation success of PM systems. These factors cover areas such as organisational vision, mission and structure, strategies and plans, performance measures, information flows, processes and systems, network use, reviews, strong and coherent linkages and others relating to PM validity, completeness, balance, timeliness, consistency, ability to provide correct and good analysis which often used to determine its design and implementation success (Armstrong, 2019; Rompho, 2015; Ferreira & Otley, 2009). Other studies point to PM systems issues where researchers and practitioners alike disagree on its effectiveness and outcomes on improved communication, strategic alignment and difficulties underlying PM complexity and discipline (Armstrong, 2019; Franco-Santos & Otley, 2018; Folan & Browne, 2005).

1.4.3.2 *PM complexity and discipline issues*

The general problem in the PM field is that it is inherently complex due to the considerable coverage of the concept in management and organisational disciplines, mainly operations management, accounting, strategy, human resources and information systems (Tweedie Wild, Rhodes & Martinov-Bennie, 2018; Pollitt, 2018; Choong, 2013; Adler, 2011). Even though the coverage has broadened, Franco-Santos and Otley (2018) criticised such extensiveness along the traditional divide of disciplinary lines, highlighting the tendency to remain isolated or siloed. The net result is hindrances in moving to a better understanding of the practices leading to improved performance and theoretically-informed integration and interventions needed to respond to complexities in a changing environment, particularly given the significant relevance of PM issues (Mingers, 2015; Andersen, Busi & Onsøyen, 2014; Siedlok & Hibbert, 2014; Bititci, Garengo, Dörfler & Nudurupati, 2012).

Researchers also note that the complexity of PM is due to the potentially infinite number of interrelated elements and factors that interact to produce outcomes (Armstrong, 2019; Ashby, 1956:39). There are many different factors critical for

enterprise performance and PM including contextual, procedural, conceptual and those that are content-related (Bititci *et al.*, 2018; Rantala & Ukko, 2018:250; Kumar & Jayant, 2017:305; Qehaja *et al.*, 2017:585). Although the list of factors may be exhaustive in the literature, a study by Bititci *et al.* (2012) argued that, in a time or context where PM operates and change is required, factors relating to economic, social and technological aspects of an enterprise play an important role in how and why PM is used. Bititci *et al.* (2012) further emphasise that not only are social and technical factors required to understand how PM works, interaction in the context where disruptions and a changing environment constantly affect the performance of an enterprise are of equal importance. Considering the diverse views in the existing literature, it come as no surprise that there is no generally accepted definition for PM and a general theory of it has yet to emerge (van Zyl, 2020:5; Barr, 2014; Ates *et al.*, 2013; Franco-Santos, Kennerley, Micheli, Martinez, Mason, Marr, Gray & Neely, 2007:797; Neely, 2007).

1.4.3.3 PM framework and definition issues

PM means different things to a diverse spectrum of management scholars (Ates *et al.*, 2013; Franco-Santos *et al.*, 2007). In the broader context, it is understood to be choices of actions, information, metrics and processes for the quantification of the efficiency and effectiveness of an enterprise's performance (Smith & Bititci, 2017; Zeglal, 2012; Franco-Santos *et al.*, 2007; Neely, Gregory & Platts, 1995). Other scholars view PM as involving not only the use of quantitative measures outputs but also the integration of qualitative outcomes and impacts of processes, goods and services provided resulting from these outputs (Saunila, 2017; Carneiro-da-Cunha *et al.*, 2016; Baldrige MBNQP, 2009-2010).

In the context of PM, van Zyl (2020:14) considered analysing the meaning of keywords such as 'performance' and 'measurement' (BPIR, 2019), and 'system' (Barr, 2014) to get a better understanding of its definition. Van Zyl (2020:13) argue that PM definitions are context-specific and not absolute, and depend on the user's background and the purpose of the system. This study follows studies done by Neely (2007) and Zeglal (2012) giving detailed definitions to view the PM system as a tool to clarify how well a business is doing to achieve its objectives in terms of processes, actions and strategies. This thesis proposes a general definition for PM as continuous collection

and reporting on a set of performance measures and processes used in an enterprise to determine the efficiency, effectiveness or both, of an existing system.

1.4.4 PM and an enterprise as a ‘whole system’

In many studies, PM is about focusing on ‘enterprise’, a concept described in organisational and resource-based theories as a whole system with sub-systems and factors (such as mission, goals, culture, environment, work-flow and processes, knowledge and skills of individuals or groups). These systems work together to produce valuable products or services to the client with outputs and progress verified and measured against objectives set in the strategic plan and innovation capabilities exploited to reinforce the wider scope of PM (Saunila, 2017; Carneiro-da-Cunha *et al.*, 2016; Mainardes *et al.*, 2014:48; Saunila, 2014; Barreiros, 2013:4; Chetty, 2013:1; Neely *et al.*, 1995; Dudley, 2010). In the economics and management fields, PM is emphasised as a vehicle to provide opportunities to use performance information and strategies for enhanced and accelerated decision-making (Oxford Economics, 2017:12). Even though PM has attracted a considerable amount of research from both academics and practitioners alike over the past two (2) decades, it has mostly been studied in larger enterprises and remains superficial with very few solutions provided for SMEs (Ratnaningrum, Aryani & Setiawa, 2020:73; van Zyl, 2020:6; Hove, 2015:34; Bäuml, 2014; Neely, 2005).

The strategic management field in which this study is located has continually focused on innovation strategies to help SMEs understand not only how to measure, but also how to innovate and improve performance (Baldrige BEF, 2019). Despite this, PM remains hard to establish and adopt by any enterprise and even more so for SMEs whose resources are limited for whom obtaining the necessary skills required to design effective PM remains difficult (van Zyl, 2020; Ferreira & Otley, 2009; Neely, 2007). Studies also argue that, if PM is well designed and implemented, not only could operational activities be boosted, but managers would also be assisted in identifying the causes that led to that performance and the innovation which forms part of improvement strategies (Saunila, 2017; Carneiro-da-Cunha *et al.*, 2016:234-235). Rantala and Ukko (2018:250) mentioned several studies that have suggested important elements necessary to understand how a PM system can be designed, built and used. However, these studies provide international views from a conceptual and literature review perspective only and much remains unknown as to what should exist

in the context, how the PM processes should look and what content to select or ignore. The current study seeks to uncover more on these topics.

The research on PM from a South African SME perspective is developing; however, most are reported from a statistical perspective (Tassiopoulous, de Coning & Smit, 2016; Sitharam & Hoque, 2016; Kirsten *et al.*, 2015; Ramukumba, 2014; Ladzani *et al.*, 2013; Ismaila, 2011). For example, a study by Tassiopoulous colleagues (2016), highlighted the importance of the role of leadership (owner of SMEs) in the providing strategy and direction to guide the enterprise, but other important stakeholders are not covered. Sitharam and Hoque (2016) mention that both internal and external factors were found to be an issue in the performance of SMEs; however, the study stops short of providing empirical evidence from real-life experiences of SMEs. As a result, an understanding of specific enterprise operational areas of performance, resources, the ways SMEs develop and implement PM is incomplete.

There have been various studies documenting PM tools and systems among SMEs (Altin *et al.*, 2018; Pešalj, Pavlov & Micheli, 2018; Bahri *et al.*, 2017; Wasniewski, 2017; Saunila, 2016; 2017; Lonbani, Sofian & Baroto, 2015; Kloviené & Speziale, 2015; Basuony, 2014). Kumar and Jayant (2017:305) studied the development of frameworks for SMEs presenting PM as a system outlining the requirements and guidelines from the perspective of a literature review only. Valaei, Rezaei and Ismail (2017) did a fuzzy set study of SME PM systems, for example, and examined their learning strategies, creativity and innovation. These studies mostly evaluate various aspects of BSC in their research but do so reflecting international viewpoints.

In the context of South Africa, a study by van Zyl (2020) investigated practical PM frameworks for SMEs only from a literature review perspective. On the other hand, Kirsten *et al.* (2015) attempted to provide evidence of SME frameworks such as the BSC amongst the PM tools used; however, the study does not provide views on the techniques or processes used or on their motivation. Although argued to be one of the PM frameworks with problems, the BSC remains the most popular among many enterprises and may be less complex to adapt in a flexible environment such as SMEs (Pierre & Fernandez, 2018:152; Bain & Company, 2015; Bititci, 2015).

1.4.5 The Balanced Scorecard overview

The Balanced Scorecard (BSC), a comprehensive PM system developed by Kaplan and Norton (2015; 2001;1996), puts together the vision and strategies of an enterprise linked to four-dimensional perspectives used to measure the performance in a balanced way. These perspectives, financial data, internal processes, learning, innovation and growth and customer areas, are linked to strategic goals to drive the achievement of enterprise strategy. However, diverse views on various BSC-related benefits and limitations exist among scholars across disciplines ranging from its concept, application and use in practice (Massingham, Massingham, & Dumay, 2018; Nielsen, Lund, & Thomsen, 2017; Hoque, 2014).

Other conflicting views include the BSC expanded adoption, its role in assisting enterprises with the implementation of strategies, criticism of its ability to cope with any changes that can influence such strategies, its implementation yielding varied results ranging from success, no actual results to being completely unsuccessful, and lack of method(s) to develop a model such as the BSC (Malagueño, Lopez, & Gomez, 2018; Bento, Mertins, & White, 2017; Llach, 2017). Interestingly, the analysis of this scholarly literature has revealed explicit contradictions among scholars with implications for the theorisation of the BSC as a PM system (Llach *et al.*, 2017; Busco & Quattrone, 2015).

Although studies on the BSC have been focused mostly in large enterprises, Malagueño *et al.* (2018) argue that such a PM system may not easily be applied to SMEs. On the contrary, supporters of the BSC write off the benefit of its use by SMEs and suggest these enterprises may develop customised scorecards to fit their unique situations in the context of the overall organisational strategy enterprises (Pourmoradi *et al.*, 2016:56; Kaplan & Norton, 2001). Various scholars identify the concept of organisational strategy in management as a broad term but with common features relating to the direction of an enterprise, finding a balance in efficacy and the holistic use of its resources and strategies in the context of its external and internal environment (Qehaja *et al.*, 2017:585; Kaplan & Norton, 2015; Mainardes *et al.*, 2014:48; Chetty, 2013). In the current literature, studies argue whether the customer's needs (external stakeholders) or the jobs to be done (internal processes) should begin the process of strategy (Christensen, Hall, Dillon & Duncan, 2016; Chatterji, Findley, Jensen, Meier & Nielson, 2016; Amit & Zott, 2015). However, no clear synthesis of

factors or processes is provided to allow an understanding of how the design of any strategy should be facilitated.

1.4.6 The Design Thinking overview

The field of strategic management has also recently seen increased developments in the design discipline to encourage the adoption of practices of toolkits such as Design Thinking (DT), for its important role in business strategy (Liedtka & Kaplan, 2019; Bezerra & Gomes, 2016:1029; Bourne *et al.*, 2014; Choong, 2013; Franco-Santos *et al.*, 2012; Nudurupati *et al.*, 2011). DT is multidisciplinary and diversely covered in various traditional classic design disciplines such as engineering or industry and, as a result, may often be confused with 'designerly thinking' which pertains to the research tradition of studying designers (Johansson-Sköldberg, Woodilla & Çetinkaya, 2013).

In the managerial discourse, DT has emerged as a concept that generally promises innovation by a user- or human-centred approach that suggests the possibility of enterprise learning how designers think and work (de Paula, Dobrigkeit & Cormican, 2019; Gonera & Pabst, 2019; Seifried & Wasserbaech, 2019; van der Bijl-Brouwer & Dorst, 2017:1; Brown, 2008; Martin, 2009). These diverse views lead to the DT notion being mislabelled and vague, making it difficult to interpret and hindering adoption or successful implementation (Nguyen, 2016:2).

Design thinking (DT) has a different meaning for various things to diverse scholars and, therefore, defining the concept remains disputed by both practitioners and advocates alike (Liedtka, 2018). Various areas of focus used by researchers to describe DT range from a personal connection with users established to co-develop solutions; a process of using design principles for solving complex problems; and a scalable methodology applied to create disruptive solutions to meet people's needs (Bason & Austin, 2019; Follett & Treseler, 2017; Brown, 2016). Schumacher and Mayer (2018), on the other hand, refer to DT as a creative practice used to spark managerial thinking in challenging times, shifting consumer preferences and changing business models. The views in the literature provide a clear indication that consensus on what DT entails remains to be achieved for a universal definition to emerge.

Within innovation management disciplines, DT can be described as a user- or human-centred approach to problem-solving, which requires creativity and innovation in combining what is technologically feasible with what is desirable and economically

viable (Carlgren, Rauth & Elmquist, 2016; Liedtka, 2015; Brown & Katz, 2011; Verganti, 2009; Brown, 2008; Beckman & Barry, 2007). Liedtka (2015:926) used Brown's definition to describe the concept of DT as focusing on characteristics such as using the designers' principles, approaches, methods and tools as a means of solving problems. Similarly, Schumacher and Mayer (2018:500) identified user-focus, problem-framing, experimentation, visualisation and diversity as common key design approaches that apply directly to the business spheres. In the context of principles, Brenner, Uebernickel and Abrell (2016) associated DT as a mindset characterised by a strong orientation to the obvious and hidden needs of customers or users and prototyping among the several key principles. Whereas these characteristics differ among scholars, DT has become a useful universal methodology strategy for solving problems using flexible and informal methods (Watson, 2015).

The literature is consistent with evidence that DT may be beneficial for business based on its increased relevance for practices of management and management innovation (Elsbach & Stigliani, 2018; Rauth, Carlgren, & Elmquist, 2015; Brown & Martin, 2015). The other benefits for applying DT mentioned in the literature are those listed by Rouse (2019) and encompass people interaction, co-creation, intimate creativity engagement, developing shared interpersonal boundaries to explore divergent ideas and managing the paradoxes of creativity. Rapp and Stroup (2016) support its effectiveness suggesting that powerful results emerge as a benefit when applying DT to review organisational people processes.

Additionally, the creative and analytical processes of DT were also found to be beneficial due to the opportunities they provide for the creation of prototype models and model experimentation and redesigning based on the feedback obtained (Kumar, Zindani & Davim, 2020). Perhaps the benefits of DT mostly related to strategic management are those identified by Fischer, Lattemann, Redlich & Guerrero (2020) and are claimed to foster enterprise agility in areas of communication and pursuit of organisational goals and culture and operational activities. Despite these important emerging benefits as a source of competitive advantage, DT has been criticised indirectly as being too narrowly focused due to its dependence on the bundle of attitudes, tools and approaches to recognise its distinctiveness (Liedtka, 2015:929).

The other criticism in the literature related to the difficulty of using DT, pointing out its inadequacy in fitting with existing enterprise processes and structures due to:

- the difficulty of implementation of resulting ideas and concepts;
- the difficulty of proving the value of DT;
- organisational culture clashing with DT principles or mindsets;
- perceived threats to existing power dynamics;
- difficulty in acquiring skills; and
- differing communication styles (Carlgren *et al.*, 2016).

Additionally, studies on how its implementation can be facilitated are scattered with inadequate synthesis to allow researchers an understanding of underlying factors for effective DT implementation (Liedtka, 2015). It is necessary to uncover how DT manifests and what factors are critical to implementing DT strategies in an enterprise successfully to understand these issues better (de Paula *et al.*, 2019:3853). However, the literature is sparse in reflecting the real-life experiences of any enterprise.

Recently, fields in design and strategic management have seen increased developments in encouraging the adoption of DT practices for its important role in enterprise strategy (Liedtka & Kaplan, 2019; Bezerra & Gomes, 2016:1029; Bourne *et al.*, 2014). As a result, researchers across disciplines are investigating how to use organisational resources to include strategies and principles of DT and BSC to enhance the entire enterprise's strategy to encourage innovation, competitiveness, PM and economic growth (Bulakowski, 2018; Nudurupati *et al.*, 2016:226-235; Melnyk *et al.*, 2014:173-186; Raj & Seetharaman, 2012:465-474).

Moreover, studies advance the need for enterprise models and PM to integrate other strategies, particularly DT and the BSC, as creative practices (Schumacher & Mayer, 2018; Nielsen *et al.*, 2017; Davis, 2010:6539). For example, Bentes *et al.* (2012:1790-1799) provided evidence that a PM system may be integrated with other systems; however, the evidence on the contributing role of DT to PM and improvement seems to have been given limited attention.

1.4.7 The integration of Balanced Scorecard and Design Thinking overview

The literature has shown that PM and the integration of strategies remain topical and an impetus for the continued growing interest in many research fields (Waśniewski, 2017:216). Furthermore, the discussions in the previous section provided evidence of remarkably different notions and aspects of strategy and PM that become the ground for the BSC and DT. As a result, in this study, we argue that the creation, formation,

measurement and improvement of strategy in the SME context by using the principles of BSC and DT makes integrated PMs possible. Additionally, the evidence shows that PM systems, BSC and DT incorporate factors and processes with potential areas where these aspects may combine closely to the strategy of the enterprise.

In general, the literature refers to these factors and processes as the critical items, actions or activities that should be present for a particular plan or situation to be successful (Eybers & Giannakopoulos, 2015). The identification of such factors and processes must be considered for enterprises to be successful in using DT and the required integration to the BSC (Nielsen *et al.*, 2017). Scholars have identified the importance of integration as a pressing problem, citing the need for PM to cross disciplines to address complex problems (Armstrong, 2019; Mingers, 2015; Andersen *et al.*, 2014). Further studies are required to provide interventions to investigate how the range of components inter-relate or interact to produce outcomes in an enterprise performance (Okwir, Anglis, Nudurupati & Ginieis, 2018). However, to date, studies on understanding the critical factors and processes and integrating the principles of the BSC and DT have not been forthcoming.

In the context of SME, Cocca and Alberti (2010) suggested that the much-needed PM tools and systems be designed specifically, based on the enterprise's characteristics and needs. Scholars have argued that attempts to develop best practices using universal means to achieve performance by PM have largely failed (Schleicher, Baumann, Sullivan, Levy, Hargrove & Barros-Rivera, 2018). Jääskeläinen and Sillanpää (2013:441) established a need for a better understanding of best practices for implementing PM, specifically gaining knowledge and empirical experiences. However, the existing work remains largely silent about examining the practices of a PM that cross the field of strategic management and design disciplines systematically and frameworks and tools that apply appropriately in the context of SMEs.

Against the backdrop of the discussions in the previous sections, this study draws on the challenges of PM and SME and an overview of key aspects of PM, BSC and DT to understand the various factors and processes for developing an integrated PM framework. The study is positioned in the strategic management discipline, which is derived from enterprise strategy concepts considering the organisational theories and resource-based-views (Qehaja *et al.*, 2017:585; Mainardes *et al.*, 2014 49). Based on these theoretical positions, an enterprise can be explained as a system in which

context resources and activities are utilised efficiently and effectively for the holistic achievement of goals and objectives and innovation to reinforce those resources and activities and also draw from the design field.

Two (2) critical and important premises are established to understand this study's epistemological and ontological position better. Firstly, it is assumed that SMEs would be positioned better to succeed or benefit from using a PM system, integrating the principles of BSC and DT (Wagner & Kaufmann, 2004:270). Secondly, it would be necessary to start with a detailed understanding of the characteristic business processes and existing PM systems of the SME to develop a PM system (Cocca & Alberti, 2010:199). This study intends to assist SMEs to augment their thinking and introduce integrated strategies to their daily operations and ways of PM. To this end, specific research questions and objectives are elaborated on in the sections that follow.

1.5 THE RESEARCH QUESTIONS AND OBJECTIVES

The research questions and related objectives are developed based on the introduction and background discussions in the previous sections.

1.5.1 The research question (RQ)

The questions consist of one main research question and four sub-questions.

1.5.1.1 Main research question (MRQ)

The main research question of this research is:

How can the BSC- and DT-related principles contribute to an integrated PM framework for use by South African SMEs?

1.5.1.2 Research sub-question (RSQ)

The following are the sub-questions for this research:

RSQ1: Which processes are used by SMEs to design and measure the performance of various business activities, products, internal processes, strategy, or services?

RSQ2: How are DT- and BSC-related PM techniques used by SMEs in the various business activities?

RSQ3: How does the process used for PM and encouragement of design skill sets influence SMEs' business performance and the environment?

RSQ4: How can existing DT- and BSC-related processes in use be merged into an integrative PM strategy?

1.5.2 The research aim and objective

This research seeks to determine how BSC and DT can address the problems with SME PM. The study is specific in its focus of uncovering an integration of newer ways of DT- and BSC-related strategies within the PM systems. The objectives of the study fall into two (2) categories.

1.5.2.1 The theoretical objective of the study

The theoretical objectives of this study serve to examine the literature for shortcomings in the PM, BSC and DT (discussed in the Introduction). This was useful to assist further with the development of the main research question. Also, the objective to investigate the guidelines on common PM, BSC- and DT-related principles, processes and areas in which the techniques might apply (discussed in Chapters Two and Three).

1.5.2.2 The empirical objective of the study

The empirical objective is to gain an improved understanding of the PM, BSC- and DT-related features and processes followed in the enterprises of the SME case participants, their perceptions on the benefits thereof and to document the sequence of events in their daily operational activities.

1.6 SIGNIFICANCE AND CONTRIBUTION OF THE STUDY

This study aims to evaluate and document a structured and clearer understanding of current PM, BSC- and DT-related processes followed by the SMEs within the CMSA. It also offers a comprehensive analysis of the factors and processes deemed crucial to strategy and PM, with the ultimate objective of developing an integrated PM framework. It is anticipated that the results and framework will empower SMEs to challenge their thinking and to seek better tools to enable more effective management of their enterprises. This study advances the importance of DT on business strategy, contributes to the growing body of knowledge in areas of PM and integration of BSC- and DT-related principles and raise potential awareness of such frameworks in SMEs.

To realise the research objectives in this study, the researcher commenced by exploring the emerging literature on PM and the broader perspectives on SMEs. Scholars hold divergent views and criticise the role of literature reviews in qualitative

research (Charmaz, 2017; Glaser & Strauss, 2017; Glaser, 2016;). The diverse views range from its use to: 'direct exploratory and explanatory empirical studies'; caution to 'limit taking pre-conceptions of literature review into the field'; concession of 'challenges of starting research with a clean theoretical slate'; 'challenges of embarking on research without some ideas of what one is looking for'; and the importance of 'pre-structured research'.

However, conducting a literature review at the early stage of this study was necessary for developing the problem statement. Secondly, reviewing a selection of definitions, processes, and pertinent aspects of PM by academics and practitioners helped to frame the research in the early chapters of this thesis, given the gaps that were identified. Thirdly, it was later used to guide the methods and methodologies of this study, and helped to direct the empirical fieldwork in ensuring that the quality of the raw data collected and its purity is maintained during the data analysis process. In light of this, a conversational flow of dialogue is allowed, and theories develop or emerge from the data (Dunne & Üstündağ, 2020; Charmaz, 2017; Nelson, 2016; Charmaz, 2014). The research design and methodology are introduced briefly in the section that follows.

1.7 RESEARCH DESIGN AND METHODOLOGY

The research design and methodology as concepts are associated with aspects deemed critical for data collection (Watkins, 2012:40). An overview of these two (2) aspects of research is discussed in the following sections and discussed further in Chapter Four to provide a holistic perspective of structures and procedures adopted to gather evidence in response to the research questions in this study.

1.7.1 Research design

Various strategies on approaches in the research design are determined in consideration of the research questions of a study, and the abilities to interpret answers and conclusions (Yin, 2014). The research questions in this research dictate that an empirical and exploratory approach with an interpretivist paradigm be adopted for the qualitative study. According to Saunders, Lewis and Thornhill (2012:143-145), qualitative studies can use a deductive (which aims to verify existing theory), an inductive (which entails generating or building theory with known premises to generate untested conclusions) or a mixed-method approach. The inductive approach is

deemed appropriate for this study that seeks to collect information or evidence to generate or build theory.

1.7.2 Research methodology

The research methodology refers to the procedural framework in which the research is conducted and includes case study research (Hyett, Kenny & Dickson-Swift, 2014:2; Yin, 2014; Remenyi, Williams, Money & Swarts, 2009:29; Merriam, 2009). During exploratory qualitative research, a case study is mostly associated with research that helps to extend or explore experiences about what is already known or seeks to understand how a series of participants experience a new phenomenon (Hyett *et al.*, 2014:9; Yin, 2014:10-11; Flyvbjerg, 2011). This study seeks to explore and understand the practical real life accounts of PM processes followed by individual SMEs in various areas of the CMSA, given the ontological and epistemological nature of the research questions. Notwithstanding the criticism of case studies for being expensive and time-consuming, this method is noted to be informative, despite the often small sample size (Heale & Twycross, 2018; Leedy & Ormrod, 2016; Gustafsson, 2017; Watkins, 2012:45; Baxter & Jack, 2008).

1.7.2.1 Sampling

Mason (2018a:121) argues that the processes to identify, choose and access relevant data sources to generate information are driven by the research aim to allow flexibility without boundaries for a sample. These samples comprise members or a collection of people, population, individuals or any other items considered for the research purpose (Collis & Hussey, 2014; Ismaila, 2011:9; Welman, Kruger, Mitchell & Huysamen, 2005:52). Other arguments relate to whether an entire sample being drawn purposively from one location is representative of the population as a whole (Statpac, 2011: Online). Watkins (2012:63-65) argues that, in non-probability purposive sampling, typical groups would represent diverse views on the phenomenon, resulting in the generalisability challenge. Morse (1994:225) suggests the use of a sample of at least five or six in qualitative studies and up to 10 people is recommended for phenomenological and multiple case studies (Yin, 2014).

In considering this study's aims and objectives, the units of analysis are the SMEs who had recently undertaken programmes focusing on PM or other strategic measurement and improvement systems. They operated in the CMSA and were drawn from the

registered members of the Cape Chamber of Commerce and Industry database. As a result, it cannot be guaranteed that each member in this database is represented (non-probability purposive sampling). It was within these parameters that considerations to facilitate the lengthy design of a data collection tool from which the case participant SMEs would provide meaningful contexts of their PM and the processes followed. According to Collis and Hussey (2014), qualitative research involves collecting qualitative data.

1.7.2.2 Data collection methodologies

Saunders *et al.* (2012:15) state that qualitative information may be gathered for purposes of in-depth exploration and identification of real-life situations that individuals deal with or experience. In general, interviews (unstructured, structured and semi-structured) are often used in qualitative research, where ontological and epistemological questions on what and how with the interpretivist philosophical stance are adopted to conduct exploratory discussions (Leedy & Ormrod, 2016; Creswell, 2014:37-38; Yin, 2014:10-11; Saldaña, 2016; Cooper & Schindler, 2006:204-211). Similarly, in this study, semi-structured interviews with open-ended questions and documentary analysis (conducted to corroborate the primary data) were used to collect data from case participant SMEs on their PM, BSC and DT processes. Additionally, focus groups were conducted for validation purposes and, in this manner, the triangulation of data from multiple sources was enhanced to help the significance of the research (Collis & Hussey, 2014).

1.7.2.3 Data analysis

The analytic strategies and techniques involve activities that require case descriptions to be developed, the use of matrices or multiple measures, the coding of qualitative data and the use of analysis software to search for meaning, match patterns and themes (Bogdan & Biklen, 2007; Easterby-Smith, Thorpe & Lowe, 2002). In this study, the data was organised using multiple strategies of coding manually and ATLAS.ti™ software to facilitate consistency in the analysis, findings and to search for themes for triangulation and dependability.

The coding of data was guided by the research questions to identify key concepts as categories used for pattern-matching and exceptions, in line with the recommendations from Yin (2014:142-170). Additionally, these were used to determine whether

empirically identified processes of PM or characteristics are matched with those of the BSC in the existing literature. Similarly, they enabled the identification of gaps where the integration of BSC- and DT-related principles or strategies could be positioned in the integrated PM framework to be developed.

1.7.3 Research credibility

Credibility is determined using trustworthiness and authenticity of qualitative research, primarily to evaluate confirmability and dependability of the findings and transferability of the procedures applied (Creswell, 2014:201; Yin, 2014:47). These are expanded on in detail in Chapter Four of this thesis. For purposes of this chapter, fieldwork interviews were conducted at the premises of the SME. Constant interaction with SMEs during the various stages of data handling, processing and validation of the developed theory by member checking facilitated the triangulation, trustworthiness, authenticity, confirmability and dependability of the research. Due to the small sample size, potential generalisability would remain in the hands of the researcher(s) and scholar(s) and other interested parties. They might use these processes and strategies in the future. During data analysis, the researcher engaged extensively in the data to show appreciation for all the information, as represented by numerous appendices. The elaborate documented procedures followed, and the various formats of records kept facilitated dependability and transferability by conducting regular member checks with colleagues and experts to show that the processes used to carry out this research has potential and would yield similar findings.

1.7.4 Ethical considerations

The section is discussed extensively in Chapter Four. An overview is provided for this chapter, and the researcher obtained a clearance certificate from the University of South Africa to facilitate compliance. A permission request letter was sent to those who were willing to take part in the study, and consent was obtained from each participant before each interview and focus group. Further explanations were provided to participants on pertinent issues of the study and relevant procedures in the interviews (before, during and after), including requesting permission to use the enterprises' documents, as was necessitated during data collection. These issues were covered in line with suggestions by Leedy and Ormrod (2016) on ethical aspects of the research, which are protection from harm, informed consent, right to privacy and honesty with professional colleagues.

1.7.5 Limitations

The limitations are often referred to as constraints or as identified weaknesses in the research (Collis & Hussey, 2014). The primary limitation of this study was that the literature reviewed returned mostly research from larger enterprises and international perspectives. As a result, it would not necessarily map out the CMSA SME successes, failures and challenges in employing PM frameworks, BSC and DT strategies. Noteworthy, though, is that the sample consists of SMEs from various sectors and differ in core enterprise areas and can, therefore, not guarantee that the SMEs selected as case studies might, to some extent, not be an accurate representation or be comparable to those in other sectors. The study was delineated to SMEs that were registered with the Cape Chamber of Commerce and Industry, which have been in existence for one or more years and are from various sectors in the CMSA.

It was also important that the researcher recognised the potential research bias that might arise as a result of the significance of time between the creation of these enterprises concerning the timing of the research. As discussed in previous sections, according to the researcher there is limited research on SME PM, particularly on the integration thereof from a South African perspective; therefore, this necessitated building this study on a sound theory.

1.8 STRUCTURE OF THE THESIS

The research was carried out in several stages, in the context of the study's objectives and the relative positioning of each chapter as briefly explained in the following section.

Chapter One portrays the background, research problem, objectives, questions and the methodology, limitations and ethical considerations.

Chapter Two consists of reviews of the existing literature. It defines the key concepts by the description of SMEs, PM and related challenges, and the relevant theories. The chapter further justifies the research questions based on the organisational, agency and contingency theories. The context of the research based on the integration of the BSC with the designer's tool kits and skill set (DT techniques) is presented.

Chapter Three investigates and analyses the literature on DT and its influences on the improvement of the performance of enterprises. The fundamental SME skill sets required for the successful adoption of these systems and the underpinning theories

are presented. The chapter further justifies the research questions based on the theories and context of the integration of BSC-related principles and those of DT.

Chapter Four describes the research methodology, methods and approaches adopted and justifies their selection for suitability. The issues of credibility, transferability, dependability, authenticity, confirmability and trustworthiness are also addressed to reveal the underpinnings of the empirical work conducted.

Chapter Five is based on the qualitative data collected and analysed. It identifies and presents the findings on the characteristics, features and factors deemed to be instrumental in strategy and PM processes; PM, BSC- and DT-related processes linking and comparing data from the interviews to unveil emerging patterns.

Chapter Six discusses and consolidates the key findings on case participants and the patterns emerging based on the analysis and interpretation of Chapter Five. The literature review on how to develop a framework is briefly revisited and presented. It addresses the main research question by examining and discussing the potential to develop theory, present an integrated PM framework that SMEs validated by the focus groups, and may be able to use or adapt to their specific enterprises for successful PM systems and sustainability.

Chapter Seven describes the overall conclusions, firstly, by evaluating whether the theoretical and empirical research objectives in Chapter One were met. The research questions and objectives are revisited to evaluate how the findings and discussion addressed these. The literature review is revisited on key publications to examine the standing of the findings comparatively. The chapter also reflects on the thesis by describing the key limitations of this research's contribution and concludes with the implications, criticisms and suggestions for future research.

1.9 SUMMARY

This chapter introduced the study, enlightened the reader on PM, BSC and DT related strategies and provided some background leading to the formulation of the research problem and questions. An overview of the research approach and methodology was provided, ethical considerations were discussed briefly, and the chapter concluded with an outline of the thesis. The next chapter provides a detailed analysis of the existing knowledge in the key areas of the literature drawn on for this research.

CHAPTER TWO: LITERATURE REVIEW - SME AND PERFORMANCE MEASUREMENTS

2.1 INTRODUCTION

In the previous chapter the background and relevance of the study, introduction to PM, the BSC and newer strategic thinking systems (DT techniques) provided a lead to the formulation of the research problem. They developed the main research question and sub-questions. This chapter reviews the existing literature and sets out to define the key concepts of the study, resulting in the development of a conceptual framework.

2.1.1 The goal of the chapter

The objectives of this chapter are to provide a literature review based on the current status of SMEs concerning PM, the concepts, aspects and underpinning PM theories, PM frameworks and related processes, and thinking strategies to justify the development of the research questions and the conceptual framework.

2.1.2 The layout of the chapter

In Section 2.2, the significance of SMEs for the economy of a country is discussed. The presentation of SME performance follows in Section 2.3. The challenges related to SME performance are discussed in Section 2.4. Section 2.5 has explanations on crucial aspects used to acquire a sound theoretical foundation and to understand the recent developments in the field of study and other disciplines better. The description, definition and characteristics of SMEs are covered in Section 2.6. Section 2.7 discusses the competency requirements for effective SMEs. In Sections 2.8, the concepts, aspects and theories of PM are discussed. Section 2.9 elaborates on the PM frameworks, processes and its standing in comparison to other systems. The extent of existing knowledge on the theories underpinning the PM systems is investigated and analysed in Section 2.10. Section 2.11 discusses the literature on the concepts and aspects of the BSC, its influence on continuously improved performance of an enterprise and integration with other thinking strategy or systems. Section 2.12 covers the conceptual framework focused mainly on key areas of the topic. A summary of the discussion is provided in Section 2.13 to conclude the chapter.

2.2 SIGNIFICANCE OF SMES TO ECONOMIES

In any economy, the SME sector may be viewed as the ultimate vehicle by which free-market systems are manifested. Their significance and contribution to economies should be recognised for their ability to create jobs, reduce unemployment and alleviate poverty, particularly in developing countries (Bvuma & Marnewich, 2020; Muhanguzi & Kyobe, 2014:1-22). Studies from both developed and developing countries emphasise their contribution from various perspectives. For example, Amra, Hlatshwayo and McMillan (2013:3) and Chodokufa (2009) recognised their dynamism as a tool or engine for economic growth, innovation and job creation. From a South African perspective, the literature argues that the contribution of SMEs to the national GDP remains a contested issue, with a recently estimated share of around 37% in total turnover during the third quarter of the 2019 financial year (SEDA, 2019; Edinburgh Group, 2014). Okpara (2009:1281-1299) and Singh *et al.* (2010:54-65) attribute the effectiveness and good performance of SMEs to the ability to grow and compete successfully in the market, despite the impact of the competitive environment on their performance (World Bank, 2019; OECD, 2018).

SMEs have been recognised as major contributors to solving unemployment problems (Mahembe, Chiumya & Mbewe, 2011:9). Their ability to create new jobs in the formal sector in low-income countries and their reputation of being a source of income are acknowledged (Ayyagari, Demirguc-Kunt & Maksimovic, 2011; UNIDO, 2006: Online). The statement is based on their promising prospects and confirmed the ability to provide training opportunities and basic services for disadvantaged people (OECD, 2018; Abor & Quartey, 2010:218-228). As a consequence, studies report that almost half of South Africa's labour force is employed by SMEs (SEDA, 2019b:9; World Wide Worx, 2012: Online). According to Smit (2012: Online), it, therefore, becomes crucial that these enterprises succeed for the better health of the economy as a whole (Quartey *et al.*, 2017).

Despite their significance to the economies of countries, SMEs in both developed and developing economies, including South Africa, still face numerous pressing problems that inhibit entrepreneurial growth (Leboea, 2017:14). The number of SMEs in South Africa has stagnated over the past decade (SBI, 2020; Leboea, 2017:18; Fatoki, 2014:922). Consequently, their growth-related challenges adversely influence the country's position in the global economic rankings (see Table 2.1). Table 2.1 reveals

the ranking of South Africa on world competitiveness and survival rates of SMEs, as well as failure rate of these entities and unemployment in the country (OECD, 2020:140; OECD, 2015:93; Monks, 2010).

Table 2.1: South Africa’s position in the global economy from 2010-2020

Criteria	Ranking or %	Sources
World Competitiveness	52 nd out of 59 Countries 59 th out of 63 countries	2020 IMD World Competitiveness Yearbook 2011 IMD World Competitiveness Yearbook
Survival rate (five out of seven SMEs fail) for established business owner-managers	41 st out of 43 countries	Leboea (2017:53) Mahembe <i>et al.</i> (2011:7)
SME failures in year five	Between 50 and 95% 70-80%	Friedrich (2016: Online) GEMS (2011: Online). Willemse (2010: Online)
Unemployment rate (estimates)	Above 25% (2012-2014) 29.1% (4 th quarter 2019)	Statistics South Africa (2020: Online) Statistics South Africa (2014: Online; 2012: Online)

Source: Authors’ compilation

Notwithstanding the problem areas depicted in Table 2.1, Smit (2012: Online) emphasises how important it is for the health of the country’s economy that SMEs succeed. Studies claim that the current highly competitive and increasingly globalised environment forces SMEs with limited resources to be innovative, with particular emphasis on looking within their flexible environment to facilitate their survival and success (Pierre & Fernandez, 2018:152). As a result, owner-managers may be confronted with the tough job of managing the enterprise for performance to survive. In particular, on how to find a balance creatively and innovatively to measure, manage or improve performance, processes or operations to ensure the growth of the enterprise (Mabesele, 2009:31). Lacking such dynamic and necessary tools, competencies and critical business skills may influence enterprises adversely as SMEs encounter exposure to the risk of failure or difficulties managing or improving what they could not describe or measure (International Finance Corporation IFC, 2018:104).

2.3 REASONS FOR SME FAILURES

A wider range of reasons for the failure of SMEs was highlighted in Chapter One (see also IFC, 2018). Additionally, studies cite a lack of vision, goals and critical information for predicting the future as contributors to their failure and lack of knowledge of PM concepts as one of the reasons (Ledwaba & Makgahlela, 2017; Koumar, 2016:147; Online; Kirsten *et al.*, 2015:13; Fauske *et al.*, 2009; Mbonyane, 2006:11). Chavan (2009:395) agreed and underscored the heavy and exclusive reliance on the traditional financial measurement of enterprise performance as a contributing factor to their failure. Hellbrunn, Rozenes and Vitner (2011:234) summarised these issues as mainly being around the use of financial PM, a lack of personnel required to establish and maintain PM infrastructure and not having the culture of regular and consistent data collection, analysis and decision-making procedures. These studies reveal concerning areas in the competencies and skills in SMEs and primarily the types of PMs used (van Zyl, 2020; Mosalaka, 2007:5). Ismaila (2011:49) and Lasher (2010:90) advise cautious use thereof due to their limitations and inadequacies.

Neely (2002:146) remarked on a revolution occurring in the field of performance measurement, as supported by claims that PM has become a particularly important topic for enterprises (Mingers, 2015; Bititci, Garengo, Dörfler & Nudurupati, 2012:305-327). These claims point to the drive for current changes due to increased competition, changes in demands and continuous improvement initiatives. PM is one of the key issues for daily operations; however, keeping the PM systems updated remains a problem for every enterprise (van Zyl, 2020; Cocca & Alberti, 2010:196-200). These issues emphasise the need for extreme flexibility and reactive responses to market changes despite constrained resources and managerial expertise. Furthermore, the issues may remain critical as enterprises continuously search for better information and creative, strategic solutions to support their efforts for success, growth and sustainability.

2.4 ENTERPRISES' SUCCESS FACTORS (PERFORMANCE AND IMPROVEMENT)

Scholars argue that PM practices are often the difference between the success and failure of an enterprise (Mingers, 2015; Davis, 2010:6532). Other studies state that having creativity, the ability to innovate and intuitive integration may be the catalyst to facilitate processes in today's PM models (Nielsen *et al.*, 2017; Davis, 2010). On the

other hand, Hellbrunn *et al.* (2011:233) identified the ability to assure a good quality level and a willingness of management to do what is needed to meet customer expectations as factors on which the success of any enterprise is dependent. In this instance, the recommendations point to having flexibility and continuous improvement as essential components for success in PM.

From the ISOs 9000 and 14001 perspectives, the achievement of set performance objectives requires an understanding of continuous improvement for enhancement of enterprise management and PM systems (Carneiro-da-Cunha *et al.*, 2016; Wieslander, 2009:14). An enterprise cannot build a self-centred PM system as the success of an enterprise is dependent on meeting the changing needs of all stakeholders and the ability of managers to identify causes leading to improvement (Saunila, 2017; Striteska & Spickova, 2012:1). It is plausible that SMEs, including those in the CMSA, do not exist in a void but are part of the larger competitive environment and, therefore, should be encouraged to incorporate innovative ways of thinking into their PM initiatives.

2.5 INITIAL FINDINGS OF THE LITERATURE REVIEW

The literature review provided critical information on SMEs and their issues; however, it is lacking in emphasising, encouraging and elevating creative thinking strategies in all spheres of enterprise performance. It is necessary to gain experience in the PM processes and to understand the inter-related components involved in them, particularly in the CMSA context (Okwir *et al.*, 2018; Jääskeläinen & Sillanpää, 2013:441; Ferreira & Otley, 2009:263-292). A structure may be required in terms of PM and improvement in an integrative manner. These developments motivate the purpose of this research and this chapter, therefore, focuses on identifying and analysing the findings from existing literature.

The sections that follow present aspects of SMEs in their context, PM concepts, strategy, BSCs and their integration and fundamental skill sets, which may be required to adopt these systems successfully. These important aspects are used throughout the chapter to provide the underpinning to the study in support of the developed conceptual framework. This is in line with recommendations to facilitate the golden thread of binding the research work by demonstrating the ability to provide an underpinning of knowledge and concepts on which the research is developed and implemented (Trafford & Leshem, 2009:34-44; Miles & Huberman, 1994:33).

2.6 SME: DESCRIPTION, DEFINITION AND CHARACTERISTICS

According to Cocca and Alberti (2010:199), a thorough understanding of SMEs is required to develop a good PM system. The starting point is, therefore, to define an SME before seeking the background on the processes of an enterprise. Sitharam and Hoque (2016:277) state that defining a small enterprise may be difficult due to the wide range of definitions globally. As a result, own judgement is often used by countries to define such enterprises. Small enterprises are identified as small and medium businesses (SMBs) in the USA (US SBA, 2016; Mahembe *et al.*, 2011:24). In the UK and India, the term micro-, small and medium enterprises (MSMEs) is often used; and medium and micro-enterprises (MMEs) in other parts of Africa (Mwiya, 2014). Small and medium enterprises (SMEs) is the term used in Brazil, Australia, the European Union. In South Africa it is often used interchangeably with small, medium and micro-enterprises (SMMEs) (Mahembe *et al.*, 2011:23-24).

According to Wiese (2014:10) and Mahembe *et al.* (2011:23-24), various region-specific, enterprise sector, annual revenue, number of employees or location are often used as criteria to develop a definition (Bvuma & Marnewick, 2020). In developed and developing economies definitions vary, for example, Beck, Dermigüç-Kunt, and Peria (2009:3) found that the definition in Europe included enterprises or people who provide goods and services and operate mostly on credit-terms to allow time for later payment rather than cash payments. These criteria may result in making it difficult to formulate a universal definition. Van Scheers (2011:5049-5056) attributes this impediment to the differing economies of countries and the adoption of particular standards for specific purposes. While the literature argued a lack of global consensus on SME definition, suggestions point to the necessity of using the defined limits set out in each countries' policies as a basis to define what constitutes an SME (Bvuma & Marnewick, 2020).

In a South African context, the official definitions of small enterprises are provided by the National Small Business Act of 1996, and respective Amendment Acts (South Africa, 2019a; 2004; 2003; 1996). According to these Acts, small enterprises denote separate and distinct enterprise entities, together with their branches or subsidiaries, including co-operatives. Furthermore, these enterprises would typically have one owner-manager or, more predominantly, carry out operations in any sector or subsector of the economy. A schedule with varying criteria complements the Acts to classify these enterprises as micro, very small, small or medium-sized (South Africa,

2019a; 2004:4-5; 2003:9-10). These classifications include any enterprise, incorporated or not, or registered under any law, consisting primarily of persons carrying on a small enterprise in the economic sector.

These issues remain a major concern, hence the need to recognise that, in various economic sectors, a small enterprise would be dependent on the nature of the activity undertaken. These Acts further stipulate the categories into which distinct groups and different economic sectors are divided as depicted in Table 2.2.

Table 2.2: SME Categories stipulated by the NSB Acts 1996, 2003, 2004, 2019a

Grouping	Categories: employees, economic sector, nature of the activity
Small	The number of employees is below 50. The enterprise would generally be more established than a very small enterprise, with complex business practices
Medium	The number of employees is between 51 and 250, depending on whether it operates in the mining, electrical, manufacturing or construction sectors. An additional management layer more often characterises them to facilitate decentralised power

Source: South Africa (1996; 2003:9-10; 2004:4-5; 2019a)

The categories illustrated in Table 2.2 form part of the discussions to follow and are included in the research methodology in Chapter Four to establish the delineation. Despite the deficiency in the clarification of the definitions, sense can be made of the requirements. The criteria may be used in the context of the objectives of SMEs (that is quality issues, customer service, flexibility and costs), their PM and continuous improvement in terms of these aspects. The literature reviewed revealed that small enterprises are generally acknowledged to be associated with a vast range of important socio-economic characteristics, namely:

- Ability to generate new employment opportunities.
- The uniqueness of abilities to invent and innovate due to the personal initiatives of an entrepreneur.
- They mostly attend to the needs of their surrounding communities.
- They lend themselves to economic stability and a better and equal distribution of economic activities and opportunities in the economy.
- They can be more flexible and adaptable.
- Being sub-contracted to larger enterprises in the economy.
- They are a point of entry to larger enterprises in the economy.

These characteristics, amongst others, are supposedly the typical aspects leading to the growth, sustainability and competitiveness of an enterprise and are fundamental to this study of PM. Researchers argue that an enterprise should adopt innovative strategies to position itself best relative to its rivals, to help not only understand measures but other threats or dynamics in the external macro-environment and take opportunities offered by the market and be able to sustain them over time (Baldrige BEF, 2019; Kaplan Publishing, 2012:109). Within such environments, an enterprise may potentially identify or create opportunities at a given time, taking into account its competencies and resources.

2.7 COMPETENCIES AND EFFECTIVE ENTERPRISES

The most crucial resources held by the management of SMEs are typified by skills, knowledge, experience and education and other entrepreneurial and behavioural competencies (Fourie, 2020; Fatoki, 2011:196). This statement is supported by Sitharam and Hoque (2016:281) who say that highly educated SME owners can attain and develop skills to sustain the business. In contrast, Neneh and van Zyl (2012:119) argue that the competencies for every valuable area of improving the performance of these enterprises are under scrutiny and pose unique challenges due to their environmental background as they constantly seek out better ways to achieve competitive advantages (Bvuma & Marnewick, 2020:1).

Studies suggest that enterprises are now forced to search beyond traditional PM and place greater emphasis on strategies which seek to consider softer issues such as organisational learning, knowledge creation and innovation capabilities or competencies, factors considered to be dominant in the competitive advantage field (Bulakowski, 2018; Nudurupati *et al.*, 2016:226-235; Zahra & George, 2002; Bromwich & Bhimani, 1994). These factors may be embedded in people and processes whose strengths or weaknesses do not reflect on any enterprise statement of financial position.

Generally, a scarce resource in any environment is not information but attention, and, for SMEs, it may become a matter of adapting current PM systems rather than engaging in a radical change. On the aspects of performance, Longenecker, Moore and Petty (1991) argue that, when an enterprise fails to achieve the desired outcomes, it is often the result of actions or inactions of top management. Fourie (2020) argues that displaying business skill or actions often lead to increased

performance of an enterprise. By implication, therefore, it may be necessary to examine more closely those internal factors that may contribute to an enterprise's success, without ignoring their environment.

In terms of the internal factors, the main indicators for the sustainability of an enterprise may include, but are not limited to, communication skills or channels, experience, relationship building or securing, honesty, service delivery and the availability of a website (Kumar & Jayant, 2017; Wiese, 2014:98-101). The IA Adviser (2015:37-40) emphasises sustainability of an enterprise more from the perspectives of its direction and vision, readiness, people, processes, data, technologies capabilities and existing measurement practice consistencies amongst others.

Other factors include new customers, good quality customer service, location, competitive price, stability in the workforce, climate, skills, experience and many others (Rantala & Ukko, 2018; Qehaja *et al.*, 2017; Cook & Wolverton, 1995). Longenecker *et al.* (1991) attributed the failure to achieve success to a lack of clear vision and direction, adopting changes, developing effective strategies, poor forecasting, planning and decision-making and not having a clear understanding of the enterprise sector and the specific industry in which it operates. More often, the performance of an enterprise may be equated to effectiveness measured as achieving goals or events related to the ever-changing business environment (Franco-Santos & Otley, 2018; Zeller & Metzger, 2013).

The effectiveness of the enterprise requires a systematic review process for maintaining the PMs (Armstrong, 2019; Rompho, 2015; Najmi, Rigas & Fan, 2005:109-122). This may imply that an enterprise should organise its strategy around a set of objectives, determine how to achieve them and allocate resources to facilitate efficiency (the role of viability) and, therefore, augment value benefit where one variable of performance may reduce another. These typical features are mostly associated with PM and are relevant to this thesis; however, an additional literature review is necessary to gain a useful and thorough understanding of the conceptualisation of PM, mainly concerning SMEs and to support the developed research questions.

2.8 THE CONCEPT OF PERFORMANCE MEASUREMENT

PM has been used since the late 1970s (Taticchi *et al.*, 2012:42). Divergent research contributions in the PM field range from operations research accounting, management, strategy, economics, psychology, human resources, design disciplines, and bodies of knowledge (Tweedie *et al.*, 2018; Adler, 2011; Neely, 1999a:205-229; Radnor & Barnes, 2007:394-396). It has become an integral part of enterprises to compete in today's changing environment. Generally, PM is an evaluation of financial or non-financial measures of an enterprise and its employees (Sorooshian, Aziz, Ahmad, Jubidin & Mustapha, 2016:123).

The term PM is yet to assume a conclusive universally endorsed definition; different meanings or approaches are used based on various situations in different fields (Sorooshian *et al.*, 2016:123; Wu, 2009:9). To understand better what PM entails, consideration of the key words performance and measurement suggested by the BPIR (2019) and the Baldrige's (MBNQP, 2009-2010) framework may guide to mitigate this uncertainty. The Baldrige's framework refers to performance as output results and outcomes obtained from processes, products and services that permit evaluations and comparisons relative to goals, standards, past results, other enterprises and its expressed non-financial (qualitative) and financial (quantitative) terms.

In the enterprise performance research field, performance refers to the extent to which certain operations fulfil the objectives of customers or market requirements (Najmi *et al.*, 2005:109-122). Views held in this discipline also differ among researchers (Smith & Bititci, 2017; Zeglal, 2012; Franco-Santos *et al.*, 2007; Neely, Gregory & Platts, 1995). Folan, Browne and Jagdev (2007:605-620), for example, argue that, when the concept functions as a placeholder in research, it is a subject open to wide variability and a somewhat imprecise word. Conversely, Daniel (2019:63) views performance as the ability to accomplish a given task when measured against pre-set known criteria or standards such as accuracy, completeness, cost and speed.

From the management perspective, Brudan (2010:109-23) positioned the term performance as a reflection on the progress of the journey of creativity, actions and results in the processes of performance measurement and management. On the other hand, van Zyl (2020) argues that defining performance should be context-specific with consideration of the user's background and purpose. In broader terms, performance can mean actions or activities using various factors such as environment, culture,

mission, goals, knowledge, skills (individuals or groups, work-flow, processes and events) all working together to focus the enterprise as a whole system, to produce something valuable to the client, with outputs to fulfil its goals and objectives (Darus *et al.*, 2017:164; Barreiros, 2013:4; Ates, Garengo, Cocca & Bititci, 2013; Dudley, 2010).

Based on the literature reviewed, the varying definitions confirm that the disciplines and fields mostly view the term in line with their specific research. For this thesis, performance will refer to processes involving stakeholders, integrating and elevating thinking strategies to facilitate improved internal processes and related enterprise aspects for the achievement of successful PM. From this perspective, performance may seem to be dependent on measurement, meaning that measurement can take place after determining and deciding what is to be measured.

2.8.1 Definition of performance measurement

What is PM then? Different versions exist, borrowing from operational management, accounting and other research disciplines and, therefore, posing difficulties in finding a common definition. At times, different approaches to PM were argued to have led to various definitions (Smith & Bititci, 2017; Zeglat, 2012; Franco-Santos *et al.*, 2007:797). The most used definition is that provided by Neely (1999b:47-64) which emphasises quantifying the efficiency and effectiveness of past actions by acquiring, collating, sorting, analysing, interpreting and disseminating appropriate data as the objects of measurement. This agrees with studies by Mathur *et al.* (2011:79) and Harbour (2009:10) when elaborating on performance and concurred with earlier descriptions by Kaplan and Norton (1992) to prove its multi-dimensionality (Sethibe & Steyn, 2016; Ates *et al.*, 2013).

PM can be characterised and described as a tool in terms of its ability to assist managers in identifying skilled performance (Saunila, 2017) and at times act as an indicator as to when it may be necessary to intervene, for example, when the performance of the enterprise deteriorates (Ladzani *et al.*, 2013:3999). Harbour (2011:5) supported PM as being a critical element of sound enterprise practices for decades, regardless of who may have coined the phrase. Nonetheless, scholars claim that PM may not be meaningful on its own and contend the relevance as actually being the actions taken because of the measure (Follett & Treseler, 2017; Powell & Netland, 2010:5; Busi, 2005). In terms of its purpose, Moullin (2003:1-25) related PM to how well enterprises are managed and the value delivered to stakeholders.

Simply put, for this thesis PM may be described as or equated to awareness and knowledge of where an enterprise is, where it can go (vision), what can be used (strategies) and how to get there (mission). This study contributes to the body of knowledge by considering building and providing a definition from existing PM definitions. As a result, this study proposes a general definition for PM as a continuous collection and reporting on a set of performance measures and processes used in an enterprise to determine the efficiency, effectiveness or both, of an existing system. The intention is to describe what it means and include incorporating designerly skill sets into the PM system from a South African SME perspective. These issues are discussed in the summary of this chapter.

Authors on the subject contend that the literature on PM is extensive with inherent complexities (Franco-Santos & Otley, 2018; Striteska & Spickova, 2012:2). They highlight the theme of the PM literature as being preoccupied more with the measurement process with less reference to the context in which the measurement is done. They focused more on the validity of the measurement system rather than on how the information will be used to change and improve the way services are delivered (Kloot & Martin, 2000:233). Similarly, Saunila (2016) views PM as a comprehensive process in which all an enterprise's on-going activities (including but not limited to leadership and management, employee motivation, quality of operations, and the ability of a product to achieve customer satisfaction) are considered for their impact on performance.

For this thesis, plausibility of the context, validity of the system, the how and on-going activities are seen as important factors contributing to a successful PM and are discussed more in this chapter. Given the field's cross-functionality nature, the literature on PM research includes some primarily from the strategy field (Pollitt, 2018; Chakravarthy, 1996:437-459; Simons, 1995). Those in strategic management research hold the view of a balanced and multi-modal PM and advocate the use of financial and non-financial performance measures (McAdam *et al.*, 2017; Pavlov *et al.*, 2017). PM as a process, is associated with methods or systems to solve general problems using financial and non-financial measures from four perspectives to measure business performance without the systems to adapt and structural problems (Kaplan & Norton, 2015). The concept of PM has also seen increasing use in innovation literature, where the focus is on the challenges and the imperative of

enterprises innovating successfully (Saunila, 2017; 2014; Tidd, Bessant & Pavitt, 2005:37-44).

2.8.2 Performance measurement vs performance management and management control systems

Performance measurement has been studied using different perspectives, for example, management-control systems (MCS) and performance-measurement systems. The concept of PM is often compared to performance management (PMM) and MCS. Diverse views in the literature contend that PM and PMM are not the same things (van Zyl, 2020:13; Ates *et al.*, 2013; Striteska & Spickova, 2012:2). They contend that the literature on PM is much more extensive compared to PMM. Furthermore, they state that PMM is often used to refer to individual PMM or appraisal schemes. However, the literature review reveals an overlap in these concepts, which creates confusion.

Van Zyl (2020:14) argues that there is no clear line between PMM and PM. Ates *et al.* (2013) and Bititci, Carrie and McDevitt (1997a:533) regard the PMM process as a closed-loop control system used to deploy policy and strategy and obtain feedback from various levels for the management of organisational performance. Folan and Browne (2005:674) contrasted the use of PM to PMM. They concluded that information in the former is used to effect positive change and, in the latter, may refer to the process of directing and controlling employees and work units, to motivate higher levels of performance.

Performance management is expected to result in an increased focus on improvement among employees and may, therefore, foster proactive behaviour to solve upcoming issues (Ukko, Tenhunen, & Rantanen, 2007:39-51; Bourne, Kennerley & Franco-Santos, 2005:373-95; Johnston, Brignall, & Fitzgerald, 2002). From this perspective, PM may be seen, not as an end in itself, but as a tool for more effective PMM. In this light, van Zyl's (2020:13) view on the concepts are supported on the basis that PMM precedes and follows PM and PM supports PMM. Simply put, PMM means using PM information to manage the capacity and processes of an enterprise.

Aguinis (2013:2) linked PMM to a process of continuous identification, measurement, development of the performance of individuals or teams and the alignment of performance with the strategic goals of the enterprise. This definition underlines to

some extent, the similarities or dissimilarities of PM and its management. This thesis seeks to understand strategies focusing on the holistic enterprise viewpoint including other stakeholders. Although the PMM is not the focus of this thesis, it contains aspects of interest to the study. It is used in this chapter to aid explanation and corroborate relevant issues and topics as and when necessitated by the discussions.

The MCS as a concept is compared in the sense that the system is also researched under the PM field using a management accounting approach. Van Zyl (2020:97) described MCS as the ability to free management from routine tasks and focus more on important strategic areas and activities. Anthony (1965:190) stated that the concept is to represent a process which helps managers to facilitate what and how resources are obtained and used effectively and efficiently in the accomplishment of the enterprise's objectives. Simons' (1994:169-199) definition introduces formalities, routines and procedures, which managers can use for maintaining or altering patterns in organisational activities. Chenhall (2003:127-169) conceptualised the term broadly to cover the management accounting system and other controls (such as, personal and clan controls) and emphasised the occasional use of the term 'organisational control' to refer to the types of controls that are built into activities and processes (such as statistical, quality control and just-in-time management).

Aureli (2010:91-114) confirmed the main focus of MCS research as being on accounting information produced primarily to measure cost efficiency and financial performance. At the same time, external and other aspects of the enterprise are still being ignored. MCSs are commonly viewed as mechanisms designed to support the implementation of strategy at management level, separating management control from strategic and operational controls (Zizlavsky, 2014:211). The literature reflects a limited view of MCS presented as comprising a systematic use of management accounting for achieving some goals and other controls, including personal and clan controls (Lopez-Valeiras, Gonzalez-Sanchez & Gomez-Conde, 2015). The limitations are further argued from the perspective that, if a strategy is concerned with achieving competitive advantage, then it is inadequate for MCS to be controls-focused only. Still, they should also be explicitly tailored to support the strategy of the business to lead to superior performance. Scholars say that MCS must provide objectives and incentives and support the development of an organisational culture that fosters knowledge (Massaro, Moro, Aschauer & Fink, 2019:274).

As a result, MCS is only covered comparatively in this chapter as it addresses one side of an enterprise's performance and is focused on leadership and neglects other critical performance-related perspectives; this study advocates holistic and balanced measures and improvement.

2.8.3 Performance measurement systems, its role and purpose

Striteska and Spickova (2012:2) view the term PM as one element of a general management system that comprises many essential components interacting to produce outcomes, where each component is a system on its own. Still, all working together to form a PM system (Armstrong, 2019). Such systems, Gotore (2011:13-14) maintains, are a representation of what drives the enterprise to competitive advantage and ultimately achieve high performance (that is quality products, improved output and efficiencies and lower costs). As a result, the literature suggests that enterprises should recognise the dynamism of the PM system and continually review, assess and update such a system. The notion is supported by Cocca and Alberti (2010:196). They suggest that PM systems should be considered as a means to gain a competitive advantage and aid enterprises to react and adapt to external changes continuously.

The existing literature indicates that a PM system should consider strategy and alignment to facilitate the optimisation of resources (Bellisario & Pavlov, 2018). Defining strategy is still difficult due to the use of the concept in various fields and disciplines. Despite this, the concept remains an important and much-needed aspect of business due to limited resources that are available for achieving goals (Freedman, 2015). The concept of strategy generally describes how the goals set would be achieved by the most efficient way of utilising resources (Luca, 2020; Durmaz & Ilhan, 2015).

The concept of strategy is widely viewed to encompass the organisational direction and scope over the long term (Pitelis & Wagner, 2018; Mainardes, Ferreira & Raposo, 2014; Johnson, Scholes & Whittington, 2008). Additionally, the strategy is expected to guide the success of an enterprise. Haberberg and Rieple (2009:6) define the term strategy, based on its process and context, as a set of actions by which an enterprise develops resources, either by accident or design. Consequently, the resources may be used to deliver services or products in a way users find valuable while meeting financial and other objectives as well as constraints imposed by key stakeholders.

According to Wiesner and Millett (2012:98), business success is linked with business planning and, therefore, strategy-making approaches should be promoted to provide a competitive advantage and improve the sustainability of the SME sector (Ndeisieh, 2018:36). Strategy in SMEs is expressed predominantly by activity rather than conception (Hussin & Yusoff, 2013:450; Kerr, Way & Thacker, 2005:93-112). For this reason, Kaplan and Wisner (2009:37-56) emphasise the importance of managers knowing the business unit strategy. Regarding the aspect of strategy, although important for any enterprise, Hussin and Yusoff (2013:449) advise that the methods used to develop and implement strategies should consider the limitations facing SMEs.

Studies on the role of PM in new product development have found that PM is not just used for reactive monitoring, but to disseminate strategy and change culture proactively (Awwad & Akroush, 2016:3; Haque & James-Moore, 2005:100-122). Other researchers have focused on the purposes of a PM system concerning research and development activities (Larsen & Lindquist, 2016; Chiesa, Frattini, Lassarotti & Mansini, 2007:199). They further list the purposes as including supporting decision-making, enhancing research and development (R&D) performance, motivating personnel, supporting incentive schemes, fostering organisational learning, enhancing internal communication and coordination, progress monitoring, focusing attention and reducing R&D risks. These results highlight that, while PM can enhance performance, it does so by backing up processes such as decision-making, learning and communication.

Bititci *et al.* (1997a:524) state that the PM system ensures effectiveness and efficiency. On the other hand, Hulthén, Näslund and Norrman (2016) looked at the effectiveness and efficiency of PM systems from the perspective of change initiatives and processes involving different key stakeholders. Tundys and Wiśniewski (2018:7) view PM systems as a set of performance measures used to determine the efficiency, effectiveness or both, of an existing system, or to compare competing alternative systems. It is from this viewpoint that Neely (2005:1229) equates PM to the set of metrics used to quantify actions of both efficiency and effectiveness. Neely and Al Najjar (2006:101-114), emphasise a learning role in which managers are challenged by measurement outputs on how best to carry out their roles, or adapt PM to their culture (van Looy & Shafagatova, 2016).

As a consequence, the literature suggests the need for PMs that are simpler, more efficient with action-oriented strategy management approaches and focused on selected processes for innovation (Otley, 2016; Buh *et al.*, 2015; Haberberg & Rieple, 2009:6). By so doing, core competencies and capabilities could be built for the executing operations while positioning their enterprises to capture opportunities that are becoming the norm in the ever-changing economic environment in which they operate. Employees should be allowed to contribute to the enterprise. In this field, the views are that high-performance work arrangements rely on all employees for their ideas, intelligence and commitment to make the enterprise successful.

Employees are a source of capabilities to support measurement-system design, implementation and management and, in particular, organisational learning, continuous improvement and strategic management capabilities (De Souza & Beuren, 2018; de Lima, Da Costa & Angelis, 2013:526; de Lima, Da Costa, Angelis & Munik, 2009:45). Furthermore, employees are important to an enterprise since their motivation will increase productivity and the quality of work and reduce staff turnover. These factors could have an impact on the achievement of PM objectives; however, regardless of the size of the enterprise, the drive to invest in new improvement plans or programmes is influenced mainly by top management, and the results thereof are impacted by, for example, team characteristics or the environment (Hussin & Yusoff, 2013:449; Bourne *et al.*, 2005:373-95; Stonehouse & Pemberton, 2002; Grütter, Field & Faull, 2002:641-657).

From the SME perspective, the area of PM remains a field in which research is developing; however, scholars are acknowledged for numerous publications in this area. Brem, Kreusel and Neusser (2008:412) highlighted that growth, in particular, is focused on the importance of adapted and new measures for PM systems. Neneh and van Zyl (2012:122) advocate significant benefits of such tools for SME performance and emphasise the effect of the tools in forcing the managers or owners to think continuously about open enterprise questions and solutions. Ladzani *et al.* (2013:3999) maintain that strategic management tools (including PM) and thinking strategies among SMEs are increasing since managers and owners are increasingly looking to strategise in their quest for competitive advantage. However, when searching for accredited sources on PM integration with newer thinking strategies from the South African SME perspective, publications are sparse.

The synthesis of the literature reviewed presents the definition and concept of PM as fragmented and draws from a variety of disciplines including strategic, operations, economic management and many others. This study is positioned in the strategic management domain with a focus on the disciplines of PM(s), strategic management, strategy including innovative thinking topics (as a developing area of research) and some publications of interest from the broader field of management from which this thesis draws. From this standpoint, the researcher argues that, in the absence of an improved PM, there may be a danger of losing control over an enterprise because of a lack of knowledge on what is happening or how to improve it.

2.8.4 Features of the PM system and processes

Different studies suggest that an effective and competitive PM system should consist of various features and characteristics (Striteska & Jelinkova, 2015:291; Kennerley & Neely, 2000; LaBarge, 1999) including:

- Measures to provide a balanced view of the enterprise;
- Measures should be multi-dimensional;
- Measures should be integrated and across enterprise or functions;
- It should provide a concise overview of enterprise performance;
- It provides comprehensive mapping;
- It should provide data for monitoring and planning future performance.

In terms of the development of a PM system, research suggests the process may be separated conceptually into phases of design, implementation and use (Pekkola, Saunila & Rantanen, 2016; Bourne, Mills, Wilcox, Neely & Platts, 2000:754-771). Supporting this view, scholars have identified the typologies and requirements of PM necessary for its design and development (Striteska & Jelinkova, 2015; Gomes, Yasin & Lisboa, 2011; Hudson, Smart & Bourne, 2001:1096-1115). Examples are illustrated in Table 2.3.

Table 2.3: Typology for PM design for SME

PM requirement	PM characteristics	Dimensions of performance
<p>Manage uncertainty, sustain evolution and change processes.</p> <p>Help the innovation of product and services.</p> <p>Develop strategy and competitive measures and align with ordinary processes.</p> <p>Balanced, tailored, flexible and dynamic adaptability.</p> <p>Must be aligned to and fit in the strategic framework.</p> <p>Be based on objectives and monitor financial and non-financial aspects</p>	<p>Non-institutional PM system.</p> <p>Key performance indicators are employed.</p> <p>Non-financial and intangible indicators are mainly employed (based on key success factors)</p> <p>Objective-oriented.</p> <p>Must change dynamically with strategy.</p>	<p>Performance results.</p> <p>Internal and external determinants.</p>

Source: *Striteska and Jelinkova (2015), Gomes et al. (2011), Hudson et al. (2001)*

The typology provided in Table 2.3 is showcased from the design perspectives of PM. In support of this view, Wieslander (2009:46) considered the first phase of identification and design to be the most crucial and emphasised that developing and implementing a PM system requires the enterprise to establish both strategic objectives and strategies. Furthermore, this activity constitutes the foundation of continuous strategic thinking, which is often lacking in SMEs.

Studies in the literature proposed that the principal characteristics and dimensions of an ideal SME PM system should include assessment, design, implementation, communication, alignment and review (Fuertes, Alfaro, Vargas, Gutierrez, Ternero & Sabattin, 2020; Hill, Jones & Schilling, 2014; Taticchi *et al.*, 2009:61). Along with the features, characteristics and processes of the PM system, Hussin and Yusoff (2013:449) highlighted some important elements for developing a strategic framework for SMEs. These elements include simplicity, resource constraint time, people and skills, costs to implement, leadership role to set mission, values, vision, culture and values, leverage on competencies for greater value, action and informality in documentation and reviews.

For today's business environment, Powell and Netland (2010:2) suggest that a PM system should be process-orientated, cut across functional boundaries and support

improvement activity (Massingham *et al.*, 2018; Nielsen *et al.*, 2017). According to Molly (2013), an accurate assessment of how well an enterprise is performing requires developing some quantifiable measures by identifying aspects of processes that are working well and those that need improvement. In this thesis, most of these aspects connect and are considered critical for developing the proposed integrated PM framework. Similarly, these aspects led to research question one (RSQ1):

Which processes are used by SMEs to design and measure the performance of various business activities, products, internal processes, strategy or services?

2.9 THE MOST PREVALENT PERFORMANCE MEASUREMENT FRAMEWORKS

PM received considerable criticism in the 1990s (Franco-Santos & Otley, 2018; Taticchi *et al.*, 2012:43-45). Many researchers point to numerous problems such as being short-term and restricted to financial measures and robust accounting methods in evaluating the performance of an enterprise specifically concerning their profitability (Neely, 2002; Kaplan & Cooper, 1999; Hill, 1995; Crawford & Cox, 1990:2025-36). In response, Sinclair and Zairi (2000:145-169) attest to the creation of new and more balanced approaches incorporating multi-dimensional PMs. Several studies elaborated on several PM systems proposed and used over recent years (Sethibe & Steyn, 2016:1-12; Mathur *et al.*, 2011:79-90)

Amongst these systems are the PM frameworks that were developed in the early and middle 1990s, some of which were designed for enterprise-wide implementation (McAdam, Bititci & Galbraith, 2017; Yadav, Sagar & Sagar, 2013). For example, the Balanced Scorecard (BSC) developed by Kaplan and Norton (2015; 1990-1992), the Performance Pyramid (the SMART system) of Cross and Lynch (1992:20-24) and the Cambridge Performance Measurement Process (Neely, Mills, Gregory, Richards, Platts & Bourne, 1996), the Performance Prism (Neely *et al.*, 2000-2001) and the Six Sigma proposed as a result of a challenge to Motorola by Bob Galvin in 1991 (van Zyl, 2020; Omachonu & Ross, 2004:443). Chapter one of this thesis showcases some of the systems to highlight issues from a benefits and disadvantages view. However, the discussions on the definitions of the most popular PM frameworks are elaborated on below:

- **Activity-Based Costing (ABC):** ABC was first introduced in the late 1990s by Johnson and Kaplan (1997). Scientists expanded the first initial idea and developed a method for cost drivers to calculate activity costs for each product and service. The arguments on such a method include supplies of accurate cost data needed for making appropriate strategic decisions for product mix, sourcing, pricing, process improvement and the evaluation of enterprise process-performance (Wegmann, 2019; Cooper & Kaplan, 1999:96-103; 1992; Swenson, 1995:167-190).
- **Performance Measurement Matrix (PMM):** This is a framework which seeks to integrate different dimensions of performance using the terms internal, external and non-cost for simplicity and to enhance its flexibility (Sorooshian *et al.*, 2016:125; Keegan, Eiler & Jones, 1999:39-43).
- **Performance Pyramid (SMART system):** A pyramid of four levels, showing the links between corporate strategy, strategic enterprise units and operations, translated from the enterprise vision using a top-down process. Furthermore, the measure is balanced in that it measures stakeholder satisfaction and operational activity (Sorooshian *et al.*, 2016:123; Cross & Lynch, 1999:23-33).
- **Balanced Scorecard (BSC):** The framework aims to provide management with balanced measures based on four perspectives, namely financial, customer, internal process, innovation and learning perspectives. Furthermore, each of these perspectives is linked to the different types of organisational objectives, measures, and activities supporting improvement (Kaplan & Norton, 2015; 1996:75-95;1992:71-79). The BSC is revisited further in Section 2.11 of this chapter for its potential as one of the strategies to contribute to the envisaged integrated PM framework.
- **Integrated Performance Measurement System:** The information system, which enables the PMM process to function effectively and efficiently. The concept emphasises two (2) main facets of the PM system, namely integrity and deployment of an enterprise's objectives and policies (Bititci, Carrie. & McDevitt, 1997b:46-53).
- **Six Sigma:** A statistical analysis tool and management system designed to streamline an enterprise's processes to improve and sustain quality, eliminate waste and increase profit. It emphasises understanding, managing and meeting

customer needs, using data analysis to minimise variation (Larsson, Syberfeldt & Säfsten, 2017; Bylinskly, 1999: Online).

- **Performance Prism:** A three-dimensional framework which graphically represents the architecture of the framework with each face of the prism corresponding to a specific area and analysis, namely: stakeholder satisfaction, strategies, process, capabilities and stakeholder contribution (Sorooshian *et al.*, 2016:127; Neely, Adams & Kennerley, 2002; Neely *et al.*, 2001:6-13).
- **Integrated Performance Measurement for Small Firms:** The framework specifically designed to be used by SMEs based on seven dimensions of measures connected by a causal chain, namely financial performance and competitiveness, costs, production factors, activities, products and revenues (Pekkola *et al.*, 2016; Laitinen, 2002:65-99).

Scholars have demonstrated that frameworks from the 1990s were developed in large business environments and were, therefore, not suitable for SMEs (Bahri *et al.*, 2017; Carlyle, 2013; Taticchi *et al.*, 2012:41-54; Wu, 2009:1). Subsequently, research focusing on small business needs appeared at the beginning and middle of the twenty-first century (van Zyl, 2020:80; Waśniewski, 2017). Furthermore, the authors point out that the beginning of the 2000s witnessed SME performance measurement (SME-PM) research take on two (2) directions. The focus was foremost on the application, adaptation or both of, for example, the BSC initially intended for large enterprises, followed by the development of more specific frameworks for SMEs directed, for instance, at the objectives or quality issues of owners. These developments are also seen among researchers in developing and emerging markets to showcase PM using BSC in various enterprise setups and the SME sector (Mamabolo & Myres, 2020).

Some of the proposed SME-PM frameworks include the continuous strategic improvement process by Hudson (2000) and a methodology to support the design and implementation of a PM system in SME by Garengo (2009). However, the BSC remains the most popular and is a widely adopted PM framework (Bain & Company, 2015; Bititci, 2015; Brudan, 2010:109-123). BSC is discussed in the sections to follow to provide an overview of the concept, structure, components and studies reporting the use of and problems with this framework in SMEs, benefits gained from adopting the BSC and its integration with other systems.

2.10 THEORETICAL PERSPECTIVE OF THE STUDY

The purpose of this thesis is to develop an integrated PM strategic framework, anticipating the empowerment of SMEs to challenge their thinking and seek better tools to enable an overall improved organisational performance. However, this study needs to provide theories and literature supporting the notion that PM leads to improved overall organisational performance to add value. Recent studies support the conclusions of Taheri, Bititci, Gannon and Cordina(2019), Francisco and Alves (2012:465-497), Limburg, Knowles and McCulloch (2012), Tung, Baird and Schochl (2011:1297-1310), and Le Roux and Wright (2010:571-597). They report a positive relationship of PM to organisational performance, in both for-profit and not-for-profit sectors.

The literature reveals enough theories that have influenced enterprises, their performance, measurement, successes and integrated frameworks. Given the objectives of this study, it is not possible, nor is it necessary, to review them all or the many variables provided in various perspectives and their relationship. For this chapter, theoretical perspectives relevant and applicable to the scope of the developed study's assumptions are reviewed. Firstly, to justify those aspects that helped to guide the observed findings and were, therefore, included in the theoretical model or framework. Secondly, to utilise the aspects in conjunction with the empirical data collection in Chapter Five on which the integrated successful PM framework would be built and discussed in Chapter Six. The resulting noticeable variables from the theoretical aggregates, their relationships, and potential conflicts are also discussed in this chapter.

2.10.1 The relationship between PM and the enterprise

PM is important to any enterprise, irrespective of its size or the sector to which it belongs, and this creates a consequential linkage to organisational theory (van Zyl, 2020:30; Rompho, 2015:58). Although not a novel theory, several authors in various fields and disciplines believe it to be an open-systems approach with different perspectives (Miller & Rice, 1967:296). Generally, a system consists of interrelated parts, with each part contributing to its survival and continuity. It is viewed by Hatch and Cunliffe (2013) as a collection of interconnected processes operated in a known environment to transform the resources of the enterprise into results or outcomes.

The organisational and contingency theories of Sharma (2019) and Otley (2016) hold the view of ensuring that an enterprise is understood wholly with its operations and show how one element within several other elements act interdependently with a clear starting point (flow of inputs and outputs) and end of a cycle (feedback loop), emphasising flexible specialisation and multi-skilling. Franco-Santos *et al.* (2012:79-110), emphasise the imperative of understanding the interdependence of its various parts, for this is the basis on which some PM systems are developed and constructed, including those of SMEs (Hatch & Cunliffe, 2013; Ali, 2003).

In the context of SMEs, ontologically no two (2) enterprises are homogeneous. Consequently, Franco-Santos *et al.* (2012:99) state that PM systems cannot be universally appropriate. They state that each enterprise needs to design its system according to its circumstances to avoid loss of performance. Pourmoradi *et al.* (2016) agree, suggesting that SMEs should develop customised scorecards to fit their unique situations within the context of the overall strategy of the enterprise. Similarly, the success of PM systems is contingent to and dependent on other factors which could have a positive or negative influence and impact on its environment. The contingency theory of enterprises has been applied to study influencing factors on PM systems. It predicts that the relationship between an enterprise's characteristics, its performance and PM systems are dependent on specific contingencies (Heinicke, 2018). For example, influencing factors on PM systems may include environmental uncertainty, technology, size, organisational structure, strategic orientation and culture (Hoque, 2004:495-502; Chenhall, 2003:127-169; Ittner, Larcker, & Randall, 2003:715-741). According to Armstrong (2009), institutional and behavioural factors such as processes, resources and employees' behaviour, enable an enterprise to perform its tasks.

The effectiveness of PM is moderated or enabled by the experience of the employees, information systems, management style and competition (internal and external factors) in which the enterprise operates (Franco-Santos *et al.*, 2012:99). In light of this, the contingency theory may appear to combine with agency theory, the latter recognising the existing relationship between the owner (principal) and manager (agent) in an enterprise (Redden, 2019; Dossi & Patelli, 2010). Both theories hold the view that managers can determine the resources needed to achieve the set objectives and proposed performance results and whether the ability of the personnel can be

transformed into organisational capability (Chenhall, 2005; Connor, 1991:121-154). Within these complexities, it becomes imperative for managers to pursue effectiveness and efficiency in attaining goals and successful PM.

Laury *et al.* (2019) and Harbour (2009:10) warn that PM may not seem a straightforward and simple task to undertake due to its dependence on factors, some of which are resource-constraints, bounded by capability or behavioural. The findings from a study by Franco-Santos *et al.* (2012:99) compound the issue, underscoring that PM might be a time-consuming exercise which can result in increased costs and workloads. In certain instances, PM may result in subsequent internal tensions, not overlooking judgement biases and perceptions of unfairness or subjectivity when used for performance evaluation and compensation purposes. The organisational theory provides different tools for dealing with issues which can constrain development and expansion, for example, human, financial, social, technological and physical resources, including organisational capability (Larson & Foropon, 2018; Wiklund, Patzelt & Shepherd, 2009).

2.10.2 Resource orientation on PM

The study that processes to the success of the PM system need not be too demanding in terms of resources, and the recommended utilisation of the talent existing in SMEs is justified based on the organisational and contingency theories. These theories consider a resource-based view (RBV) acknowledged as the most prominent theory in the field of strategic management (Burr, Valentowitsch & Carpentieri, 2016). In strategy, this view conceptualises enterprises as bundles of resources and suggests the need to find those that are valuable and unique to gain competitive advantages (Connor, 1991:121-154).

The most general type of resource, such as financial capital, is classified to provide resource availability (Cooper, Gimeno-Gascon & Woo, 1994:371-9; Cyert & March 1963). According to Zahra (1991:259-295), financial capital allows experimentation with new strategies and innovative projects, which might not be possible in a more resource-constrained environment. Subsequent researchers believe that financial capital is relatively convertible to other types of resources to increase innovation and potential new opportunities and could, therefore, help enterprises expand more and perform better (Bamford, Dean & McDougall, 1997; Castrogiovianni, 1996:901-923).

2.10.3 SMEs and resource challenges

The literature revealed a well-documented lack of resources experienced by small enterprises, compounded by the fact that South African SMEs have not found it easy to access financial capital. In contrast, the literature argued that lack of access to finance is not due to the size of these enterprises but more often their inability to produce financial documentation (that is, lacking 'finance readiness' as a criterion required by funders) (Mail & Guardian, 2019:1). As a consequence, SMEs are failing to access financial funding, despite matching the funding available and possessing viable business models and security. On the upside, these enterprises are reported to be making an effort to overcome the funding challenges and have found ways to innovate for finance using their savings and other strategies to access loans to finance SME operational activities and needs.

Notwithstanding the dilemma related to finances, other SMEs are faced with different problems that include limited access to social and human-focused resources (Cromie, Birley & Callaghan, 1994). According to Johannisson (2000:26-44) and Birley (1995:107-117) resources such as social capital can enhance an individual's access to information about new opportunities and equipment. Similarly, financial capital and related advice and information can provide the necessary reassurance to exploit and explore competitive and growth opportunities. On the other hand, Hussin and Yusoff (2013:456) emphasise the importance of evaluating the need for these resources or efforts and measuring to ensure their effect would not be higher than the benefit gained. This study proposes that these types of resources are necessary and critical to benefit SMEs in terms of cost reduction and performance capabilities and their inaccessibility can limit competitiveness and achievement of growth or sustainability.

The resource-oriented literature on PM views human capital as integral to the performance of an enterprise since it is that component where knowledge, skills and experience to contribute to activities and attainment of objectives resides (Cressy, 2006:103-116; Koeller & Lechler, 2006:427-437). The theory of human capital proposes that individuals with more, or higher quality education, tend to achieve better performance in executing relevant tasks (Becker, 1975). It can therefore be argued that SMEs need to use its knowledge, innovate and create value to outperform and survive the competitive business environment.

2.10.4 Resource-based theory and Intellectual Capital Statement (InCaS)

The academic world has seen a paradigm shift in the knowledge-based perspectives and resources-based theories, with an emphasis on intangible assets (such as human and social capital and others) as complementary to traditional financial capital and the role of intellectual capital (IC) to value creation (Rahmawati, 2018:102; Roos, 2017: Khalique *et al.*, 2013). The debates in this research arena recognise IC, as not only the most important indicator of an enterprises' ability to manage assets but also its relationship with creating long-term competitive advantage, based on investments in knowledge (Camfield, Giacomello & Sellitto, 2018:23; Mendoza, 2017; Verbano & Crema, 2016).

In terms of tools and frameworks or models around the IC, the concept of an Intellectual Capital Statement (InCaS) is the most popular model in existing literature (Bueno, Merino & Murcia, 2016). Szczepankiewicz (2013:138) views the concept of InCaS as a state-of-the-art and turn-key tool used to monitor, control and improve IC management processes. Furthermore, the InCaS model has been viewed as constituting a particularly useful and complex tool for relational capital (RC) measuring in those enterprises wishing to focus on active improvement around this capital resource.

The InCaS structure considers three (3) elements of IC, namely human, relational and organisational capital (Szczepankiewicz, 2013:138). Additionally, the InCaS recommend identification of individual components for each these capital elements. Furthermore, the InCaS propose identifying, measuring and presenting the RC in the enterprise's Intellectual Capital Statement with key areas and stakeholders relevant to performance. Reporting on key areas of RC involve aspects on accessibility to the labour market and competent employees, specialists or experts and various stakeholder areas such as customer, supplier, public, investor, co-operation partner, professional membership, competitions, enterprise image relationships and others (Ibarra Cisneros & Hernandez-Perlines, 2018).

Following the InCaS model, it is not possible to manage only one of the components of intellectual capital, namely, only RC or human capital. InCaS emphasises the intensity and importance of interfaces and mutual relationships between all capitals (Nupap, Chakpitak, Neubert & Tra-ngarn, 2016). Lee and Huang (2012) looked beyond the view of interfaces of these capitals and sought to evaluate integration by

relationships between the BSC implementation, accumulation of intellectual capital, organisational commitment and organisational performance and found a significant interaction effect of these concepts and aspects to organisational performance. The resource-based theory also contains variables such as learning and management experience, which could provide an SME with the knowledge to assist them in identifying opportunities and ways to improve areas of PM more effectively and efficiently. In this light, an RBV extends to the dynamic capabilities' perspective (Henri, 2006:77-103; Teece, Pisano & Shuen, 1997:537-556).

2.10.5 Resource-based theory and dynamic capabilities

Dynamic capabilities refer to the enterprise's processes that use resources to integrate, reconfigure, gain and release resources, match and even create market change (Eisenhardt & Martin, 2000:1107; Guokun & Yungang, 2016). The organisational capabilities found in these dynamics could be enhanced or created for diagnostic and interactive purposes (Mundy, 2010:499-523; Tuomela, 2005:293-320; Bisbe & Otley, 2004:709-737). Scholars maintain that these dynamics may involve specific processes, activities or competences (including individual capabilities) that enable enterprises to gain competitive advantage by organisational learning or innovation (Brink, 2019; Zhao, Meng, He & Gu, 2019; Eisenhardt & Martin, 2007:1107). Furthermore, other researchers emphasise the importance of these processes for small enterprises specifically, to create, discover and exploit new opportunities successfully and may, therefore, seem a prerequisite for pursuing and ensuring a successful PM strategy (Ferreira & Coelho, 2020; Zahra, Sapienza & Davidsson, 2006:917-955).

For example, resource-integrating capabilities concerning selecting and combining the abilities of employees and equipping them with thinking strategies (such as DT skill sets) facilitate the innovative and creative efforts of the small enterprise and thereby its PM strategy. Moreover, employees who work closer to operational processes are exposed to more detailed information distinct from their specific daily activities. PM approaches focus only on top management may not facilitate these employees and, therefore, impede those resources that genuinely stimulate dynamic capabilities to contribute to the discovery and exploitation of new opportunities and the improvement of processes and organisational performance. Evaluating performance and continuous improvement is useful for producing much better strategies to discuss issues with

people or constituencies with first-hand experience and the potential to do something about it.

2.10.6 Stakeholder constituencies, strategy and PM

Within strategy literature, considerable evidence is provided to support the degree of attention given to internal and external constituencies or stakeholders as a good indicator of organisational performance. In this way, the stakeholder or constituency theory can be used to facilitate the effectiveness and successful organisation of the PM system. The literature associates stakeholders with a group(s) or individual(s) that may influence or be influenced by, for example, the strategies, practices or goals of an enterprise (Laine & Vaara, 2015; Freeman, 2010). Other studies investigated how multiple stakeholder interests can be incorporated into a PM system to make assessments of the organisational performance easier and, therefore, propose a multi-dimensional framework, based on the stakeholder theory, to improve the effectiveness of the PM system (Nguyen, Mohammed & Panuwatwanich, 2018; Francisco & Alves, 2012:467-497).

For example, to generate interest and commitment requires building trust in the PM design process (Junginger & Sangiorgi, 2009:4339-4349). According to Meroni and Sangiorgi (2011) and Sanders and Stappers (2009:5-19), the best demonstration of trust-building encompasses enlisting the support of all relevant enterprise stakeholders. This may imply the active involvement of customers, employees, managers, suppliers, regulators and surrounding communities in all aspects of the PM process to undertake true co-creation, not just collaboration. Some studies considered the identification and design process to be the most crucial to establishing both the enterprise's strategic objectives and strategies (Peters, 2019; Wieslander, 2009:46). Accordingly, this phase may represent the very foundation of continuous strategic thinking to enable a successful PM implementation process, which SMEs are often lacking. Similarly, the extracted examples above provide literature to support the notion that the design and implementation of PM systems happen iteratively rather than linearly. While both the PM processes pose a challenge, Cocca and Alberti (2010:196-200) recommend the need to be extremely flexible, transparent, reactive and proactive given the resource constraints.

In this context, flexibility and transparency require the involvement of employees (whose performance is going to be measured) in both operational activities and

managing the PM system, as they influence the conceptualisation and defining measures and the identification of required data, including adapting systems (Groen, Wouters, & Wilderom, 2012:120). This interactive activity refers to, and creates, possibilities of how managers and employees communicate, whilst participating and working together to design, implement and use PM systems (Ferreira & Otley, 2009:263-292). Furthermore, according to Sinisammal, Belt, Harkonen, Mottonen and Vayrynen (2012:34), communication and employee work relations may significantly improve when employees participate in building indicators for success.

Research also indicates that employee participation goes beyond setting targets and extends to processes for developing and implementing management-accounting systems (Eldenburger, Wolcott, Chen & Cook, 2010). If viewed from an increased focus on improvement actions among employees, it may foster proactive behaviour to solve upcoming issues (Ukko *et al.*, 2007:39-51; Bourne *et al.*, 2005:373-395; Johnston *et al.*, 2002:256-262). Groen *et al.* (2012:120-141) used a participative, bottom-up approach and behavioural theory to provide a possible explanation for the increase in employee initiatives in the development process. In the design discourse, a bottom-up approach constitutes narrowing gaps by decisions being taken or driven by people directly affected by policy or strategy (Kolko, 2018). In their study on improving performance and influencing behaviour of individuals, de Leeuw and van den Berg (2011:231) established that motivated people do their work in implementing PM. That is, they are not rewarded in performance metrics, but typically seem to understand the contribution of those activities better.

2.10.7 PM system and implementation success

Hussin and Yusoff (2013:456) take the view that such conditions may be attainable if the measures are kept simple and the sources of data or information available and collectable. The clarity and simplicity of a PM system are of crucial importance for its successful implementation and use; however, both characteristics are not simple to assess owing to their subjective nature. Within the PM fraternity, scholars study and develop the models that define clarity and simplicity (Rompho, 2015; Neely *et al.*, 2002; Laitinen, 2002; 1996; Lynch & Cross, 1991b). Similarly, others describe the main characteristics of PM systems being clarity and simplicity (Armstrong, 2019; Rompho, 2015; Ferreira & Otley, 2009; Neely *et al.*, 2000:1119-1145; 1996; Maskel, 1999:32-

33; Schneiderman, 1999:6-11; Bierbusse & Siesfeld, 1997:6-7; Globerson, 1995:639-646; Eccles, 1991:131-7).

Organisational performance is enhanced by multi-dimensional performance measures and careful use of information between actors in the process and why the use of performance measures is required for individual performance evaluation and compensation to increase motivation and attainment of goals and objectives (Oxford Economics, 2017:12; Dossi & Patelli, 2010:499-526; Griffith & Neely, 2009:49-92). Motivated employees are important to an enterprise as they lead to an increase in productivity and quality of work and reduce staff turnover (Okoro Musonda & Agumba, 2017). On the other hand, the influence of employees on improved operating performances is driven by aspects of what motivates the action or inaction of individuals.

Generally, work-related motivation, as used in management accounting, may be viewed from a four-process conceptualisation:

- the stimulation or initiation of energy to act;
- where energy or effort is directed;
- the amount of effort expended per unit of time; and
- the duration of time that effort is expended (Birnberg, Luft & Shields, 2007:119).

From a scientific management-theorist viewpoint, the economic needs of an individual (such as money) are the major drivers of performance. However, arguments against this notion state that, if money or reward is the main motive (motivation theory), it could have a negative effect and cause a decline in performance when referring to valence, expectation, exchange and transaction and equity theories. Hence the view that achievement motivation could also be applied with good performance results (Lehtinen, 2018:7; Adams 1963).

2.11 THE BALANCED SCORECARD

In the literature, the BSC remains by far the PM framework that is used most around the world as a tool for measuring overall organisational performance (Bain & Company, 2015; Bititci, 2015; Chytas, Glykas, & Valiris, 2011:460-469; Taticchi, Tonelli, & Cagnazzo, 2010:4-19; Neely, 2002). The framework is based on the notion that the performance of the enterprise should be managed (hence measured, monitored and improved) to facilitate that the enterprise's activities yield the expected financial returns

to the owners and satisfy the customers by producing goods and services by efficient and effective processes driven by people and knowledge. As a theoretical framework, the BSC takes objectives and strategy as its starting point. It begins by asking “What do shareholders or stakeholders want?” and translates the vision and strategy of an enterprise into measures across four different areas financial, customer, internal business process and learning and growth (Kaplan & Norton, 2015; 1992:71-79). The BSC framework provides the most integrative approach for measuring enterprise performance. Internal resources and capabilities implement efficient and effective business processes. The business processes relate firstly to the customer perspective and eventually leads to superior organisational performance (Qehaja *et al.*, 2017:585; Kaplan & Norton, 2015; Mainardes *et al.*, 2014:48).

The BSC was developed by Kaplan and Norton (1996:76; 1992:71) to expand traditional models to include financial measures that report on the results of actions. It considers actions already taken and operational measures (non-financial performance indicators) that are drivers for future financial performance. Kaplan (2012; 2008) emphasised that the BSC is a holistic system which could be used to describe, communicate and implement the strategy of the enterprise. Huang, Lai and Lin (2011:4975) claimed that it provides a multi-dimensional view of the overall performance of the enterprise and suggested a sequence of perspectives that reflect its value-creating activities. The sequence begins with a learning and growth perspective, followed by internal business process, customer and financial perspectives. The framework integrates financial measures with other important performance indicators (KPIs) on customer perspectives, internal business processes and organisational growth, learning and innovation. Unlike traditional systems, the BSC places strategy, vision and communication in the centre rather than in control. The main elements of the BSC are depicted in Figure 2.1.

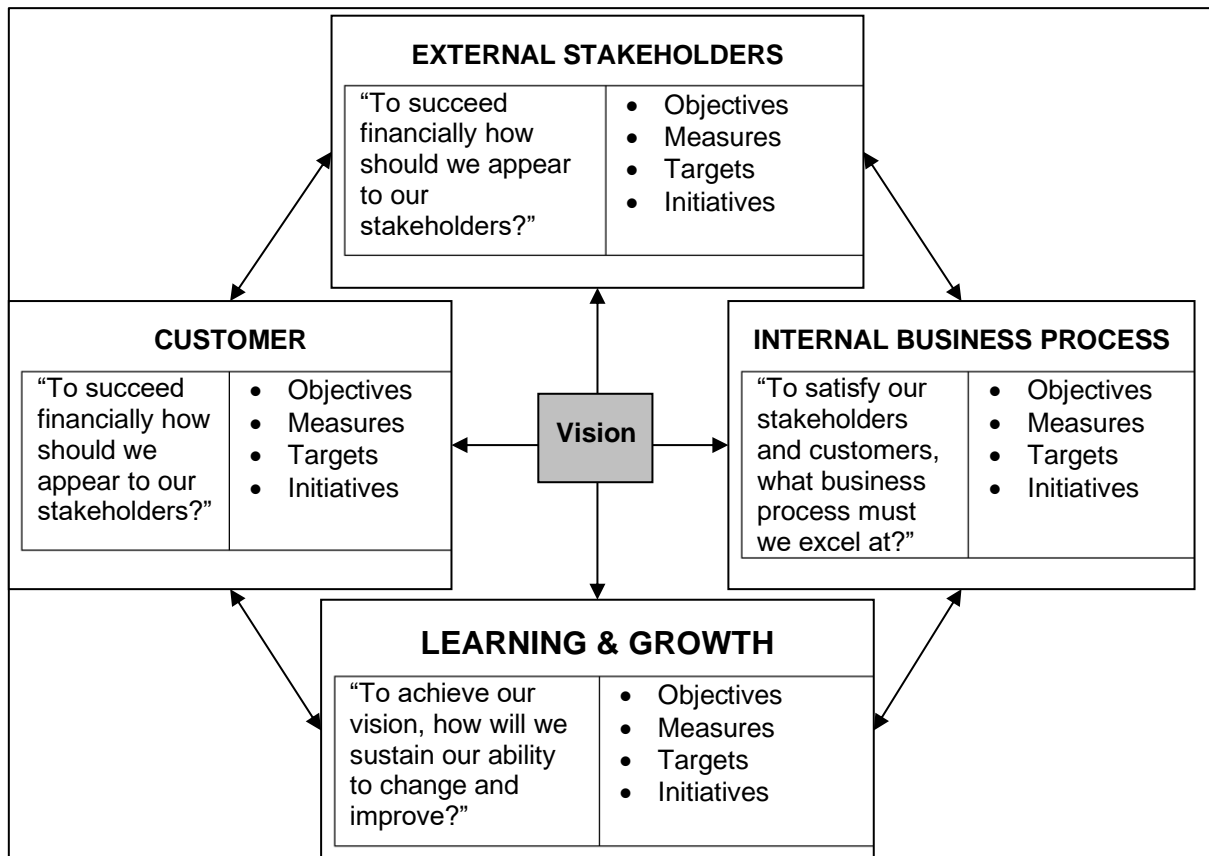


Figure 2.1: The Balanced Scorecard

Source: Kaplan and Norton (1996:76); Rompho (2011:46)

Figure 2.1 has been adapted from the original BSC framework that suggests viewing an enterprise’s performance from four main perspectives, financial data, internal processes, learning, innovation and growth and customer areas. These perspectives are linked to the strategy of the enterprise, and a holistic model is created. When implemented, it allows everyone in an enterprise to understand how and what can be done to support the strategy and to contribute to the success and competitiveness of the enterprise (Kaplan & Norton, 2001:361).

The success of an enterprise is dependent on many factors. Suprpto, Wahab and Wibowo (2009:90) view the concept of the BSC on the assumption that the efficient use of investment capital as a factor is no longer the sole determinant for competitive advantage. Still, that softer factors such as intellectual capital (IC), knowledge creation or excellent customer orientation, are becoming more important. Hoque and Adams (2011) and Ridwan, Harun and Fahmid (2013:103-110) established that using the BSC primarily for the implementation of strategy leads to outperforming competitors who do not use the framework.

Gotore (2011:17-19) noted that BSC principles could provide managers with sufficient PM information from both external and internal perspectives to help address the needs and expectations of shareholders, the identification of future growth areas, value propositions and infrastructure needs of the enterprise. The information is typically representative of the financial, customer, internal business processes and learning and growth perspectives for creating and managing long-term growth and improvement using people, systems and business procedures (Kaplan & Norton, 2006). It is within these perspectives that this study seeks to uncover the potential integration of the principles of the BSC by Kaplan and Norton (1996:29-29) with newer strategies in an attempt to encourage SMEs to invest in reskilling employees, enhancing information technology and systems and aligning business procedures and routines.

2.11.1 Processes in the BSC (PM system)

Generally, in large enterprises, the BSC design includes elaborate processes for identifying measures to inform management on progress to achieving its goal (Andersen, Cobbold, & Lawrie, 2001:5; Olve, Roy & Wetter, 1999:320-8). The utilisation of a formal measure definition in SMEs is lower, and Andersen *et al.* (2001:5) and Mintzberg (1981:103-116) attribute this to the limited size and complexity of the enterprise, meaning that managers are well aware of all performance-related issues. The process starts with the enterprise purpose, vision and mission statements and strategic goals, linking directly to strategic objectives and cascading down to lower-level goals and establishing performance measures.

In this process, managers indicate the critical success factors, including resources, capabilities, processes and results for achieving goals (Manoochehri, 1999: Online). The process may seem complicated; for ease and some degree of clarity and precision, Kaplan and Norton (2004a; 1996) provide a tool called a strategy map (Figure 2.2 for the generic version).

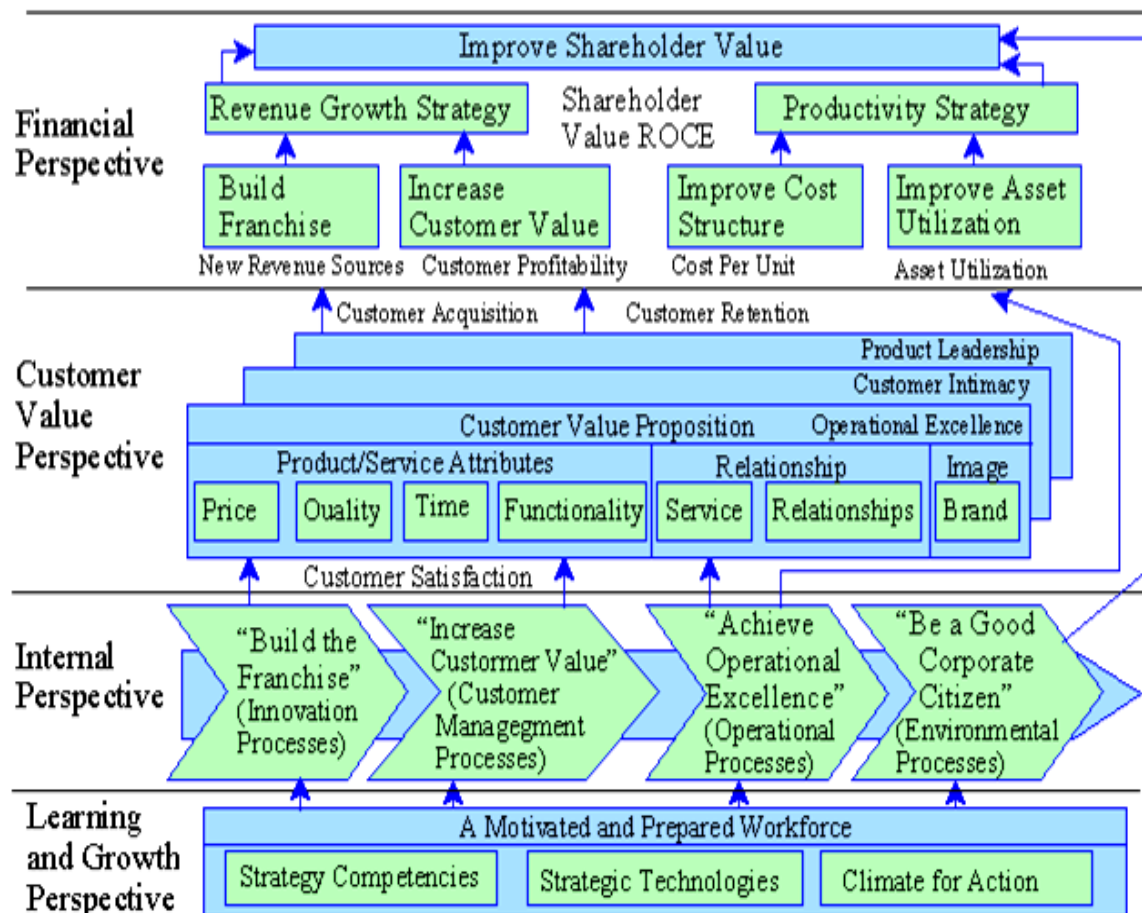


Figure 2.2: The BSC generic strategy map

Source: Kaplan and Norton (1996:96)

Enterprises can use this strategy map as a powerful tool to describe the linkages between intangible assets, value creation and processes with desired outcomes. Additionally, Kaplan and Norton (1996, 2004a, 2004b) advocate its use for evaluating, measuring and improving the processes most critical to success and targeting investments in human, informational, and organisational capital. Suprpto *et al.* (2009:79) agree that the BSC translates strategy to operational terms. From the SME perspective, the research conducted by Monte and Fontenete (2012:246-269) provided a generic strategy map with a focus on the maximisation of profitability. Moreover, they demonstrated the processes of implementing the BSC and suggested strategic phases that lead to the development of such a PM framework (Figure 2.3).

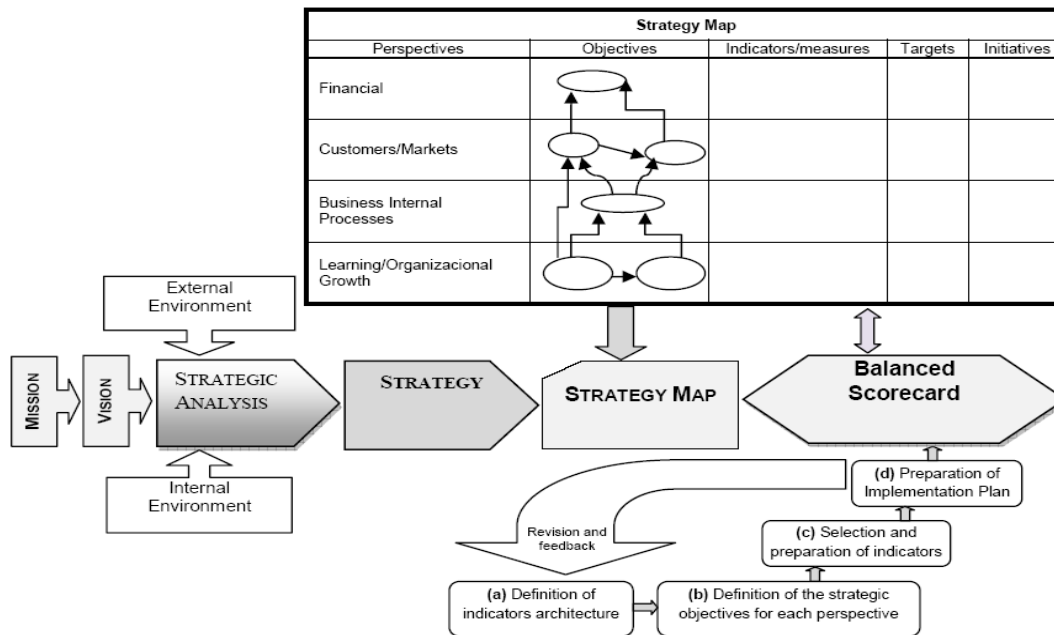


Figure 2.3: Process of Implementing a BSC in an enterprise

Source: Monte and Fontenete (2012:246)

Figure 2.3 illustrates a process of implementing the BSC framework encompassing various aspects of strategy, including the strategy map, but only guides the viewpoint of the objective. This represents a part of the relevant and appropriate aspects to consider leading to achieving the purposes of this study. Some of the aspects are used in the theoretical perspective section of this chapter to evaluate the potential integration of the BSC with the designerly skills set using a strategy map focusing on objectives, measures, target and initiatives. In contrast, some are used empirically to determine whether the findings reveal the use of identified processes of PM, improvement and their influence on the performance of the daily activities of interviewees in this study. Also to evaluate whether processes match the characteristics for developing and implementing the BSC (as discussed in Chapters 5). However, to assist with the ultimate objective of developing the integrated PM framework, the strategy map provided by Hussin and Yusoff (2013:454) shown in Figure 2.4 is pivotal. In their research, the authors used their experience in assisting various sized Malaysian enterprises to implement the BSC to formulate a simpler and more practical strategy implementation framework. They used an SME to adopt some crucial aspects of the BSC together with other strategic management ideas such as building lasting enterprises and strategic capabilities.

Key BSC Terminologies

Diagram of the cause and effect relationships between strategic objectives (Strategy Map)

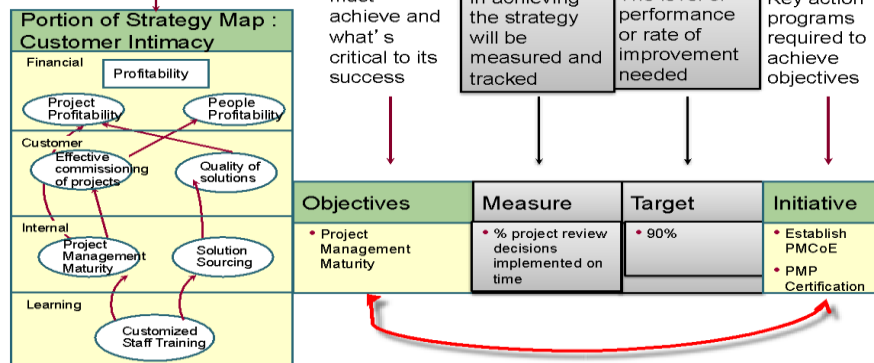


Figure 2.4: Strategy map and components of the classical BSC framework

Source: Hussin and Yusoff (2013:454)

Of particular importance is that Hussin and Yusoff (2013:449-459), using Figure 2.4, adapted the BSC of the SME (focused on the customer intimacy business activity for example) to include the core purpose or the mission statement, long-term vision and values as a best practice for building lasting enterprises. They also replaced the generic and conceptual objective drivers with actionable initiatives specifically relevant to the enterprise for the particular planning period. By doing so a new strategy visual that balances the longer-term mission, values and vision with shorter-term strategic outcomes of what to do and achieve with specific, actionable strategic initiatives, drivers or actions is displayed.

The study by Hussin and Yusoff (2013:449-459) showcased a strategy map with actionable strategic initiatives such as DT workshops and innovation, notwithstanding a lack of elaborate details on how DT is used or adopted in the enterprise. In line with the assumptions, research questions and objectives of this thesis, these aspects are relevant and considered in this case, to assist the researcher in identifying the gaps where and how the DT strategies can be positioned with the BSC for integrated framework to be developed for this study. The aspects of PM literature and related aspects discussed in the previous sections form the basis by which research sub-question two (RSQ2) was developed:

How are DT- and BSC-related PM techniques used by SMEs in the various business activities?

2.11.2 Success and benefits of the BSC

Although the BSC has become very popular, studies have shown that there is no single version of the framework that has been universally accepted (Ratnaningrum *et al.*, 2020:72; Perkins, Grey & Remmers, 2014). Gotore (2011:1) confirmed that numerous enterprises had implemented some version of this framework. The diversity and unique requirements of different enterprises suggest that no one-size-fits-all approach will ever apply. Evidence on the success of the BSC has been reported across many industries and in the US public sector (Hepworth, 1999:559-563). Deloitte (2004:14) states that large enterprises are benefitting from using the BSC, identifying Sun Life of Canada and Brinks in the United States, for example, to have used the framework with success. However, BSC is not only suitable for larger enterprises, smaller enterprises can also benefit from using it, as contended by the ICSB (2006:407).

Despite the recent findings of Hussin and Yusoff (2013:449-459), noted in the above paragraphs, to demonstrate the adaptation and use of the BSC by SMEs, the ICSB (2006) recognised the use of the framework at Futura Industries in the United States, where it identified the financial metrics, customer measures and internal processes focused on quality as critical to their success. Other studies on the use of BSC and implementation in SMEs include those of Suprpto *et al.* (2009:76-97) in Malaysia. These studies highlight the potential of the BSC within SMEs and its requirement to provide sufficient information so that people can act on unacceptable performance and pursue improvement. The BSC is used for continuous improvement, which is important for the growth of an SME (Gumbus & Lussier, 2006:407-425). A study by Fernandes, Rajab and Whalley (2006:623-634) provided insight on how an SME manufacturer could enhance its ability to respond rapidly to the ever-changing market in which it operates by a practical implementation of the BSC and the four perspectives. Basuony (2014:15) contends that, if an enterprise makes the strategy everyone's everyday job using the BSC, it will lead to minimising the challenges and difficulties of communication or coordination.

Furthermore, Basuony (2014) holds the view that the four perspectives of the BSC can help to overcome the failure of internal factors. For example, the problem may be addressed by connecting and transferring internal factors into measures which connect them to the operational process. By so doing, the author argues that the BSC may contribute to the aim of SMEs, so that strategy revision and translation become a

natural and permanent process that can be used to help employees understand strategic plans and objectives. Based on the PM literature and related aspects discussed in the previous sections, research sub-question three (RSQ3) was developed:

How does the process used for PM and encouragement of design skill sets influence SMEs' the business performance and environment?

2.11.3 The BSC criticism (weaknesses and limitations)

Despite the widely reported coverage of the successful implementation of the BSC, the framework is not without problems. The BSC has been criticised from several different angles. Madsen and Stenheim (2015:32) categorised the criticism into two (2) aspects, fundamentals of the concept and ways in which BSC is applied or used by different actors. From the concept perspective, the problems include the causal relationships of perspectives and measures, rational top-down perspectives of strategy implementation process and rhetoric in the BSC literature (Nørreklit & Mitchell, 2014). On the other hand, views from the BSC application-level criticise it as a hindrance to creative learning and innovation in enterprises, as a management fashion and as a consulting product (Madsen & Stenheim 2015; Antonsen, 2014; Hoque, 2014).

The primary problems are, for example, excessive measurement and detail versus summary. How much detail to include depends on what is required for decision-making. Brown (1996:240-54) suggests a limit of no more than 20 measurements for the overall enterprise. Additionally, if the four perspectives of BSC are incompatible with strategic goals, Kong (2010:294-304) warns this could result in its being less effective. Another weakness is that it is primarily designed to provide only senior managers with an overall view of performance and ignores other stakeholders (Ghalayini, Noble & Crowe, 1997:209). Some of the issues influence the failures of the framework. Rompho (2011:40), citing Kaplan and Norton (2001:360), highlighted two (2) sources of BSC failure from the viewpoint of a larger enterprise, namely design and process failures. These are summarised, not for comparison, but ease of reference, and depicted in Table 2.4.

Table 2.4: Sources of failure of the BSC

Design failure	Process failure
<p>Too few measures in each perspective, leading to failure to obtain a balance between financial and non-financial measures (that is, leading and lagging)</p> <p>Too many indicators without identifying the critical few, therefore, loss of focus and being unable to find a link between indicators</p> <p>Failure of measures selected to depict the enterprise's strategy, trying to input all its KPIs into each perspective without screening those linked to its strategy</p>	<p>Lack of senior management commitment</p> <p>Too few individuals involved</p> <p>Keeping the scorecard at the top</p> <p>Overly long development process</p> <p>Introducing the BSC only for compensation and treating it as a one-time measurement and systems project</p> <p>Hiring inexperienced consultants</p>

Source: Rompho (2011:40)

As illustrated in Table 2.4, the failure of the BSC may be due to various factors, in particular, commitment, inexperienced advisors and limited stakeholder participation in the design and processes of the system. These findings complemented the study conducted by Wagner and Kaufmann (2004:269-291), which focused on how to overcome the main barriers to using a BSC.

Table 2.5 depicts the different reasons and various stages where barriers to BSC success are noted in the literature.

Table 2.5: Barriers to the successful use of the BSC

Initiation and set-up stage	Roll-out and on-going stage
<p>Lack of commitment, completeness, top management support and adverse support from consultants</p> <p>Lack of formulated vision, identifying strategy and insufficient alignment</p>	<p>Lack of sustainability and insufficient communication and availability of performance data</p> <p>Missing BSC review, reporting and link between ownership and reward system</p>

Source: Wagner and Kaufmann (2004:273-9)

It should be clear from Tables 2.4 and 2.5 that a lack of commitment, support, stakeholder involvement, communication, strategies and sustainability are significant impediments to the successful use of the BSC. Research findings by Gotore (2011:v) highlighted the point that, despite efforts by enterprises to foster participation whilst senior management was committed to the successful implementation of the PM systems, employees still perceived the system as being imposed by management and confirmed a lack of commitment on their part. Groen *et al.* (2012:136) established that

PM influenced employees positively if the performance measures are intended to help them take the initiative to improve the performance of their department and not as a control device for management. These shortfalls highlight the criticisms of PM systems which, according to Hussin and Yusoff (2013:450), are levelled by many researchers on the concept of BSC, showing that it fails to identify PM as a two-way process with the only focus being the top-down PM. The system is also criticised for its inability to answer questions on what competitors are doing; it overlooks the extended value chain of the contribution of employees and suppliers to achieving the objectives of the enterprise.

Despite the benefits and problems of the BSC, it can be defended based on the argument that the concept of the BSC has evolved considerably since its inception in the 1990s. Perhaps the criticisms may have been levelled at outdated versions of the BSC, as Kaplan (2012) argued that most are focused more on these aspects and largely overlook the important role played by this tool for the implementation of the strategy (*strategy execution*).

2.11.4 The suitability of BSC to SMEs

Chillida (2009:9) views a PM system such as the BSC as a good fit for SMEs. The proponents and supporters of the BSC laud the benefit of its use if SMEs are to develop customised scorecards for their unique situations considering their context and the overall organisational strategy (Pourmoradi *et al.*, 2016:56; Kaplan & Norton, 2001). Almost 60% of the world's enterprises are reported to be using the BSC (Fuentes *et al.*, 2020:13; Cooper, Ezzamel & Qu, 2017). Malagueno *et al.* (2018) found that better financial performance was obtained in SMEs where the BSC was used for feedforward control, presenting higher levels of exploitative innovation and a perceived positive effect of BSC in some of the more established SMEs.

The literature has provided developing evidence on the use of BSC by SMEs, mostly pointing at the ability of these enterprises to innovate for competitive advantage. Scholars contend that SMEs have an advantage over their larger counterparts due to having informal decision-making processes and greater flexibility, and can communicate with clients more easily to introduce innovations (Dudic, Dudic, Gregus, Novackova & Djakovic, 2020:3). As a consequence, two (2) options are suggested when it comes to the ability of SMEs to innovate. Firstly, the independence of working on innovations using their research and development and, secondly, SMEs can apply

one or several innovative management practices using internal resources such human resources and teamwork and searching for external sources for co-operation.

In contrast, research in the field of enterprise performance confirmed that PM alone cannot change performance and might be meaningless by itself (Powell & Netland, 2010:5; Hume & Wright, 2006:199-192; Halachmi, 2005:502-516). For this reason, Busi (2005) maintains that crucial to the processes are the actions taken as a result of the measures, particularly if the objective is to change performance. In contrast to larger enterprises, SMEs lack financial means and in-house expertise and are without support to explore aspects of innovative human-centred solutions. They may, therefore, not know what strategies or techniques may be useful in improving their competitiveness. Enterprises (particularly SMEs in South Africa) may need to incorporate the maximum utilisation of the resources and talent available to them. They need to develop and discover strategies to stimulate newer ways of thinking, innovation, benchmark and measure performance in an integrative manner to strengthen and encourage the development of the capacity to compete, sustain and survive the changing nature of the business environment.

2.11.5 Integration of the BSC with other systems

There are a variety of reports on the integration of the BSC with other frameworks or strategies from which the researcher can learn in preparing to develop an integrative model. For example, research by Bentes *et al.* (2012:1790-1799) focused on the practical implementation of an integrated framework, bringing together two (2) well-established mechanisms, the BSC and decision-making Analytic Hierarchy Process (AHP) for performance analysis. Their research provided evidence for the flexibility of BSC as a PM system to be integrated with other systems. For the future of business, Davis (2010:6539) stresses the necessity of integrating thinking strategies such as the Design Thinking (DT) into the business model to provide a breadth of discoveries in all aspects of the enterprise (from management to customer service) that may otherwise be overlooked. Several researchers have established links between PM systems and other strategies; however, research focusing specifically on the links with developing thinking strategies is scanty (Armstrong, 2019; Nielsen *et al.*, 2017; Waśniewski, 2017:216).

2.12 CONCLUSION

The discussions above identified the approaches and their constructs prevalent in the existing literature to explain the theoretical frameworks of PM. Notably, the BSC, by design, takes objectives and strategies as its starting point and begins by asking “What do shareholders or stakeholders want?” and translates the vision and strategy of a business into measures across four different areas, financial, customer, internal business process and learning and growth (Kaplan & Norton, 1992:71-79). The BSC provides the most integrated approach for measuring business performance.

According to Mbo and Adjasi (2017:406), in a practical organisational setting, ultimate performance is a product of many variables interacting with one another. The literature identified, amongst other things, the traits of SMEs as critical factors for PM and processes that are critical for strategy development, implementation and innovation strategies in organisational operations to justify the research questions raised. In addition, the literature review helped with the identification of key concepts and aspects to formulate the conceptual framework for this study in Table 2.6.

Table 2.6: Conceptual framework with the underpinning theory aspects and concepts

Key concepts	The aspects underpinning the key concepts
SME/Leadership and Characteristics	Contextual, Structural, Knowledge, Content-related factors Organisational theories, Resource-based theories
Performance Measurement (PM) and PM systems (PMs)	Strategy planning, development, implementation, review and improvement processes, PM theories
Balanced Scorecard (BSC)	Vision, Mission, Objectives, Stakeholders, Alignment, Internal processes and Innovation
Design Thinking (DT)	Innovation and thinking strategies
Integrated PM systems	BSC-related and DT-related principles

Source: Author's compilation

Table 2.6 illustrates the developed conceptual framework to reflect the underpinnings incorporating conceptual and theoretical PM perspectives. What comes to the fore is that not only leadership and management experience but also various other factors,

other stakeholders and a combination of the BSC with other thinking strategies, all play a pivotal role in the success of PM and its integration.

2.13 SUMMARY

What has become apparent from the literature review is that PM is diverse, requires the different fields it borrows from to succeed and various mechanisms directed at improving and enhancing performance or PM systems for its successful adoption, and to account better to stakeholders. The description of SME concepts and aspects of PM and an analysis of the extent of existing knowledge in addressing the challenges related to SME PM were investigated, identifying typical features, factors required of SMEs, strategy, PM and processes. The competency of SMEs, lack of awareness of PM and their single sidedness came under scrutiny.

The BSC, strategy alignment and related processes, and its influence on the continued improved performance of enterprises, the underpinning theories and fundamental skill sets required by SMEs to adopt these systems successfully were investigated and discussed. These aspects, aided by the developed conceptual framework in Table 2.6, are based on the theories and the context of the research. Within the framework, the new designerly skills sets, the DT technique as an innovation strategy was deliberately introduced and is discussed in Chapter Three for further justification of the research questions and its critical part in the envisioned integrated PM framework.

CHAPTER THREE: THE CONCEPT OF DESIGN THINKING

3.1 INTRODUCTION

In the previous chapter, the literature reviewed revealed the critical PM aspects for justification of the main research questions and the underpinnings incorporating both conceptual and theoretical perspectives guiding this study with the developed conceptual framework (Table 2.6). This chapter builds on the conceptual framework in Table 2.6 to provide evidence from the literature on the DT technique and its flexibility as a potential thinking strategy to be integrated with the BSC in PM systems, particularly to provide support and complement the justification of the research questions raised in Chapter One and expanded on in Chapter Two.

3.1.1 Goals of the chapter

The objectives of this chapter are initially to provide literature review evidence based on the concepts, aspects and underpinning theories of DT strategies, frameworks and processes. Secondly, to describe the context of the research on the integration of the BSC with DT related principles and techniques, providing first the conceptual framework as the basis for the envisioned integrated PM framework to be discussed in Chapter Six.

3.1.2 The layout of the chapter

Section 3.2 provides evidence relating to DT, covers the history and origins of DT, concepts, definition, characteristics, components and processes in enterprises. The literature on the aspects and theories underpinning newer thinking skills, DT techniques, frameworks or systems and their influences on continued improved performance are investigated and analysed in Section 3.3. The traits and requirements for the use of DT, with a focus on the skills required by SME owner-managers to adopt and integrate these thinking strategies with BSC related principles within PM systems successfully, are discussed in Section 3.4. The context of the research covering the integration of the PM utilising the BSC framework and the new design skill sets (DT techniques), and the underpinning theories are discussed in Section 3.5. The closing discussions of the chapter are provided in Section 3.6. A summary of the findings in Section 3.7 concludes this chapter.

3.2 THE HISTORY AND ORIGINS OF DESIGN THINKING

The literature shows that Design Thinking (DT), by its nature, is multidisciplinary and its origins can be traced to the design realm; a field made up of concepts, practices and knowledge from areas such as psychology, engineering, marketing, planning and architecture, among others (Seifried & Wasserbaech, 2019:82; Carlgren *et al.*, 2016; Fischer, 2015; Johansson-Sköldberg *et al.*, 2013). It has been debated for more than three (3) decades in the academic field, focusing mainly on how designers think (Johansson-Sköldberg, Woodilla & Çetinkaya, 2011).

Studies have indicated that the concept only emerged in management in the early 2000s (Liedtka & Kaplan, 2019; van der Bijl-Brouwer & Dorst, 2017; Bezerra & Gomes, 2016). Scholars argue that its growth in importance and application remains fairly new, partly due to the view that it has become too important to be left to designers (Gonera & Pabst, 2019; Liedtka, Salzman & Azer, 2017; Brown & Katz, 2011:391). Even though DT is a relatively recent concept, there are conflicting views among researchers and tensions are not unusual about what it constitutes, due to the diverse disciplines and where the term originates (Micheli, Wilner, Bhatti, Mura & Beverland, 2018:2; Johansson-Sköldberg *et al.*, 2013; Suddaby, 2010).

3.2.1 The concept of Design Thinking

Design Thinking has diverse meanings for various things to different scholars, so defining the concept is increasingly contested by both practitioners and advocates alike (Liedtka, 2018). The diverse views by many researchers led to the DT concept being mislabelled and ambiguous to interpret, thereby hindering progress in understanding it better and its adoption or successful implementation in enterprises (Nguyen, 2016:2; Johansson-Sköldberg *et al.*, 2013). Liedtka (2015:926) contends that the term DT remains controversial to both practitioners and proponents. As a consequence, various views and critiques exist among promoters and opponents about what DT is or may be and what it can do (Beverland, Wilner & Micheli, 2015; Liedtka, 2015; Johansson-Sköldberg *et al.*, 2013; Brown, 2009; Martin, 2009).

Many scholars hold different perspectives on the concept of DT. On the one hand, some consider the term from organisational attributes and, on the other, some view the term at an individual level, to highlight what constitutes typical characteristics of 'design thinkers' (Luchs, 2016; Brown & Katz, 2011). Other studies focused on tools

used or design as a culture or its use for product development, while some argued whether the DT concept could be uncoupled from design practices altogether (Elsbach & Stigliani, 2018; Carlgren *et al.*, 2016; Luchs, Swan & Griffin, 2016; Deserti & Rizzo, 2014; Seidel & Fixson, 2013; Kimbell, 2011).

Brenner *et al.* (2016:7) discussed the term DT concerning linguistic problems, where the language is not only used for communication but also as a valuable tool in DT to create artefacts within the creative design process (Lourens, 2017:730; Owen, 2007). Brenner *et al.* (2016) stated that, from a German perspective, defining design entails the creation of nice appearances, whereas, in English, the term could be used both as a verb or a noun. By implication, this means that to design entails doing or planning (something) while having a specific purpose in mind. On the other hand, Johansson-Sköldberg *et al.* (2013:121-146) provided contrasting scholarly and management views, to argue the foundation of DT in the classic design disciplines where DT has also been mentioned alongside designerly thinking.

Accordingly, in the various traditional design fields such as engineering or industrial, Johansson-Sköldberg *et al.* (2013) emphasise that DT may often be confused with designerly thinking which pertains to the research tradition of studying designers. In management it applies to design practices and competencies outside the design field. As a consequence, the confusion contributes to divergent views to describe or define what the concept entails and presents a hindrance to comparing empirical findings and progress to understanding what DT constitutes better.

3.2.2 Definition of Design Thinking

Drawing from the previous sections, DT is one of the design concepts seen as rather broad, often universally understood and used in a variety of ways and multiple contexts. However, it does not have a well-defined meaning due to a lack of common understanding among practitioners and scholars (Hassi & Laakso, 2011:50-62; Kimbell, 2011:295-306). Studies have shown that various focus areas used most often by researchers to describe DT, range from personal connectivity established to co-develop solutions to a process of using design principles for solving complex problems or a scalable methodology applied to create disruptive solutions to meet people's needs (Bason & Austin, 2019; Follett & Treseler, 2017; Brown, 2016). The literature review provided evidence that consensus on what DT entails remains to be reached

and, hence, the difficulty of a universally accepted definition emerging (Carlgren *et al.*, 2016; Micheli *et al.*, 2018:2; Liedtka, 2018).

In the management discourse, the most concise definition of DT is the one provided by Brown (2008:89) which represents a methodology covering a range of innovation activities with an ethos of human-centeredness (Brown, 2009:3; Kelley & Kelley, 2013:25; Lourens, 2015:38). More specifically, it is designed to meet three (3) constraints as depicted in Figure 3.1. It is defined as a discipline where the designer's sensibility and methods can be used to match people's needs with the feasible technology and viable enterprise strategy and can be converted into customer value and market opportunity (Brown, 2008:86). By implication, DT entails adapting design principles and cognitive styles to the management of an enterprise.

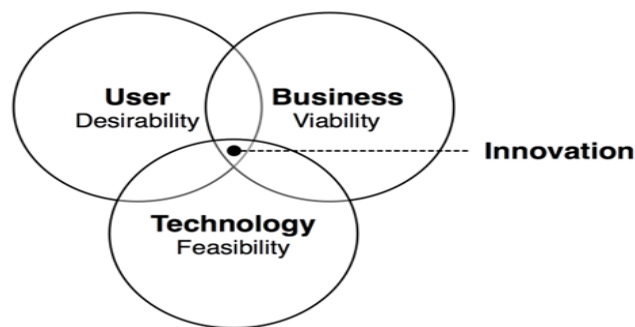


Figure 3.1: Criteria for a successful innovation

Source: Brown (2009:19)

The criteria in Figure 3.1 represent successful innovation by which ideas should be developed by integrating what is desirable from a human point of view with what is technologically feasible and economically viable, designers have been able to create the products and services we have today (Brown, 2009:19; Brown, 2009:4; Micheli *et al.*, 2018:9).

Similarly, the managerial discourse has seen DT emerge as a concept that generally promises innovation by a user- or human-centred approach that suggests possibilities of enterprise learning the ways designers think and work (Brown, 2008; Martin, 2009, van der Bijl-Brouwer & Dorst, 2017:1; de Paula *et al.*, 2019; Gonera & Pabst, 2019; Seifried & Wasserbaech, 2019). On the other hand, DT has been argued to be not only a human-centred approach to problem-solving but also the management concept of innovation that has gained substantial attention in recent years, often associated with

providing a competitive advantage (Gonera & Pabst, 2019:97; Liedtka, Salzman, & Azer, 2017).

The literature provides evidence to show that, when design thinking is integrated into an organisation, it can be the foundation for a competitive advantage (Björklund, Maula, Soule & Maula, 2020:100-101; Wrigley, Nusem & Straker, 2020:127). A study by Gibbons (2016), for example, used a practical approach to define DT based on problem-solving approaches that lead to creativity and, in turn, to differentiation and competitiveness, while using the intuition of designers as a means of problem-solving.

Despite diverse definitions and characteristics, not only is DT a problem-solving strategy, it has been generally accepted as an approach for product development and creative practice to stimulate the thinking of managers challenging times (Schumacher & Mayer, 2018; Hassi & Laakso, 2011:50-620). Additionally, DT has become a universally useful methodology for the use of flexible and informal methods (Watson, 2015). For this study, DT represents an approach to encourage a flexible and open culture or environment where collaborative practices are used to inspire people with diverse skills from different areas to work together to improve strategy products, services and processes.

3.2.3 Criticism of Design Thinking

Despite the growth in popularity of DT and the fact that it emerged as a shift from the design realm of scientific or systematic processes and rather focused on user participation and involvement, it has been criticised across disciplines (Lourens, 2017:30; Rittel, 1984:332). The literature showed that problematic areas include its lack of fit with existing enterprise processes and structures, the difficulty of implementing resulting ideas and concepts to prove its value, organisational culture clashing with DT principles and mind-sets, perceived threats to existing power dynamics, difficulty in acquiring skills and differing communication styles (de Paula *et al.*, 2019:3857; Carlgren *et al.*, 2016).

Scholars have criticised the DT for its inherent conservative nature and lack of alignment with increasing participation in its approaches and that it suffers limitations by protecting those in leadership (Iskander, 2018). Similarly, Liedtka (2015:929) critiqued the concept as too narrowly focused, suggesting that attitudes, tools and approaches were aspects where DT could acquire distinctiveness. Other studies point

to the fact that not much critical investigation on the impact of DT on strategy has been done (Clarke & Craft, 2018). Other scholars lamented the scarcity of studies on how DT implementation can be facilitated, inadequacies in the synthesis of processes and underlying factors for its effective implementation, which further inhibits researchers from a better understanding of the phenomena (Liedtka, 2015). De Paula *et al.* (2019:3853) suggested the necessity for studies to uncover how DT manifests and related critical factors for the successful implementation of DT strategies in an enterprise. A study by Eybers and Giannakopolous (2015) described the critical success factors (CSF) for items or actions that should be present and identified in a particular project or situation to enable successful DT implementation.

3.2.4 Characteristics and components of Design Thinking

Brenner *et al.* (2016) described DT using three (3) core elements, namely the design thinking process, methods and mind-set. Other scholars identified three (3) dimensions to characterise the elements of DT as practices, thinking styles and mindsets (Nguyen, 2016; Hassi & Lakso, 2011). The practices dimension includes activities, ways of working and the use of specific tools represented by visualisation, prototyping, human-centeredness, collaborative processes and combined divergent and convergent approaches. The thinking style dimension involves a cognitive process represented by abductive reasoning, reflectivity, a holistic view to understand the problem and integrative thinking. The dimension of mind-set referred to mental orientation to work and consists of ambiguity tolerance and experimental and exploratory optimism in the DT processes.

3.2.5 The processes of Design Thinking

The literature showed that practitioners of DT take many different steps or processes depending on their needs (Wrigley *et al.*, 2020:126). It is noteworthy that studies show the processes all have one common feature, a 'non-linear process' of a system with overlapping spaces and no orderly steps following a linear process (Matthews & Wrigley, 2017:45; Brown & Wyatt, 2010:33). By implication, this means that no correct order is followed during the design process, due to the flexibility that a designer uses to modify the process in ways that best serve the problem at hand (Dunne, 2018:14).

Despite the facts that the process is non-linear and dissimilar, studies exist that describe the nature of DT processes (Dunne, 2018:16-28). Kumar *et al.* (2020)

describe the DT process as creative and analytical and provide opportunities for creating, prototyping and experimenting with models and obtaining feedback used for the model redesign. Other researchers view the process as trial-and-error learning, where end-users and other multi-disciplinary stakeholders collaborate in iterative prototyping, trial and test various possible solutions and improvement for innovative products and services (Beverland *et al.*, 2015:593; Plattner, Meinel & Leifer, 2012:v; Açar & Rother, 2011:57-62; Young, 2010:14).

A recent study by Liedtka (2018) described DT as a paradigm that enables people's full creative energy, commitment and an improved innovation process. Gero (2011) equated DT to an innovation process of revolutionising the economic structure from within an enterprise by deliberate and explicit actions of change. Beyond the iterative and innovation process, DT has been argued by researchers to be interactive in that designers can innovate by their ability to see what is there and draw relationships between ideas to solve problems to further inform design efforts (Do & Gross, 2001:135-149; Lloyd & Scott, 1995:393-406).

At its core, DT is inspired by the ways designers see, think and work, distinguishable by the human-centred innovation process and integration of methods to solve problems (Johansson-Sköldberg *et al.*, 2013:121-146; Seidel & Fixson, 2013:19-33; Hassi & Laakso, 2011:53; Kimbell, 2011:295-306; Brown, 2009:92; Liu, 1996:435-449). For this reason, Rapp and Stroup (2016) state that, when DT is applied to reconceiving organisational people's processes, powerful results emerge.

Studies have also shown that DT is fundamentally an exploratory process (Lourens, 2015:94; Brown, 2009:16). Teams do well to visualise their process, outputs and outcomes to add verbal and written information or knowledge, especially if and when intangible products and services are involved (Carr, Halliday, King, Liedtka & Lockwood, 2010:59-63; Sato, Lucente, Meyer & Mrazek, 2010:44-52). As a consequence, the process encourages customer and other stakeholder involvement. It could start developing a thorough understanding of customers and combining customer knowledge with employees' creative ideas to develop products and services.

However, the design school theorists in the new knowledge arena believe that the exploratory processes require abductive reasoning or 'what might be' logic. Lourens (2017:45) explored the notion of what might or could be, which are essential abductive reasoning ideas that embody many design definitions, but established that what is

desirable remains a fundamental design goal or step to creating innovation. Other scholars such as Leavy (2010:9) believe that abductive reasoning is a thought process only verifiable by the generation of new data, usually by prototyping and testing. For this reason, Fischer (2015) emphasised that using an abductive reasoning approach requires the designers to clear their minds of traditional solutions and create a specific 'working principle' that leads to new and creative problem-solving.

3.2.6 Design Thinking principles

While the definitions of DT have been contested increasingly, particularly when applied directly in the business domain, more consensus exists on the crucial characteristics of design principles and approaches. Scholars agree that these could include a user focus, problem framing, experimentation, visualisation and diversity (Schumacher & Mayer, 2018:500). Carlgren *et al.* (2016) summarised the principles of DT into five categories:

- user focus (focus on the user),
- problem framing (challenging the problem),
- visualisation (making it tangible),
- experimentation (experimenting), and
- diversity (include diverse viewpoints).

A study by Montgomery (2016) on the principles of work DT, went beyond the principle focus on user results and added others which enable multidisciplinary team building, ideas being prototyped and the process creating a closed-loops. The ideas could be nurtured by the team and gradually involve the entire enterprise (Tang, 1996:297-309). On the other hand, when defining the main categories that are crucial for DT, Plattner, Meinel, and Weinberg (2009) agreed with the principle of the specific constellation of multi-disciplinary teams but also identified flexible workspace, culture, including rituals and mind-set and specific DT processes as equally important principles.

In general, scholars agree that, where the principles of DT are integrated into innovation processes (that is, progressively integrated into key organisational activities), often a certain mindset is shared indicating that the enterprise is striving to cultivate a more creative and human-centred culture (Carr *et al.*, 2010:59-63; Sato *et al.*, 2010:44-52). However, in creative spaces or culture, studies show that the requirements of designers differ; therefore, non-linearity and flexibility prevail, and no

orderly or right order steps can be followed in the design process (Dunne 2018:14; Matthews & Wrigley, 2017:45; Brown & Wyatt 2010:33). The literature review discussed in the previous sections contributed to the developed research sub-question: Which processes are used in the enterprise to design and measure the performance of various business activities, products, internal processes, strategy, or services?

3.2.7 Design Thinking stages, phases and steps within processes

The literature shows that practitioners of DT take different steps depending on their requirements (Wrigley *et al.*, 2020:126). Research studies including that of Martin (2009), have identified three (3) essential components, deep and holistic user understanding, visualisation of new possibilities, prototyping and refining and the creation of a new activity system to bring the nascent idea to reality and profitable operation. Brown (2009:4), categorised the DT processes into three (3) steps; the inspiration step involves using sketches, mock-ups and scenario-building to identify the problem or opportunity that motivates the search for solutions. The second step includes the process of generating, developing, and testing ideas by building prototypes, and the third step explores the balance between practical functionality and emotional appeal.

In the academic arena of studies aimed at teaching DT to educators, Ray (2012: Online) proposed six steps to the process, identify opportunity, design, prototype, get feedback, scale and spread and present. Adair (2009: Online) characterised stages of DT according to seven steps, define, research, ideate, prototype, choose, implement and learn. Scholars claim that, within these stages, problems can be framed, the right questions asked, more ideas created and the best answers chosen; however, the sequence is not linear and can occur simultaneously or be repeated (Adair, 2009: Online). Consequently, the iterative nature of DT strategies to problem-solving can enable clear communication of ideas and is creative and illogical at times (Kolko, 2018).

3.2.8 Design Thinking and business strategy

Changes in the business environment have also led to the concept of becoming more involved with the goals of other organisational functions and playing a more significant part in the enterprise's strategy. Recent developments in the strategic management

field in which this study is positioned have also recently seen increased developments linked with the design discipline to encourage the adoption of practices of design practitioner's toolkits such as the DT and for its important role in business strategy (Liedtka & Kaplan, 2019; Bezerra & Gomes, 2016:1029; Bourne *et al.*, 2014; Choong, 2013; Franco-Santos *et al.*, 2012; Nudurupati *et al.*, 2011).

As a result, researchers across disciplines investigated how strategies and principles related to DT and BSC were used to encourage innovation, competitiveness, PM and economic growth alongside organisational resources, to enhance the entire enterprise strategy (Bulakowski, 2018; Nudurupati *et al.*, 2016:226-235; Melnyk *et al.*, 2014:173-186; Raj & Seetharaman, 2012:465-474). As a purposeful strategy, DT has been reported to enable the co-evolution of problems with the development of solutions, thereby serving as a frontier to develop ideas and formulate strategy (Liedtka & Kaplan, 2019).

3.2.9 Design Thinking and other thinking strategies or approaches

Research studies have placed DT along a spectrum of various other thinking strategies as a contrasting or alternative approach (Lewis, McGann & Blomkamp, 2020; Lourens, 2017). When DT is applied to the business strategy and transformation, some scholars associate it with integrative thinking, and it is also known as the integration of disciplines (Lourens, 2017:7; Cooper, Junginger & Lockwood, 2010). Integrative thinking has been described as the ability to confront two (2) or more conflicting ideas, but rather than selecting one or the other; a better solution is to include (integrate) the attributes of both to yield a superior outcome (Lourens, 2017:75; Martin, 2009:165).

DT is based on the premise that it is preferable to seek various competing alternatives in an integrative manner to assist in formulating better solutions. DT can be seen as an implementation of integrative thinking to create one coherent solution by integrating two (2) best opposing or possible solutions (Lourens, 2017:75). In this way, DT has attempted to solve the issue between analytical and intuitive thinking or between exploitation and exploration (Lourens 2017:75; Martin, 2009).

DT and scientific thinking have also shown an obverse relationship and not just as opposites. The valuable unique differences and balance or complementary relationship are suitable to integrate useful knowledge for problems and purposes of the present, rather than being isolated as a source for guidance (Lourens, 2017:7). When

contrasted with systems thinking, Lourens (2017:108) and Owen (2007:17) claim that there is a strong relationship and similarly mirrored outcomes; however, they suggested that DT can have a lasting impact by learning from the mistakes of other related concepts.

When DT is examined based on strategy, two (2) alternative approaches can be compared between the rational process and participatory models (Lewis, McGann & Blomkamp, 2020:115). When defining problems, these models can be distinguished by the extent of their genuine participation and emphasis on human- or user-centredness in understanding stakeholders' views and experiences. In this view, openness becomes a requirement for DT in attempting to get business people to think like a designer and transform ways that products, services, processes or strategy could be developed (Elsbach & Stigliani, 2018; Owen, 2007).

3.2.10 Design Thinking in enterprises

Research studies have reported findings on enterprises or companies where design perspectives and DT are used as problem-solving approaches applied across the enterprise (Seifried & Wasserbaech, 2019; Liedtka, 2018; Wong, 2009: Online). For example, Liedtka's (2018) studies of 50 industry projects, 22 companies, NGOs and government associations explored the impact DT had in action and described the observed practices for a deeper understanding of user needs, diverse teams, communication, multiple solution outcomes and other related structured or facilitated processes. He concluded that quality of choices improved, risk and cost failure was reduced, the likelihood of successful implementation was enhanced, adaptability increased and contributed to capability building in some of the practices.

A study conducted by the Danish Design Centre (2003:4) identified 50% of enterprises with ten employees being non-design enterprises and further emphasised that there is great economic potential for society as a whole to enhance the design behaviour of businesses. However, examples of SMEs in related studies are found in both developing and developed countries on the use of a design-driven economic strategy to turn innovative ideas into world-class brands (van Zyl, 2009).

3.2.11 Design Thinking and SMEs

Recent developments have seen a growing body of research calling for support in building DT capacity and understanding in corporations and SMEs (Brown, 2009;

Martin, 2009). As a result, it has been introduced in many different organisational settings, including SMEs (de Paula *et al.*, 2019:3852). For both entrepreneurs and their SMEs, DT can be a valuable tool to define the products or services to offer, positioning in the marketplace and articulate unique SME value propositions (van Zyl, 2009: Online).

The literature provided evidence from studies that used DT in SMEs (Lattemann, Guerrero, Redlich & Fischer, 2020). Lockwood, Smith and Mcara-Mcwilliam's (2012:750-752) study provided an example of DT in SMEs, with the focus on exploring and stimulating innovation in a Scottish context. The findings showcased how DT and methodologies could help improve the performance of SMEs by building better cultures of innovation. Furthermore, evidence was provided that suggested a ripple effect resulting from methods of knowledge-sharing in a broader group. For instance, shop-floor workers with a wealth of knowledge of materials and production used self-initiated peer-to-peer learning in daily operations to contribute ideas to develop other projects using themed processes called NOW (New Opportunity Within).

The concept of DT involves generating a multitude of out-of-the-box ideas building on these ideas, deferring judgement and arriving at a consensus (Wrigley & Bucolo, 2012:901). According to Dunne and Martin (2006:513), managers and others should start thinking like designers, and enterprises should organise themselves like design teams or adopt a design attitude (Elsbach & Stigliani, 2018; Boland & Collopy, 2004:199-192). Research indicates that enterprises that use DT perform better and benefit economically in the marketplace (Dell'Era, Marchesi & Verganti, 2010:12; Cox, 2005; Borja de Mozota, 2003). The literature on aspects of DT as discussed in the previous sections helped to develop the research sub-question: "How DT and BSC related strategies, techniques or principles are used in the various business activities?"

3.2.12 Benefits of using Design Thinking

According to the Danish Design Centre report (2003:4), elevating design has boosted innovation, and the bottom line at enterprises such as GE, increasing design activity such as design-related employee training boosted revenue by 40% on average, more than other enterprises over five years. Furthermore, DT can be used as a tool to assist people and practitioners in contributing new ideas, improving the performance of an enterprise and stay competitive in the long-term. It is, therefore, essential for sustainable growth for non-designers SMEs where these skills-sets are not expected.

Using DT might mean approaching decisions and solving problems, from fixing a bad enterprise process to solving a complicated issue to the way a designer attempts to make situations better, embracing the notion of flexibility to respond to the changing needs of people and innovation processes in real-time (Wagner & Watch, 2017:23). Managers of SMEs with their constrained environment could learn using the ways designers operate, for example, by accepting more ambiguity, embracing risk and resetting expectations (Kolko, 2015:71).

The literature consistently shows evidence that DT may be beneficial for business based on its increased relevance for practices of management and management innovation (Elsbach & Stigliani, 2018; Brown & Martin, 2015; Rauth *et al.*, 2015). The other benefits for applying DT mentioned in the literature are those captured by Rouse (2019) and encompass people interaction, co-creation, intimate creativity engagement, developing shared interpersonal boundaries to explore divergent ideas and managing the paradoxes of creativity. Rapp and Stroup (2016) support its effectiveness, suggesting that powerful results emerge when applying DT to reconceive organisational people processes. By implication, this might require the managers to understand and adopt the following:

- how designers embrace and work within constraints and doing more with less by identifying their limitations to create not the perfect but the best solution;
- designers' belief that change does not happen without taking some chances or risks and being comfortable to take risks with a tolerance for failure but still experimenting and trying new approaches;
- designers' belief that answers are important, but first questioning everything leading to the right question to find the right answer; and
- designers' use of simple tools, such as pencil and paper, to sketch out their ideas, therefore proving that DT is about ideas and not new technology tools.

A study by Carlgren (2013:29-29), lists an array of benefits from using DT. For example, DT may be projected as an all-purpose problem-solving approach (Liedtka & Ogilvie, 2011; Brown, 2009:94-92). It may be viewed as a booster of the creativity of enterprises and employees creativity (Kelley & Kelley, 2013.) From a mindset perspective, DT will assist enterprises in finding a better balance between analytical and creative thinking and exploration and exploitation (Kumar *et al.*, 2020; Lourens, 2017:75; Martin, 2009:1-31; Dunne & Martin, 2006:517). Enterprises using DT can

expect greater innovation output, more desirable solutions that offer creative alternatives, which go beyond aesthetics and are emotionally satisfying and meaningful (Lewis *et al.*, 2020; Brown, 2009:9). It is also argued that implementing DT will improve aspects of innovation and new product development (NPD), for example, by improving collaboration and motivation using empathy and knowledge-sharing by prototyping (Brown, 2009:94-92). The literature reviewed from a DT perspective led to the research question: “How the process used for PM and to encourage design skill-sets influence business performance and the environment”.

3.3 DESIGN THINKING FRAMEWORKS

The literature reviewed revealed that a competitive business model is underpinned by emphasising a morphing of DT approaches (Björklund *et al.*, 2020; Wrigley *et al.*, 2020; Schumacher & Mayer, 2018; Nielsen *et al.*, 2017; Davis, 2010:6539). The DT arena encompasses a variety of frameworks, commonly from authors such as Verganti (2009) and his work on design-driven innovation, Beckman and Barry’s (2007) framework of DT as a learning process, Martin’s (2009) Knowledge Funnel and Tim Brown’s (2009) Change by Design as explained in the section to follow.

3.3.1 Buchanan’s matrix

One of the broadest DT frameworks is the matrix developed by Richard Buchanan, a well-known design theorist. Buchanan (1992) broke up the term design or designing into four very broad areas of exploration called orders. These include:

- symbolic and visual communication (signs and words),
- the design of material objects and construction (things),
- strategic planning, activities and organised services (action) and
- systemic integration, the design of complex systems or environments for living, working, playing and learning (thought), intersected with designer abilities, inventing, judging, deciding and evaluating, as illustrated in Figure 3.2.

	Communication Signs and words	Construction Things	Strategic planning Action	Systemic integration Thought
Inventing	Signs, symbols and images	→	→	→
Judging		Physical objects	→	→
Deciding			Activities, services and processes	→
Evaluating				Systems, environments, ideas and values

Figure 3.2: Buchanan’s matrix

Source: Buchanan (1999:13)

The matrix in Figure 3.2 is formed by encountering new problems (Buchanan, 1999:13). Scholars argue that these problems may be chronic and complex and lack boundaries or solutions (Wrigley *et al.*, 2020:126; Dunne, 2018:29; Buchanan, 1992:15). For example, a new problem can be the complex and ever-changing business environment in which human participants (not only the designer but also the design client or an enterprise and the design use) are involved in the design. The four broad areas of DT should not be linked only with traditional disciplinary practice (for instance, graphic and industrial design, engineering, and management) or specific outcomes. Buchanan (1992:10) claims that design is closely tied to human experience in contemporary culture and is common to all of these interconnected professions and applications. From this expansive perspective, it can be deduced that DT defines methods, processes and planning that aid understanding a problem, acquiring knowledge and information, sharing and adopting the perspectives of others, problem-solving by the creative action; offering solutions and the analysis of project outcomes. In this light, DT may be viewed as a way in which to develop a product or communicate a message and expanded to an approach that offers better services to clients and creates more effective business models.

3.3.2 Verganti’s work on design-driven innovation

DT is combined with innovation as per the matrix proposed by Verganti (2009), by a study of enterprises that successfully utilise design to innovate. The author proved that design-driven innovation does not necessarily result from cutting-edge technology but by assigning new meanings to existing products or services. The matrix classifies

radical innovation strategies into three (3) groups, depending on the level of technology and meaning, namely: technology push, design-driven and technology epiphany, as depicted in Figure 3.3.

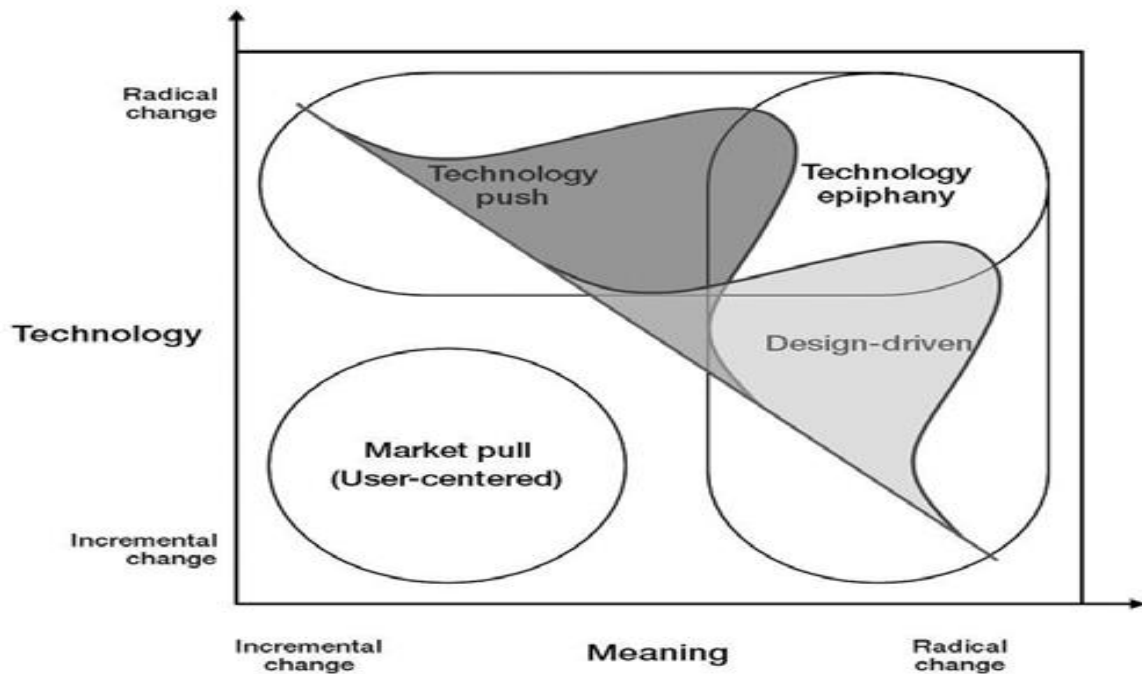


Figure 3.3: Combining DT (Martin, 1995) with the Innovation Matrix

Source: Verganti (2009)

As for the technology and meaning illustrated in Figure 3.3, for example, teams using intuitive thinking such as design teams are often asked to assign new meanings to products. In contrast, manufacturing teams in analytical thinking take full responsibility for improving technology. By implication, the two (2) types of thinking can be mapped onto the two (2) drivers of innovation and a balance in intuitive and analytic thinking; therefore, it also balances meaning and technology. Furthermore, Verganti (2009) highlights that an enterprise does not achieve DT when it belongs to the technology push and has advanced technologies with relatively old-fashioned meanings. Neither does it achieve DT when it belongs to a design-driven initiative characterised by fresh meanings with outdated technologies. Verganti maintains that only when it belongs to the technology epiphany does it assign new meanings to new technologies and achieve DT.

3.3.3 Beckman and Barry's framework of Design Thinking as a learning process

The experiential learning theory developed by Kolb (1994) suggests four distinct learning styles split into categories. The first category is associated with individuals who are good at generating ideas. The converging category is used by individuals who can complete technical tasks rather than tasks requiring the navigation of social or interpersonal issues. The assimilating category is for those individuals who can order information logically. Lastly, the accommodating category involves those individuals who prefer to work with their hands and do best in action-oriented learning. From this theory, Beckman and Barry (2007) conclude that the team members who prefer to use the accommodating style of learning are the most helpful in a group due to their abilities to create solutions (Figure 3.4). Such people possess dominant learning abilities such as concrete experience and active experimentation and tend to learn primarily from a hands-on experience and act on their gut feelings (Beckman & Barry, 2007:44). The authors advise that those with such traits should be identified and promoted for this learning style, therefore encouraging solution-based learning rather than styles that focus on creativity, technical aptitude and organisational skills. Furthermore, encouraging intuitional risk-taking or gut feelings to follow a line of thinking better may result in more experimental and experiential processes and outcomes.

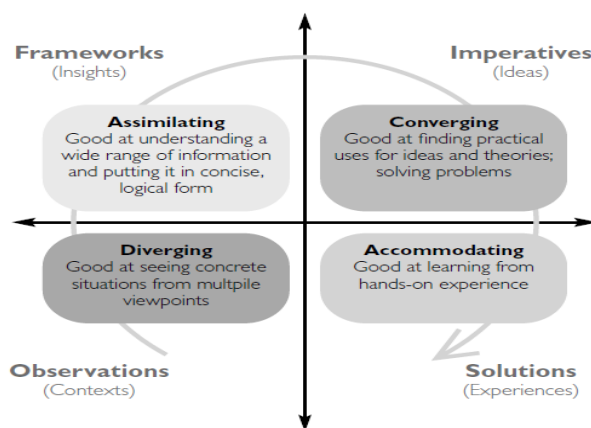


Figure 3.4: Innovation process and learning styles

Source: Beckman and Barry (2007:47)

In Figure 3.4, Beckman and Barry (2007:47) joined innovation processes and learning styles to demonstrate the experiential learning processes of finding or selecting problems, finding or selecting solutions, or storytelling often associated with the value

of innovation. The authors highlight that the innovation process places equal importance on identifying, framing and reframing the problem to be solved. They add that the four phases of an ideal learning cycle (that is, experiencing, reflecting, thinking and acting) which draw on the four learning styles of Kolb's theory are engraved in DT. The cycle allows participants to experience their learning style preferences and gain an understanding and empathy for the different personalities required to achieve innovation.

3.3.4 Roger Martin's Knowledge Funnel

Martin (2009) advocates approaching management problems the same way designers approach design problems. The author distinguishes between a strategy based on rigorous, quantitative analysis with a basis of analytical thinking and an approach based on creativity and innovation and intuitive thinking, the art of knowing without reasoning. In contrast, Martin (2009) argues that analysis or intuition are inadequate and that the future's most successful businesses will balance analytical mastery and intuitive originality in a dynamic interplay referred to as DT. Although this view may stem from a conventional school of thought, the literature acknowledges the notion and the argument of the shift in the approach as an important contribution due to managers who have applied abductive reasoning despite (probably) not having learned it from business schools. Martin's contribution to the design and DT arena is in the formulation of the knowledge funnel approach, illustrated in Figure 3.5.

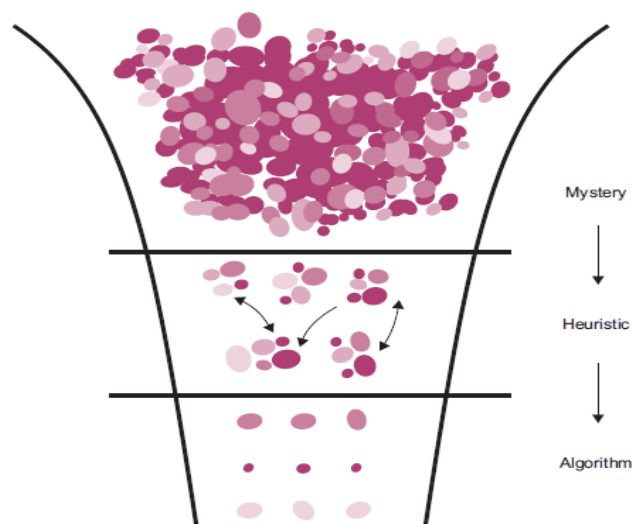


Figure 3.5: Knowledge funnel

Sources: Martin (2009); Leavy (2010:7)

With the approach of design and thinking-led innovation, as depicted in Figure 3.5, Martin makes an abstract formulation of the nature of the process rather than guidelines, leading back to the wicked problems of Rittel and Webber (1973:155-169) and the reflective practitioners of Schön (1993). In his approach, Martin illustrates that the pathway through the funnel has three (3) main stages, mystery (and hunch), heuristic and algorithm. The knowledge funnel also reflects that the process of advancing knowledge and capturing value involves the successful movement of knowledge through all stages and as a way of thinking in the creation of any enterprise. Drawing from a practical application and successful use of the approach by the enterprise, for example, Martin's framework suggests the importance of:

- Pinpointing a latent market opportunity (selecting a particular mystery to be solved, for instance, what the impact of an innovative product boom might be on the eating habits of citizens);
- Devising an offering for that market (turning a hunch into an initial heuristic, for instance, the need for an inexpensive, quick, convenient, tasty and healthy meal);
- Codifying the operation (converting the heuristic into a repeatable formula or algorithm of an enterprise's format).

By identifying and solving the mystery before the competition, an enterprise may create an initial efficiency advantage. By converting heuristics into algorithms, they may raise their efficiency advantage and enhance the value proposition, resulting in the financial success of an enterprise. For user-centred understanding, Martin's work also identifies effective tools for making ideas tangible, namely ethnographic investigation, brainstorming, mind mapping or visual thinking, storyboards, improvisations and scenarios and rapid prototyping. These tools may be seen as facilitating the ability of an enterprise to capture the inspiration that is found at the edges of unfamiliarity, where interdisciplinary creativity and experimentation (in collaboration with a diverse set of actors in the innovation ecosystem) can build capacity to think analytically, intuitively and abductively without any prejudice of one over the other.

3.3.5 Brown's work on Change by Design (features and processes)

From an industry perspective and considering the CEO and president of IDEO.org, Brown's (2009) work talks about moving away from reliability to viability and simultaneously striking a perfect balance of desirability, feasibility (such as technology)

and viability of products and businesses. In this instance, viability entails what is likely to become part of a sustainable business model. The business model in this context is treated as a part of the product, service development or PM strategy and is heavily dependent on that. There are attempts underway to work and research the business model and its PM strategies in a designerly way. Brown (2009:4) observed that there is no linear, step-by-step approach to DT but rather an interaction of three (3) things, inspiration, creativity and implementation, as depicted in Figure 3.6:

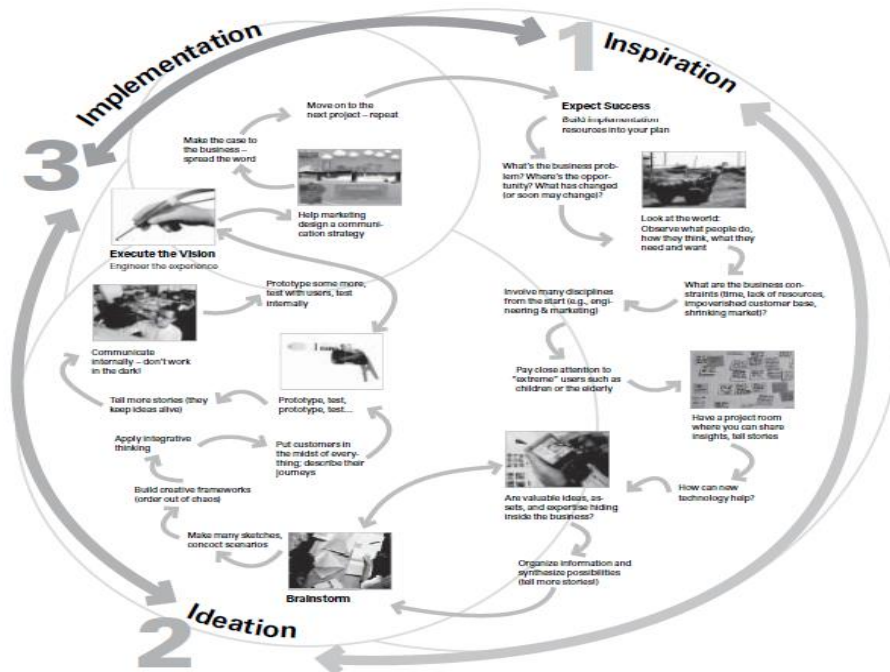


Figure 3.6: An interaction of inspiration, creativity, and implementation stages

Source: Brown (2009:5)

In Figure 3.6, the first inspiration stage focuses on the problem or opportunity that motivates the search for solutions and involves sketches, mock-ups and scenario-building to obtain background information on problems or opportunities. The ideation stage includes the process of generating, developing and testing ideas, exploring the balance of practical functionality and emotional appeal by brainstorming and prototype testing. The implementation stage refers to the path that leads from the project room to the market, clearly communicating the idea and proving or showing that the executed best idea or most suitable prototype will work. Furthermore, Brown (2009) argues that the tools developed and used by designers can be utilised effectively in business, for example, by adopting user-centred understanding using mind mapping or visual thinking and storyboards and rapid prototyping in making ideas tangible.

3.4 TRAITS AND REQUIREMENTS FOR THE USE OF DESIGN THINKING

According to Cross (1999:25), designing is something that everyone does; it distinguishes us from other animals and (so far) from machines, as it is a part of human intelligence and is natural and widespread in the human population. Cross's (1999) view supported the statement by Buchanan (1999:13) that all humans have some design ability, formulated as invention, judgement, decision-making and evaluation. Cross (1990:132) acknowledged that. Although professional designers might naturally be expected to have highly developed design abilities, it is recognised that everyone possesses at least some aspects, or lower levels, of design ability.

Nussbaum (2007: Online) stresses that design will increasingly be the driving force behind business decisions and notes that, in the future, only business leaders with a deep understanding of design values and processes will have the edge over their peers who do not. Studies suggest that empathy, invention and iteration would often benefit an enterprise if managers thought like designers (Carlgren *et al.*, 2016:52). However, Nussbaum (2007) cautions that designers are usually pardoned if they overshoot their budgets, in contrast to managers who often find it hard to get presidential pardon (Iskander, 2018). Nussbaum maintains that, if a manager is willing to learn, digest, and lead the way of thinking and processing as in DT and integration, the result could improve all areas of an enterprise. The literature suggests that, when DT is integrated into an enterprise, it can be the foundation of competitive advantage (Björklund *et al.*, 2020:100-101; Wrigley *et al.*, 2020:127).

Although South Africa has seen growth in new SMEs, the rate of business failure relative to outputs based on financial support and challenges brought about by the ever-changing environment is a concern to funding agencies (OECD, 2020:140; Damane, 2006). Moreover, the challenge facing SMEs is that many enterprise strategy decisions are made without supportive information and data, any formal business training and with very little professional guidance. More often than not, design skills or PM design experiences in these enterprises are lacking (van Zyl, 2020:54, 67; IFC, 2018:105). Martin (2007: Online) stresses that the design revolution cusp in enterprises requires that today's business people not only understand designers better but also think like designers to transform how products, services, processes or strategy could be developed (Elsbach & Stigliani, 2018).

DT supports the use of an abductive approach comprising appositional thinking, resolving ill-defined problems, adopting solution-focused cognitive strategies and using non-verbal modelling media to foster innovation and meet the real needs of the customer (Lavin, 2013:5; Cross, 2010:127). Design cognition is associated with formulating problems, generating solutions, process strategy and a shared, social process that needs different personality types, experiences and knowledge to negotiate and establish a common language or means of communication between different parties to be effective (Cross, 2011:19). Although highly developed in skilled designers, everyone possesses these abilities to some degree, making them a fundamental form of human intelligence (Cross, 1990:127). In light of this, Brown (2009) and Martin (2009) disconnect design from designer professions and refer to design thinkers, whose professional backgrounds can vary, stating that people outside professional design can also have a natural aptitude for DT.

Beyond an abductive approach, it emphasises the importance of considering customer's needs and a collaborative and integrative approach to problem-solving using both analysis and synthesis of the problem area (systems thinking), and the iterative re-visiting of the resultant designs for continuous improvement (Dunne & Martin, 2006:517). Those in contemporary design practice suggest, therefore, that design should move from designing for people to designing with people and provide tools and support to assist them to think in a designerly way (Blyth & Kimbell, 2011; Brown, 2009; Sanders & Stappers, 2009:7). DT is said to bridge the gap between deductive and inductive thinking using abductive reasoning to consider what could be (Brown, 2009:4; Martin, 2009).

The integration of methods distinguishes DT by a focus on a human-centred innovation process, the formation of multi-disciplinary teams, collaboration and iterative improvement and is a powerful tool for achieving desirable and economically viable design solutions (Plattner, Meinel & Leifer, 2012:v; Açar & Rother, 2011:57-62). IDEO (2009:95) views DT from an incremental approach to also assist in identifying what it will take for an enterprise to deliver that idea. It is also linked to innovation, defined as the pursuit of an individual's seed idea, nurtured by a team and gradually involving an entire enterprise (Tang, 1996:297-309).

At its core, DT refers to how designers see and consequently think. It is an interactive process used to see a representation of problem-solving concepts or ideas and

relations thereof and what can be drawn from it to inform further design efforts (Do & Gross, 2001:135-149; Liu, 1996:435-449; Lloyd & Scott, 1995:393-406).

DT is related to the theory of innovation and is founded on Schumpeter's (1942) concept that innovation is the process of revolutionising the economic structure from within an enterprise by the deliberate destruction of the old and the explicit creation of the new (Gero, 2011). According to Brown (2009:4), DT and innovation are described as stages of inspiration, creativity and implementation. Brown (2009) argues that design solutions need to meet three (3) criteria:

- what is desirable (what makes sense to and for people),
- viability (likely to become part of a sustainable business model or strategy), and
- feasibility (what is functionally and technologically possible for the near future).

It stimulates and encourages the open and radical culture of collaboration that inspires both intellectually and emotionally and creates an environment where people from different areas, such as large enterprises, start-ups, schools, non-profits and the government, can participate in working and learning on products, processes, and projects together.

Johansson-Sköldberg and Woodilla (2009:4) claim that, with the development of more process-oriented views, the epistemology underlying strategy has transformed into a more humanistic debate. They further highlight all the actors in the PM process and their capabilities of embracing ambiguities and paradoxes to create and harness the resources of DT and innovation for value-add purposes. Lockwood (2010) suggests embracing the designerly-led process for the ultimate generation of innovative strategies. Studies, such as that of Groen *et al.* (2012:136-137), provide an example of innovation incorporating the use of PM and DT in an integrated manner. The study presents the alignment of performance measures with the goals of the enterprise by dividing the participants into groups. It begins the process by soliciting operational improvement ideas during group meetings, using a so-called brain-write. Performance measures are developed iteratively at several subsequent group sessions. In many of these meetings, prototype versions, based on actual data, are discussed (Wouters & Roijmans, 2011:709-736). The process is facilitated in a nuanced way by the main action researcher to help the employees get their ideas to work to increase productivity. In contrast, in circumstances where new ideas get introduced from an expert

perspective, employees may find them contextually ambiguous, resulting in undesirable outcomes.

The discussions above have identified the theories, approaches and the constructs prevalent in the existing literature to explain PM and DT and related concepts for an effective and successful integrated PM for SMEs. It is important to note that these perspectives are not necessarily independent of each other and that they may lead to conflicting views on their integrativeness under certain circumstances. Reflecting on Powell and Netland (2010:2), for this study the key areas suggested for the development of an integrated performance measurement system (IPMS) for SMEs include the operations, business strategy (strategic plan), innovation (value creation) and a supporting conceptual framework for PM and improvement. Therefore, the theoretical approach relevant to, and adopted for, this study draws on organisational and stakeholder theories, RBV and an abductive approach.

Additionally, adopting the integrated approach by Monte and Fontenete (2012:246) and Hussin and Yusoff (2013:454) suggests the inclusion of forward and backward mapping, advocacy coalition and communications improvement as part of the mix of the bottom-up and top-down approaches (Kolko, 2018; Groen *et al.*, 2012:136). For this reason, the disputes arising due to the suggested top-down and bottom-up approaches may be settled by considering the scope of change, the validity of the technology, institutional environment, goal, conflict and environmental stability. The previous sections provided the theoretical perspectives, the concepts from the most well-known PM system as adapted from the BSC approach of Kaplan and Norton (1990-1992) and Brown's (2009:5) DT techniques to underpin the framework for the development of this study's integrated PM framework, which is discussed in the section to follow.

3.5 A NEW PARADIGM: INTEGRATING PERFORMANCE MEASUREMENT (BSC- AND DT-related principles)

Being successful in today's highly technological and globally competitive world requires a person to develop and use a different set of skills from what was previously required (Shute & Becker, 2010). Managers or owners of SMEs need to develop and hone their skills to incorporate better PM, benchmarking, design skill-sets and strategies that enhance problem-solving skills. It is now a global priority to promote certain skill sets which are expected to serve the long-term survival, growth, and

sustainability of business (Vitez, 2013: Online ; Attolini, 2012:6; Ropega, 2011:476-483). Given the rapid change of the business environment and technology, increased business failures following a lack of certain skills or competencies of managers are already affecting the nation's economic systems and global positioning (OECD, 2015:93; Wiese, 2014:4; Monks, 2010:26). The adverse consequences for the South African economy and economic risks seem to be calling for alternative interventions to address SME shortfalls on newer tactical management skills.

Commonly, SMEs are not able to count on in-house expertise to support or explore aspects of innovative human-centred solutions, due to a lack of financial means and expertise. They, therefore, do not know what strategies or techniques may be useful for improving their competitiveness. According to Franceschini, Galetto & Maisano (2007), an integrated PM system should be based on motivation and the improvement of operating performance to assure full optimisation of all-processes workflow. Developing strategies to stimulate newer ways of thinking, innovation, benchmarks and performance measures in an integrative manner is imperative to strengthen and encourage the development, competitive capacity and sustainability of SMEs in South Africa. The importance of innovation in corporate competitiveness and global economic growth has made it a central topic of research with a growing recognition of DT as the new approach to innovation (Beausoleil, 2012:1).

Borja de Mozota (2009) supports the adoption of Kaplan and Norton's (1996) BSC framework in design management so that the complexity of the enterprise can be captured and the contribution of design (both to processes and organisational knowledge) can be recognised financially through this. According to Davis (2010:6539), integrating DT into the business model is essential for the future of business. It provides a breadth of discoveries in all aspects of the business from management to customer service that may otherwise be overlooked. A research sub-question was developed on how the DT and PM processes in use can be merged into an integrative strategy.

PM and DT are focused on human aspects and contain common characteristics, such as innovation, and can be integrated to create a new foundational framework for competitiveness. It is as simple as thinking of them as two (2) different shapes:

- **The DT world:** reflects the world of possibilities (a sphere which can be populated with ideas and unconstrained thinking), encourages customer involvement and combines customer knowledge with employees' creative ideas;
- **A balanced framework:** brings these limitless possibilities from different perspectives down to executable probabilities; it looks at the customer and internal perspective (for instance, employees, internal processes).

With the focus on viewing an enterprise holistically using the BSC and creating new things through DT techniques, the researcher in this study believes that the integration of the two (2) systems may provide many benefits. For example, the integration may afford the enterprise collaborative, focused and creative opportunities to evaluate how well SMEs are performing against set objectives. It may also help to elevate thinking skills to support PM efforts and decision-making in mitigating the risks of poor business performance. As a consequence, the integration processes may necessitate an understanding and full assessment or characterisation of those activities deemed to be critical to the success of a business and existing impediments to the inability to grow and compete.

Enhancing organisational or managerial multi-modal and inter-disciplinary thinking skills may be achieved by incorporating authentic and intriguing tasks into the enterprise's activities, section or department and providing many opportunities to apply design processes. Gottlieb, Wagner, Wagner and Chan (2017:21-22) commented on the DT approach's abilities to expand significantly on traditional approaches by an emphasis on qualitative methods for data gathering, the incorporation of users throughout the different stages of development and implementation as the designers' work.

In this thesis, the researcher envisions combining the theory in this chapter and data collection in the chapters to follow to demonstrate, for example, in a chosen business process in which inter-disciplinary teams inter-actively and pro-actively are part of a strategy to design, develop, accumulate, evaluate and communicate performance measures and improvements (bottom-up approach). Such information may help managers to monitor the team or activity performance interactively, deduce the strengths and weaknesses relative to DT variables and provide targeted feedback to improve the team or activity performance (top-down approach).

The goal in this BSC- and DT-principle related PM integrative bottom-up and top-down approach is that managers should not only focus on preparing the team to perform well on specific tasks or activities, but also equip it with powerful and empowering skill sets to help with achieving success both within and outside its environment. This integrated framework (discussed in detail in the closing chapters) would display an interaction activity, feedback, monitoring and innovation in improvement, thereby ensuring efficient decision-making and a successful and effective PM system.

3.6 CONCLUSIONS

This chapter is built on the conceptual framework in Table 2.6 in Chapter Two and provided evidence from the literature on DT techniques and relevant theoretical frameworks, its traits, components and processes. The chapter also demonstrated the flexibility of DT as a potential thinking strategy for integration with principles of the BSC within PM framework, particularly highlighting the effective use or adoption primarily to support and complement the justification of the key research questions raised in Chapter Two.

From the literature reviewed, the definition of a successful integrated PM framework (IPMF) is clarified by a focus on its holistic and integrative condition. This current study contributes to the body of knowledge, firstly by defining an IPMF framework as an all-encompassing process that enables flexible, inclusive and creative effort to gather, monitor, assess and improve organisational PM information and activities to achieving goals and objectives.

The argument is that an IPMF framework may exist if holistic (for instance, financial and non-financial measures) and creative (thinking) perspectives are used in an integrated way with a looping effect to optimise the utilisation of existing resources in the enterprise, illustrated graphically in Figure 3.7.

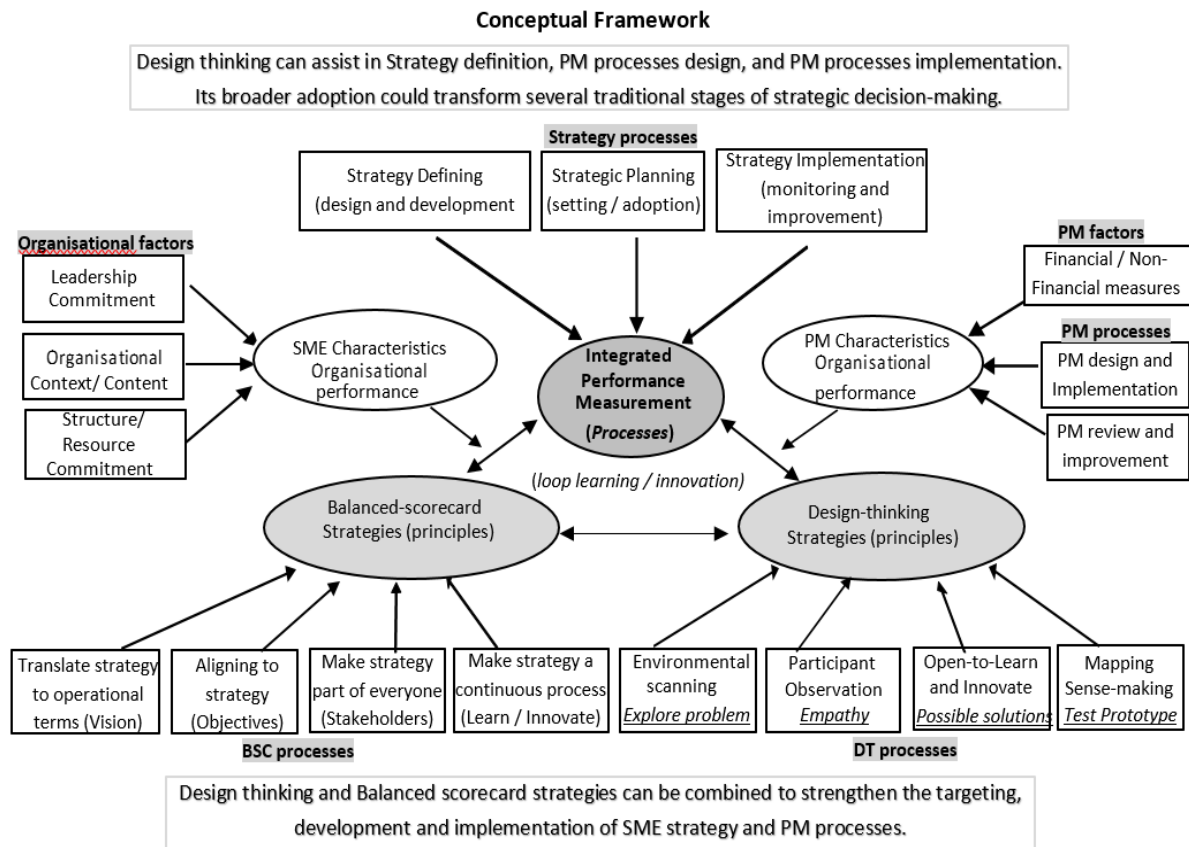


Figure 3.7: Conceptual framework – linkage of SME, PM, BSC and DT theories

Source: Author's compilation)

The aspects shown in Figure 3.7 demonstrate the bridging across the domains of SME and PM, with that of BSC and DT from which the conceptual framework developed. The concepts of the developed framework and definition are of importance to provide a point of departure, help inform and guide the data collection instruments in the methodology design aspects in this study.

The definition is based on the assumptions of the study introduced in Chapter One. The premise is that SMEs may be able to improve and manage their PM not only by applying the processes and methods that designers use, however, also integrating its principles and those of the BSC. In this way, the enterprise may be presented with an opportunity to experience how designers approach and solve problems for business strategy. For example, by creativity, managers may be more ready to face problems, and start to think outside the box to come up with innovative solutions to their customers' needs and support employees and other stakeholders in developing these skills. In turn, the process is replicated by multiple opportunities of collaborative employee experimentation, the exploration of different ideas and reflective learning

while measuring, revising and improving the performance of the enterprise. The author believes that DT is more than just a skill to be acquired or used in a limited-resource environment and should rather be viewed as a way of thinking that integration could potentially enhance the effectiveness of an enterprise's PM.

3.7 SUMMARY

What has become apparent from the literature review is that there is a shift from the conventional methods of PM towards integrated framework, especially concerning the maximum utilisation of resources at the disposal of SME managers, and the importance of DT in its integration with strategies and principles of the BSC. From a South African SME perspective, their international peers are continually looking at ways and means of surviving the turbulent business environment in which they operate. In the sphere of the environment, those who adopt integrative mechanisms for measuring performance and incorporate DT may gain positive results. Successful PM may require the consideration of a mix of integrated strategies to withstand the economic pressures and facilitate the growth and competitiveness of SMEs. In summary, this chapter provided evidence of the literature from a DT strategy' perspective to complement the justification of the research questions and the developed conceptual framework in Table 2.6 and improved in Figure 3.7. The next chapter builds on the findings of this chapter to understand the methods and methodology in how the research questions raised can be addressed.

CHAPTER FOUR: RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

Chapters Two and Three revealed the theories underpinning pertinent aspects that are relevant to the topic of this study and developed a conceptual framework by the literature review. In this chapter, the structure and procedures to gather evidence to address the research problem and questions in response to the topic of enquiry are discussed.

4.1.1 Goals of the chapter

The purpose of this chapter is to explore, explain and justify the research methods taken into consideration to support the researcher's philosophical position, assumptions and commitments to execute the research effectively. This chapter explores the approaches, procedures and methods to identify the most appropriate ones that are adopted for this study to justify the underpinning of empirical data collected and presented in Chapter Five.

4.1.2 The layout of the chapter

Section 4.2 commences with evidence on sourcing relevant information for the study. A discussion on research philosophies and paradigms follows in Section 4.3. Section 4.4 explains the research design of the study. Section 4.5 covers views in literature on the different purposes of research to justify suitability in this study. Section 4.6 justifies approaches deemed appropriate and adopted for this study and the design of this research. The research methodologies applied are discussed in Section 4.7. The population and sample are discussed in Section 4.8, followed by the sources of data, collection methodology and documentary evidence in Section 4.9. The methods for data analysis are discussed in Section 4.10. Section 4.11 addresses the criteria for qualitative research, including research credibility. Ethical considerations are discussed in Section 4.12, and delineation of the study is described in Section 4.13. The chapter concludes with a summary in Section 4.14.

Figure 4.1 provides an illustrative overview of the research design and methodology to orient the reader on how it links with various phases in the different chapters of this study.

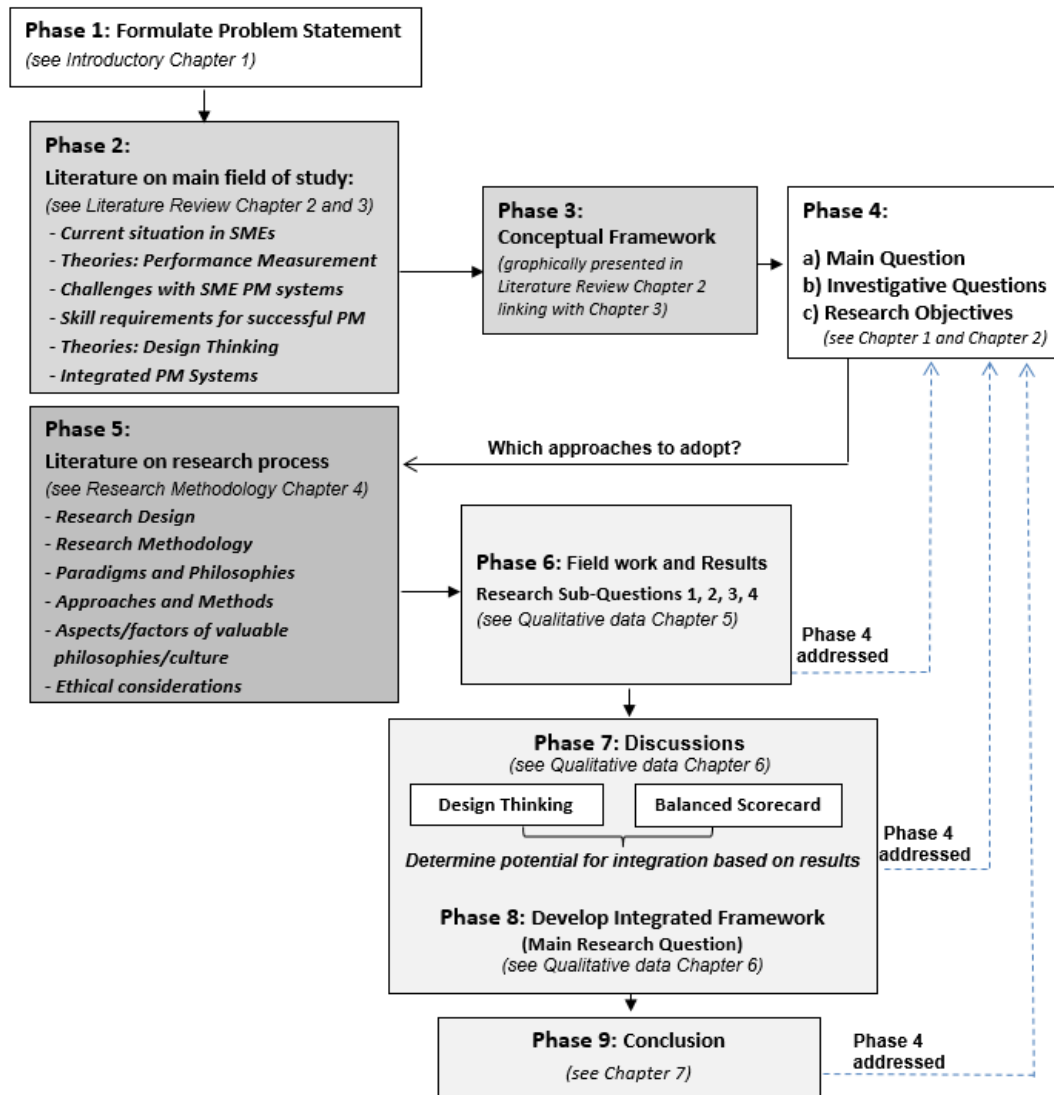


Figure 4.1: An overview of the research design and methodology for the study

Source: Author's compilation

In Figure 4.1 the overview of the research design and methodology demonstrates the avenues in nine (9) linked phases by which information and data were sourced to provide how the research questions can be addressed as dictated by the research topic, objectives and problem.

4.2 SOURCING RELEVANT INFORMATION FOR THE STUDY

The researcher consulted literature to provide a scholarly grounding for the study. Following Grant and Booth (2009), who have elaborated on the purposes of reviews, published sources were analysed, for the study to:

- a) acquire a sound theoretical foundation (Smith & Albaum, 2012);
- b) understand recent developments in the field of study and other disciplines;

- c) gain in-depth perspectives of the topics to aid in the identification of aspects to look out for during the empirical and data analysis phase of the study.

Sources which did not explicitly address the key conceptual aspects of the study were excluded.

The review of academic literature included peer-reviewed journal articles, research reports and books from academic databases, mainly Scopus, Emerald, Sage, EBSCO and Google Scholar. These databases provided relevance and addressed topics and statements in the study. The search for sources returned a significant amount of results, of which 643 were selected, reviewed and cited as depicted in Table 4.1.

Table 4.1: Summary of cited sources in this study from various periods and per year

		Sources: 2010 - 2014					Sources: 2015 - 2020					Total	
2000 and prior	2001 to 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	643
		42	45	40	39	63	37	39	37	34	10	21	
84	151	Total (2010 to 2014) = 230					Total (2015 to 2020) = 178						

Source: Author's compilation

Table 4.1 indicates sources cited in this study for the various period(s) and per year. Almost 410 represent those from 2010 to 2020. Other sources from 2009 and prior years were cited primarily to provide a balanced representation of how PM research in the various fields has developed and evolved over the years (Appendix AC). In Table 4.2, the origin of sources cited in this study is shown.

Table 4.2: Summary of cited sources in this study per source type

Source type	Journal articles	Books	Professional websites	Theses/ Dissertations	Research reports	Conferences	Legislation documents	Harvard Business Review	Film
Number sources cited	339	154	74	26	14	14	8	13	1

Source: Author's compilation

Table 4.2 shows a summary of the more recent and relevant sources per origin of the source over the past decade.

These sources also contained sections of information on the relevant research design and methodology aspects of these studies. How other scholars had used design, and methodology aspects enabled the researcher to make better-informed decisions as to the relevant choices in terms of the research process for the study.

Empirical processes were used to provide the evidence base for the primary data. The researcher collected real-life experiences, thoughts and responses from participant SMEs. People directly involved in decision-making on the topic participated in establishing the relevance of the study. The researcher used interviews, documentary evidence and focus groups. These aspects were informed by research and methodology-specific sources on research philosophy, design, methodology and methods, sourced to help with their justification and suitability for use in this study, as discussed in the sections that follow.

4.3 THE RESEARCH PHILOSOPHIES AND PARADIGMS

In the following subsections, the research philosophies and paradigms of the study are discussed.

4.3.1 Choice of paradigm for the study

In terms of their philosophical stance and paradigms, researchers take careful consideration when choosing the most appropriate method strategy for their research (Creswell & Poth, 2018; Merriam & Tisdell, 2016; Loan, 2015). Such academic conventions consist of a cluster of commonly shared beliefs and assumptions in research communities that lead researchers to certain types of practices and positions to understand and address problems (Creswell, 2014; Johannesson & Perjons, 2014).

There is a range of philosophical traditions and practices in modern scientific enquiry. Positivism, interpretivism and pragmatism are the three (3) dominant traditions or paradigms (Creswell & Guetterman, 2019; Jones & Alexander, 2018:10; Creswell, 2014; du Plooy-Cilliers *et al.*, 2014), therefore explained in terms of ontological, epistemological and methodological-related stances and positions (Creswell & Guetterman, 2019; du Plooy-Cilliers *et al.*, 2014).

4.3.2 Ontological position and the paradigms

Ontology is a branch of philosophy about the nature of truth or reality in the world. It influences assumptions that we make on the nature of reality (Lincoln, Lynham & Guba, 2018; Creswell & Poth, 2018). Simply put, an ontological stance or position influences the decision of what one chooses to notice or ignore, and the evidence which one will collect or not to represent the 'knowledge' of a reality.

4.3.2.1 Ontological position of positivism

Ontologically, positivism assumes that reality exists independently from human actions and experiences (Jones & Alexander, 2018:10; Johannesson & Perjons, 2014). The positivistic paradigm is the approach of natural sciences to study certain social phenomena, based on the consideration of data, evidence and rationale as a single identifiable reality from which to measure truth (du Plooy-Cilliers *et al.*, 2014; Creswell, 2014:7). Positivist research ideally follows a quantitative approach for theory verification and empirical observation (Jones & Alexander, 2018:10; Rahi, 2017; Creswell, 2014).

4.3.2.2 The ontological position of critical realism/pragmatism

In the pragmatist world, ontologically, the focus is on the nature of experiences, unlike other philosophies where the nature of reality is emphasised, and actions are based on a set of beliefs rather than the possibility of truth (Kaushik & Walsh, 2019:3; Morgan, 2014:26). From the pragmatist perspective, knowledge or reality is not static and changes with every turn of events (Kaushik & Walsh, 2019:3). Pragmatism embraces both quantitative and qualitative approaches when choosing appropriate research methods (Kaushik & Walsh, 2019:12).

4.3.2.3 The ontological position of interpretivism

Within the interpretivism ontology, the belief is that, depending on circumstances such as culture and social experiences, people may or may not experience reality in the same way (Jones & Alexander, 2018:10; Bryman, 2016; Du Plooy-Cilliers *et al.*, 2014; Creswell, 2014). Interpretivist researchers follow a qualitative approach to gain in-depth understanding by having direct contact with participants and constructing knowledge by deriving meaning from their participants' experiences (Rahi, 2017; du Plooy-Cilliers *et al.*, 2014:27-28).

4.3.3 Epistemological position

Epistemology is the branch of philosophy concerned with what counts as knowledge and truth and, therefore, how to create or generate knowledge (Poucher, Tamminen, Caron & Sweet, 2019; Lincoln *et al.*, 2018; Creswell & Poth, 2018).

4.3.3.1 The epistemological position of positivism

Positivists claim that objective knowledge about the social world is obtainable but only by direct observation and experimentation (Johannesson & Perjons, 2014). They obtain knowledge by experiments and testing hypotheses (du Plooy-Cilliers *et al.*, 2014).

4.3.3.2 The epistemological position of pragmatism

The pragmatism epistemological paradigm argues that people's social experiences shape their perceptions of the world, as each person creates his or her unique experiences and truths, regardless of the equal validity of all such truths (Morgan 2014, 2020:65). Despite the recognition of knowledge creation from socially shared experiences, pragmatists argue that no two (2) people's sets of beliefs will ever be similar due to unique individual experience (Morgan, 2020:65). Rather than arguing about whether something is true or not, pragmatists focus on the consequences of action-based sets of beliefs (Morgan, 2020:65).

4.3.3.3 The epistemological position of interpretivism

Interpretivism argues that common sense guides people in daily living, and if you want to understand human behaviour, you need to grasp what people view as common sense (du Plooy-Cilliers *et al.*, 2014). Interpretivism believes that truth is dependent on people's interpretation of facts, and they are not interested in generalising their results (du Plooy-Cilliers *et al.*, 2014).

4.3.4 Methodological position

Methodology is about methods, and the techniques a researcher applies when conducting research. For positivists, methods must be devised to study reality objectively. They, therefore, favour methods such as direct observation and experiments under laboratory conditions which relate to the quantitative method of investigation (du Plooy-Cilliers *et al.*, 2014). The pragmatist approach attempts to recognise multiple influences on a given situation, many different points of view and

multiple realities and highlights that knowledge and solutions are based on experience bringing together a variety of perspectives (Kaushik & Walsh, 2019; Creswell & Creswell, 2017). Therefore, pragmatists in social science generally base their research on mixed methods (Morgan, 2014). On the other hand, the methodological position of interpretivism holds the views that the researcher(s) can get close to the people who participate in the phenomena being studied and thereby come to understand their views and interpretations (Johannesson & Perjons, 2014). Since the aim of interpretivism is to gain an in-depth understanding of multiple realities, they depend on qualitative research (du Plooy-Cilliers *et al.*, 2014).

Having reviewed the paradigmatic possibilities for research, the researcher in this current study declares her stance as ontologically subjective, following interpretivist epistemology and qualitative methods. This is based on research objectives which seek to contribute to the body of knowledge in an open-ended social reality of how people perform in SMEs. SMEs are organisational entities rooted in social and entrepreneurial needs and are resourced by people who respond to complex, social and market realities.

4.3.5 The chosen 'interpretivist research paradigm' for this study

These declared stances are therefore deemed appropriate, considering the qualitative nature of this current study and the collective societal nature of the SME industry being examined. SMEs are typical enterprises established from the need for people to sell or buy goods or services (service by doing) primarily for profit or financial gain or growth. Additionally, they are characterised by innovation and engage in contextually-situated strategic management practices (Windapo, 2018:1). Internal and external factors or forces influence the environment of an SME. As a whole system, it comprises actively participating inter-related sub-systems working together to achieving objectives and operates by practice and performance. This complex reality is best measured by subjective stances that actively construct meaning from the participants.

Interpretivism argues that knowledge of reality is about understanding the subjective particularities of different individuals' perspectives and interpretations, unlike positivists who reduce reality by cause and effect and common underlying patterns or mechanisms (Jones & Alexander, 2018:10). Accordingly, interpretivism is crucial to this study, the objective of which was to evaluate and document a clearer understanding of current PM and design-based skillset factors and processes followed

by SMEs, based on their experienced realities. The knowledge contribution of the study was derived from real-life experiences of SMEs in practice in the CMSA. In the light of the suitability of the interpretivist paradigm, the appropriately consistent research design and methods are provided in the sections that follow.

4.4 RESEARCH DESIGN

Collis and Hussey (2014) define research design in terms of:

- the purpose of the research (exploratory, descriptive, analytical and predictive research),
- the process of the research (qualitative and quantitative),
- the logic of the research (deductive and inductive), and
- the outcome of the research (applied and basic research).

4.4.1 Choice of qualitative research approach and logic

As indicated under methodological assumptions in the paradigm section, qualitative research involves studying the meaning of people's lives as they experience it in real-world conditions, unlike quantitative studies which seek numerical values in an objective approach (Leedy & Ormrod, 2016; Yin, 2015:9; Collis & Hussey, 2014, Remenyi *et al.*, 2009:125). Given that this research studies performance in socially anchored enterprises, a qualitative research approach was deemed suitable.

4.4.1.1 Research approach

A research approach follows deductive or inductive logic. This logic depends on the choices made by the researcher, prompted mainly by the research paradigms, aims and objectives, limitations and, sometimes, personal opinions (Creswell & Guetterman, 2019; Saunders *et al.*, 2009). Deductive logic is mostly associated with quantitative research wherein a theory or foundational proposition takes precedence, leading to the hypotheses which are tested by the collection of data and culminate in the theoretical proposition being rejected or confirmed. Inductive logic is often linked to qualitative research. In this type of reasoning, the researcher moves in a counter direction to quantitative studies. The research questions prompt the study, framed by working theories or orienting concepts which are then probed, described and analysed concerning collected data leading to extending or creating theory.

In the qualitative research approach where inductive processes are adopted, researchers are cautioned to remain vigilant that their study may result in results that are very often different to what may have been anticipated (de Chesnay, 2017:8). Therefore, it may become difficult to measure certain concepts or variables due to the inductive nature of qualitative methods and the underlying assumptions of reality being a social construct (Almalki, 2016:291). This qualitative research study used inductive logic to build theory; difficulties were encountered and overcome at various stages, phases and processes of the study as discussed in the remainder of this chapter. Given that the researcher has asserted the qualitative anchoring of this study, Creswell (2014) says that the approach works particularly well for case-study research since it allows rich empirical data yielded from case studies to be applied to either quantitative or qualitative methods. The framework developed by Yin (2014) framework is used in Figures 4.2 and 4.3 to depict the steps in a case-study process.

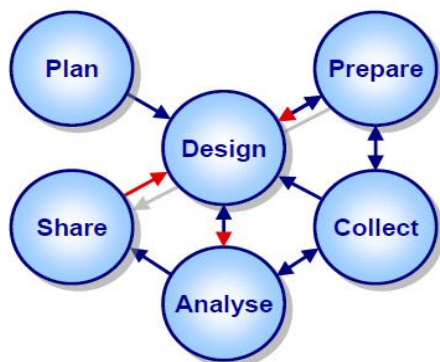


Figure 4.2: The Case Study Process

Source: Adapted from Yin (2014)

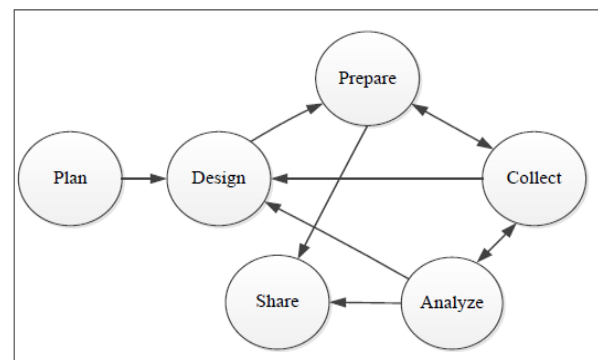


Figure 4.3: The Case Study Framework

Source: (Yin, 2014:2), Baškarada (2014:20)

Figure 4.2 represents a modified version of the almost universally accepted six-stage case study process by Yin (2014) and an updated version in Figure 4.3 designed by Baškarada (2014) to assist researchers (for instance, students, academics, and practitioners) with conducting and evaluating a qualitative case by integrating additional guidelines from the wider methodological literature. Using this method helps to provide information on the phenomena, processes and practices as suggested by Kelle (2001:17). In this study, the method helped with information on different levels from SMEs, owners or managers that are using PM and DT, the business areas and activities where the techniques are used and the areas of the business environment for inclusion in the case-study part of the research. To obtain such information

necessitates several methodological and ethical issues that should be addressed before, during and after the research is conducted.

4.5 PURPOSE OF THE RESEARCH

In the following subsections, the diverse views and perspectives in existing literature are discussed to provide understanding and justification for those adopted in this study.

4.5.1 Empirical research (positivist versus interpretivist)

Watkins (2012:9) viewed empirical research as suitable for research projects undertaken in a business or management, or both, environment, where extensive interaction with people is required (Leedy & Ormrod, 2016). Views held on empirical research differ, mainly on issues surrounding its use to answer questions about measured variables, their relationships or different purposes. For example, if the purpose of empirical research is to predict, frequently it would be associated with quantitative studies and positivism (Watkins, 2012:9; Henning, Smit & Van Rensburg, 2010:17). Whereas, if the purpose of empirical research is to describe or explain, it would more often be referenced to interpretivism associated with the qualitative research approach. In terms of this qualitative research study, empirical research is used to address the research questions and objectives to understand and describe the types of factors and processes of PM and other related strategies in an SME environment.

4.5.2 Exploratory research

Exploratory research is viewed as research conducted into a problem where there are very few or no earlier studies to which one can refer for information about the specific problem at hand (Yin, 2018; Collis & Hussey, 2014; Watkins, 2012:5). According to McNabb (2007:97), exploratory research helps a researcher gain a greater understanding of a problem for which more information is required and focus on gleaning data from enterprises knowledgeable in the field of study. However, Blumberg, Cooper & Schindler (2011) argued that exploratory research has differing applications when the objective fact is to support or reject a hypothesis. On the other hand, Babbie (2015:91) praises exploratory studies as being valuable for social science research, a source of grounded theory and always yielding new insights into research topics. Furthermore, exploratory research is appropriate for more persistent phenomena, and the field of study is relatively new (Babbie, 2015:90). Although views

on its application differ, the use of exploratory research in this study is justified on the basis that the research area on the integration of PM using strategic management tools (the BSC) with design skill sets (the DT) despite being well-established in larger enterprises, is yet to develop in SMEs. Existing studies are not clear on what processes are followed in these enterprises.

4.5.3 Explanatory research

Generally, explanatory research is used to explain phenomena as they exist (Watkins, 2012:5). More often, explanatory studies are linked with the interpretivist qualitative research approach and used to identify and obtain information on the characteristics of a particular research problem or question to be addressed (Watkins, 2012:9; Thomas, 2011:124). They are normally experimental, where hypotheses can be tested and comparison groups used. Although often criticised for its subjective nature, interpreters may be able to design, investigate a case, its data and the results to help provide a clearer understanding of reasons and meanings that define and bound the case. As a result, this study sought to establish and describe the PM processes and factors used in the daily operational activities of SMEs and determine the potential for integration of PM framework (using BSC and DT strategies). It was, therefore, deemed inappropriate for this study.

4.6 DESIGN OF THE RESEARCH

The sections that follow discuss the research beginning with a literature review on various strategies for the collection, measurement and analysis of data, followed by a justification for those chosen to address the research and research questions in this study.

4.6.1 Case study approach

The definition of a case study varies among researchers for several reasons (Yin, 2014:15-17; Eriksson & Kovalainen, 2009:115-117). A case study is regarded as a conscious selection of a bounded case; it is viewed as a strategy of enquiry, a methodology or a comprehensive research strategy (Yin, 2014:15-19). The definition by Yin (2018; 2014:15-17) relates to a case study as an empirical enquiry, which considers its real-world context to investigate a contemporary phenomenon comprehensively, notwithstanding unclear or unrecognisable boundaries between phenomenon and context. Case studies can consist of a single case or multiple cases,

and researchers must remain vigilant of their biases and facilitate understanding of the phenomenon and its context (de Chesnay, 2017:8; Giles, King & De Lacey, 2013). A case study is useful for exploring or explaining a phenomenon that is poorly understood in the big picture (Yin, 2018).

The area of PM, BSC and DT is not fully known in South African SMEs, particularly those in the CMSA, although it is applied by large enterprises and their international peers. With the unique situation of SMEs, especially in the context of PM, the adoption of newer thinking strategies, inadequacy of information available and the research questions raised, case study research is deemed to be appropriate and useful in this study. A case study is a typical research design that provides unique examples of real people and cases in real situations and may be used to answer research questions in explanatory research (Alkhatib, 2015:6; Collis & Hussey, 2014; Yin, 2014:10-11).

A case study strategy was used to engage SMEs in their environment to gain an understanding and identify the areas of business activities where PM and design skill sets are used. The intention was to document their experiences during the interview process and determine how, who and what the process involves to measure performance in business activities. The rationale for using a case study in this research is based on its compatibility with an interpretivist and epistemological stance. It recognises the role of human participants and the social construction of knowledge (Ramsay, 1999:163-173).

The case study does not restrict researchers to a specific set of tools. Still, it encourages data collection using main tools such as interviews, participants' observation, documentation, archival records, direct observation and physical artefacts (Yin, 2014:110-114). These examples suggest that, although a case study is generally classed as qualitative, it can take on a variety of tools for data collection. It is, therefore, acceptable to include techniques from other methodologies to collect different forms of data as appropriate to the context. In this research, these characteristics of the case-study method facilitate the use of interviews, documentation and focus groups.

As opposed to other research strategies such as experiments (statistical-based methods to test causal effects) or surveys (deductive approach for statistical analysis), the case study can cope with technically distinct situations where many more variables than data points can lead to methodological approaches such as triangulation by converging multiple sources of data (Yin, 2014:30). Furthermore, Yin suggests that,

during the planning stage, the researcher should look for cases to study as an integral related unit of analysis. Yin also recommends constant awareness and vigilance on the part of the researcher in terms of proximity or attachment to the cases since bias-related issues may arise to the detriment of the trustworthiness and credibility of their qualitative studies (Yin, 2014:30).

The other problem with a case study is that the researcher may need to gain familiarity with the phenomena in question by undertaking a preliminary examination of a variety of cases before selecting one or several for deeper examination, and this can be time-consuming. This study was no exception to challenges. The familiarisation of the researcher with the phenomena that occurred organically over time and was addressed at the early stages of this study as follows:

- by an in-depth analysis of the literature review (secondary sources);
- one SME expert (an SME in its own right and involved in training other SMEs on innovations and strategic matters) had direct input on ensuring the quality of data collection instruments (without answering the interview questions) due to familiarity and first-hand knowledge of the workings of PM in the SME environment. The expert did not participate in the case interview phase of fieldwork, only at the later stages of the study to provide input on the validation of the developed integrated PM framework.
- Input from three (3) other SMEs was also sought to verify familiarity with the concepts covered, ease of understanding, the relevance of questions and applicability to their environment (Appendix E). These SMEs offered to provide input on the quality of the data collection instrument (without answering the interview questions) due to their being unavailable for individual face-to-face interviews.

4.7 RESEARCH METHODOLOGY

Yin (2014:17) also suggests the case study method is beneficial in gaining a holistic understanding of real-life complex social phenomena such as organisational and managerial processes. An overview of the methods to be adopted is presented in the sections to follow.

4.7.1 Case selection

According to Meyer (2001:329), there are no existing specific requirements to guide case study research. The researcher decides on how many cases to study, which cases to sample and the unit of analysis. Durepos and Mills (2013) also state that researchers have to decide on several aspects of their research design, which indicates the diversity of case-study strategy. Generally, a range of case-study research strategies involves single or multiple cases (Yin, 2014:51-56; Saunders *et al.*, 2012). Multiple cases are used to achieve replication across cases to improve the robustness of findings, thus, making it easier to analyse each case separately and produce patterns of similarities or differences (Yin, 2014:56-57). Single case studies are used to test a pre-existing theory and its ability to provide a rich and in-depth exploration of extreme or unique phenomena (Eisenhardt & Graebner, 2007).

The literature review reveals numerous studies adopting case study design with single or multiple cases that consider the characteristics of these strategies (Heale & Twycross, 2018; Gustafsson, 2017; Yin, 2014). Other researchers highlight that a single case study may be difficult to generalise. Flyvbjerg (2006) emphasised its centrality to scientific development as "...the force of example". This viewpoint is supported by Josefsson (2015) and Yin (2014:51). They echo the sentiments on the use of a single case study to be more natural in describing the case and with the capability of delivering richer theoretical insight.

Based on the aims of this current study, the literature provided abundant single or multiple case insights on real-life experiences of PM integration by BSC and DT from the viewpoint of larger enterprises or public institutions. Still, there are very few papers on the integration of these systems in SMEs. Hussin and Yusoff (2013) adopted a single case study to adapt the BSC for SMEs and Rompho (2011) used a single case study to test the adequacy of factors leading to successful BSC implementation by SMEs.

In contrast, Rickards (2007), Gumbus and Lussier (2006), Hudson *et al.* (2001) and Chow, Haddad & Williamson (1999) used multiple cases to study PM, BSC and DT from an SME viewpoint ranging from development to the applicability of the systems. A study by Carlgren (2013:36) used a combination of many cases and a single case to study design thinking as an enabler of innovation. The objective of this study is to uncover the PM processes followed by various SMEs, and a multiple case design was

used. Essential to each case is defining the unit of analysis. The following sections describe how the cases were selected, sampling and the unit of analysis used.

4.8 POPULATION AND SAMPLE FOR THE RESEARCH

In the following subsections, the literature on various strategies and methods for sourcing the data are discussed to identify and justify those chosen to address how data would be generated in this study.

4.8.1 Sample selection

Sampling and selection are principles and procedures used for identifying, choosing, and gaining access to relevant sources of data from which chosen methods are used to generate data (Mason, 2018a). A variety of sampling methods exist, such as the non-probability method (mainly purposive sampling) which has no way of forecasting or guaranteeing the researcher that each element of the population will be represented in the sample (Babbie, 2013:199; Watkins, 2012:63). Purposeful sampling is a non-random method of sampling where information-rich cases are selected, based on the researcher's knowledge of the population (Patton, 2015; Rubin & Babbie, 2011:357).

In light of the qualitative approach and interpretivist paradigm, the purposive sampling method is best aligned to this study. Purposive sampling also allows for self-selection, in line with interpretivist research where participants who are socially situated in the phenomenon may wish to be participants. Self-selection was done in this case and is often used for recruitment in the broader population. Once the ethical documents for the research reach the potential participants, self-selection ensures that any contact between a potential participant and the researcher is initiated by the potential participant.

Mason (2010) states that samples in qualitative studies are generally smaller because of being labour intensive, time-consuming and often impractical. Lee, Woo and MacKenzie (2002) confirm this by suggesting studies that use more than one method for data collection (such as semi-structured and in-depth interviews or documentary evidence) require fewer participants. Yin (2014:61) argues that the actual number of cases could be discretionary and recommended between four and 10 cases for a multiple case study. Morse (1994:225) proposes a sample of at least five or six be used in qualitative studies.

In this study, the researcher took cognisance of measures to reduce the risks and difficulties associated with qualitative studies identified in the previous paragraph. In terms of the sample population, initially, a brief understanding of the main economic sectors of the Western Cape province where the CMSA is located was gained to identify the distribution of SMEs and where most of them operated by looking at various reported data in the recent five years (2015 to 2019). The results, as presented in the sections that follow.

4.8.1.1 The location of the CMSA in the Western province

Firstly, an overview map of where the CMSA is located in South Africa is provided in Figure 4.4.



Figure 4.4: An overview of the CMSA

Source: <http://www.justmaps.org/maps/images/southafrica/capetown-map1.gif> (Accessed 04 Aug 2018)

Figure 4.4 shows the Cape Metropole in the Western Cape province of the Republic of South Africa. It also shows that the CMSA consists of various suburbs scattered around the city of Cape Town. In this study, the case interviews and focus group discussions took place in five suburbs, at the participant's business premises (at an agreed time for each SME), at a distance that was convenient for both the participants and the researcher.

In the case of the first focus group, a consensus was reached for the discussion to take place at a place and time selected by the researcher. Four SME participants voluntarily offered to travel to one of the library training rooms at the researcher's place of employment. The second focus group took place in one of the CfERi training rooms voluntarily offered by the Centre Manager due to convenience and familiarity of SME participants with the premises and venue.

4.8.1.2 *Provincial economic overview, CMSA and employment*

Given the recent national figures, particularly, the performance of SMEs and unemployment at just over 27% (SME South Africa, 2018:4), the Western Cape has been reported to have had steady employment growth of 2.3% on average between 2013 and 2017 (South Africa, 2018:4). The trend continued in the first quarter of 2019, with the highest rate of labour force participation and absorption (South Africa, 2019: Online). Show its significant role in the province, in 2016 the CMSA was reported to be the largest contributor to economic output in the Western Cape at just above 72% (South Africa, 2018:5).

4.8.1.3 *Provincial SMEs performance overview (and South Africa)*

The South African economy emerged from a technical recession in the second half of 2018, but the growth of SMEs remained stagnant, and unemployment remained a problem (World Bank, 2019:106-110; OECD, 2018). The Western Cape has shown a staggering increase of 37% in SMEs reported to have operated in the third quarter of 2019, compared to 41% in the whole country (SEDA, 2019b:21). These outcomes showed strong resilience in these SMEs in the face of all the chronic and acute shocks experienced in the ever-changing environment. However, debates are inconclusive as to which or how many SMEs exist or how many people they employ.

4.8.1.4 *The structure of the SME sector*

In general, SMEs encompass a very broad range of enterprises and include formally registered, informal and non-VAT registered enterprises (BER, 2016). Small businesses vary from medium-sized enterprises, such as established traditional family enterprises employing not more than 250 people, to informal micro-enterprises (South Africa, 2019). According to the BER (2016), an informal enterprise does not operate in economic sectors because of their size, but due to other reasons (such as initial layout

costs and ease of market entry have opportunities to grow and are less likely to hire staff. By implication, the SME sector is generally divided between formal and informal.

4.8.1.5 Sectors and number of SMEs per sector in the Western Cape

The Bureau for Economic Research (BER) (2016:17) reported that, in 2016, just over 230 000 SMEs were operating in the Western Cape in both the formal and informal sectors (Table 4.3).

Table 4.3: SMEs by sector – Western Cape (including the CMSA)

Formal sector	Formal sector	Informal sector	Other	TOTAL
Number of SMEs per sector	110,107	110,188	10,030	230,324

Source: Adapted from the BER Research Note Volume 1 (2016:17)

Table 4.3 shows that SMEs in the Western Cape shared an almost equal distribution of above 100,000 in both the formal and informal sector of the economy, there is no clarity of what is represented by 'Other'.

In more recent developments, the SEDA's report for the first quarter of 2019 indicated that SMEs operated in various industries of the economy, with almost 300,000 in the Western Cape, (SEDA, 2019a:19), see Table 4.4.

Table 4.4: SMEs by industry type and number per industry in the Western Cape

Industry	Agri-culture	Manufacturing	Construction	Trade and accommodation	Transport and communication	Financial and business services	Community
SME per sector	8,043	27,301	29,334	100,045	20,687	48,069	54,715
TOTAL Number of SMEs by industry type - Western Cape Total = 288 194							

Source: Adapted from the SMME Quarterly Update 1st Quarter 2019 (SEDA, 2019a:19)

A closer look at the total in Table 4.4 relative to Table 4.3 seems to indicate an increase of almost 60,000 in the number of SMEs in the Western Cape.

4.8.2 The population of the study

In terms of identifying the population of this study, the researcher adopted an approach almost similar to that of Ismaila (2011:9), because a complete list of SMEs in South Africa is unavailable. To draw a sample, Ismaila requested a list of businesses from the Department of Trade and Industry (DTI) to facilitate effective access to the sample.

The study within the ambit of this thesis sought to engage SMEs that were registered members of the Cape Chamber of Commerce (CCoC) and were operating in the CMSA. These SMEs were targeted due to the assumption made in the introductory chapter that those who join this support system may view the performance of their enterprises as critical for business success. They would, therefore, hope to benefit from the wide range of services, including information, training, networking and trade facilitation opportunities, provided by CCoC. Additionally, the researcher was encouraged by the CCoC to contact one of their affiliates, False Bay College Centre for Entrepreneurship and Innovation (CfERi - an incubator for SME innovation and development) at the later stage of this research for more potential member SME participants, to overcome the problem of low response to invitations.

4.8.2.1 Processes for implementing the inclusion and exclusion criteria

The identification of the population and sample involved a three-stage process. Firstly, sourcing potential individual case interview participants (for collecting data to develop the framework) and then, at a later stage, sourcing potential participants for the two (2) focus groups (for validation of the developed framework).

This study was delineated to registered SME members of the CCoC operating in the CMSA. The CCoC had more than 2487 registered and paying members with an identifiable unique structure of the number of employees allocated per category, together with business and contact details, industry and sector on its databases. The databases included other SMEs with contact details across various provinces of the Republic of South Africa.

At this point, the definition of SMEs by the National Small Business Act (NSB) and its amendments (South Africa, 2003, 2004, 2019a) was also considered to identify the number of employees per SME class. The latest NSB Amendment Act of 2019 (South Africa, 2019a) categorises small enterprises as having fewer than 50 employees, and 51 to 250 employees as medium-size enterprises, both these categories were used in this study. Table 4.5 provides aggregate numbers of SMEs on the CCoC databases per category.

Table 4.5: Different categories of registered members on the CCoC databases

	Inclusions									Exclusions		
SME (per employees)	10-	10+	20+	30+	40+	60+	80+	100+	Corporate Plus 151+	Associate	Former President	Youth
SME (Total) = 2487	1,649	282	127	71	91	35	25	31	95	8	56	17

Source: Adapted from the CCoC databases of registered SME members

Table 4.5 shows that 2487 SMEs (aggregated) as per the databases of the CCoC members were listed, which represents less than 1% of the number in the Western Province (Table 4.5). This study targeted those SMEs operating in the CMSA in the category with below 250 employees to draw the sample.

For the case interviews, any SME outside the CMSA or with over 250 employees those listed on the database as associates, former presidents and youth (constitute the support services or leadership of CCoC) were excluded, further reducing the population size and would not form part of this research at any of stage. As a result, most of the SME registered members of the CCoC were included as the target population (Table 4.5 inclusions).

Determining the population for the first focus group from the CCoC-based potential participants proved to be problematic due to enforced government legislation and the Protection of Personal Information (POPI) Act that governs confidentiality and the protection of member's details. Consequently, the legislation restricted the CCoC from providing the researcher with the required databases. Nevertheless, the researcher was assisted by guided access to the databases on their network server or system. The researcher had to register on the website as a user member of CCoC to gain exposure to network groups, scheduled SME network meetings or other events and activities.

To understand the population, the researcher used the access to the network server or system of the CCoC on numerous occasions and persistently attempted to identify registered member SMEs contact details with no success. To overcome this challenge and with the assistance of the CCoC, the researcher was invited to numerous SME networking meetings hosted quarterly by the CCoC. On average, not more than 30 SMEs would attend each of the four sessions, but the researcher registered for attendance and was permitted to present a brief invitation for the research project.

A few would show interest in the study but were reluctant to commit to availability for participation. Overall, an estimated 100 people constituted the population at that point. Additionally, various other means and methods were also offered by the CCoC to assist the researcher due to the low response rate, as explained in the second focus group population section that follows and further detailed in Section 4.5.4.

The second focus group came about as a result of the low response rate received from the first focus group. At this stage the study, CCoC registered members remained the primary target. Still, the researcher was advised to gain exposure to other CCoC-specific events by which their affiliate CfERi listed members attend network meetings for information and other support services. The researcher facilitated the attendance of at least three (3) of the CfERi network sessions and was permitted to present the study to about 15 SMEs per session.

The CfERi offered to provide the researcher with a list of databases, with the view that the research project would help enlighten SME members with important strategic matters relating to business management. The list obtained categorised the affiliated SME members identifiable through cohorts and year affiliated.

The list contained the cohorts per year, together with some business and contact details, industry and sector. Table 4.6 provides the breakdown of various cohorts per year and the number of SMEs per year used by the CfERi for each class of members.

Table 4.6: Different cohorts affiliated to CCoC through CfERi

Cohorts	2017	2018 (Mar)	2018 (Spring)	2019 (Ikapa)	SMME Support
SME (number per cohorts)	8	9	15	15	12
	Included				Excluded

Source: Adapted from the CfERi databases of registered SME members

Table 4.6 shows 59 SMEs and support as per the database of CCoC affiliate, CfERi; exclusions only affected the SME support group comprising 12, since their purpose was to provide support and were deemed not to be active SME. As was the case in the first focus group, only 47 SMEs could be determined to form part of a very small population from which to draw the sample for the second focus group.

4.8.3 Access to units of analysis

In this empirical work, the researcher approached the CCoC of the Western Cape Province in South Africa (by telephone and email) for assistance in the identification of registered SMEs in the CMSA and the parameters of this study, and those interested in strategic management research for the effectiveness of their enterprise. Initially, a summary of the research project was provided to the CCoC for clarity on the background, objectives and the UNISA protocol of the project permission.

A list of databases was obtained from the CCoC from which a sample of registered member SMEs responded and voluntarily consented to participate in the study. This is consistent with judgement (purposive) sampling (a non-probability form of sampling) to be used in this study, and Statpac (2011: Online) confirms that an entire sample may be drawn from one representative city, although the population includes all cities. The researcher was granted permission to contact CCoC members, and the CCoC voluntarily offered to place the research project notification on their website as an invitation to potential case participants among their registered members. According to Ismaila (2011:9), a population comprises elements or members often used to represent a unit of analysis in case-study research.

4.8.4 Unit of analysis

Within the case-study parameters, it is central to determine the unit of analysis by defining and bounding the case (Yin, 2014:31-34; Eriksson & Kovalainen, 2009:115). Generally, the unit of analysis members or elements of the population may consist of the study's subjects. For example, Welman *et al.* (2005:52) identified the subjects as consisting of individual(s), group(s), product(s), event(s) or the condition(s) to which they are exposed.

Additionally, the literature often suggests instances where more than one unit of analysis may be chosen in case study research. Such conditions could be possible, provided the unit of analysis is divided into logical sub-units. For this reason, and Yin (2014:31-34) and Eriksson and Kovalainen (2009:119) associated such case study research with an investigation where more than a single bounded system may be observed. Yin (2014:53) further states that such an approach allows for enhanced insights, ensures an exploration of the global nature of each case and may help to compensate for any potential researcher or respondent biases.

The criteria set required that qualifying participants should either be:

- SMEs that have been in operation for one or more years;
- SMEs that have undertaken programmes focusing on strategic measurements and improvement of enterprise performance;
- SMEs that have had recent developments on their PM and other strategic improvement systems;
- SMEs that have received award(s) based on the best performance of their business as a result of using their in-house or home-grown PM system;
- SMEs that have characteristics of existing PM systems with at least related principles of the BSC;
- SMEs that have adopted newer strategic thinking systems or at least related principles such as those of DT.

The rationale is that these enterprises (if still operational) would have been around long enough for the managers or owners to provide meaningful contexts, illustrations and scenarios of particular performance measurement in their daily business activities. Furthermore, those actively seeking strategic measurements and improvements would

be most likely to view PM as a strategic improvement tool requiring integration with other mechanisms.

For this study, the population contained in the database of various categories of SMEs registered with the CCoC operating in the CMSA were the target. After the empirical nature of this study, the unit was not restricted to a particular sector and were operating businesses such as manufacturers, services providers, hospitality or any sector.

Originally, 17 potential SMEs self-selected to participate in the research study by voluntarily contacting the researcher based on the provided qualifying criteria. On distributing the letter of instruction and participant's information, several SMEs withdrew, some with reasons and some without providing any explanation (Appendix Z). A final sample of 14 SMEs willingly volunteered and consented to take part as units of analysis, being five (5) case interview participants and nine (9) focus group members, based on the characteristics and criteria set. In addition, 21 case interview participants' documentary evidence was collected to facilitate the quality and the richness of their input and data.

Although the participation figure of 14 participants in this study may be criticised as being a small sample, the study can be considered reasonable given the fact that sourcing the qualifying participants proved to be a challenging process where numerous avenues of invitations were used. These included an invitation placed voluntarily by the CCoC on their website, email invitations sent by the researcher to SME members using the database provided by the Chamber and invitations promoted by the researcher during numerous CCoC hosted breakfast meetings where SME members gather for networking.

In all invitations, the initial interest looked promising, but few would ultimately provide consent for case interviews and focus groups, therefore posing a problem in securing adequate numbers of participants. However, the researcher found consolation on the problematic matter of sample size from the extensive arguments and views in the literature. The diverse views range from:

- sample size *a priori* determinant in qualitative studies (Sim, Saunders, Waterfield & Kingstone, 2018);
- sample size and saturation in PhD studies using qualitative interviews (Mason, 2018b); and

- sample size in qualitative interview studies: guided by information power (Malterud, Siersma & Guassora, 2015).

However, some studies concluded that it is inherently problematic to determine qualitative sample size *a priori* and, therefore, size should not be a problem when following qualitative studies and might be between 12 and 20 (Englander, 2019; Sim *et al.*, 2018).

Furthermore, despite the low responses experienced in this study, a brief review of the literature of SME-related qualitative case studies research in the context of South Africa was conducted. It seemed to indicate that small samples and low responses are a prevalent pattern, irrespective of the province or area in the country where the studies were conducted (Table 4.7 and Appendix AD).

Table 4.7: A sample snapshot of select qualitative research on SME in South Africa

SME studies in South Africa (Research methodology purposes) – Cape Metropole vs Other provinces (Sample)								
	Author	Title	Type	Approach	Sample	Data collection	Limitations: area	Limitations experienced
1	Naidu, P. 2018	A case study on the critical success factors of two small businesses in Kwa-Zulu Natal.	Qualitative	Case study (Exploratory)	Two (2) entrepreneurs	Semi-structured interviews	Durban North (KwaZulu-Natal Province, South Africa) (Not generalised)	Limitations of this study were the small sample size and the limited time given to collect sufficient data. This study used a sample size of two. Using more than two respondents would have resulted in more time needed to gather and analyse data. If more respondents were used during this study, results may have been more accurate.
2	Sayed, Z & Sunika, B.P. 2016	Investigating and evaluating the influence of supply chain structure on supply chain risk	Qualitative	Case study (Exploratory)	Four (4) Owners/Managers	Survey, Semi-structured interviews, maps	Gauteng Province (South Africa) (Not generalised)	This study was limited to only four cases
3	Rootman, C., Venter, E. & Mataboee, M.J., 2017	Non-relational conditions necessary for mentoring of black small business owner–managers in South Africa	Qualitative	Unknown (Exploratory)	Four (4) SMEs	Semi-structured interviews	Unknown (South Africa) (Not generalised)	Limitations of this study were that it focused only on black owner–managers and therefore limits the capacity to generalise research findings across all small business owner–managers in South Africa.
4	Thompson, C. Bounds	The status of strategic planning in	Qualitative	Unknown	Twelve (12) SMEs	Semi-structured	Gauteng Province	Limitation of the research was the likelihood of managers of SMEs revealing

Source: Author's compilation

Table 4.7 shows that this study was no different from a select sample of SME-related qualitative case research studies previously conducted in the nine provinces of South Africa. The drawback was countered by gathering data using case interviews, documentary and focus groups which resulted in substantial data being collected providing valuable insights as evidenced in the findings chapter and numerous appendices included in this thesis.

4.9 DATA COLLECTION METHODS

Qualitative data can be collected using participants' knowledge, experience and observation, or various other methods. Different kinds of tools for personality or opinion tests and instruments for standardised research are prominent (Burrell & Morgan, 1979).

4.9.1 Interviews

Interviews are the most common qualitative data-collection method and an important source for case study information (Yin, 2014:103). In contrast to the questionnaires often used for large sample studies, qualitative information gathering aims to understand deeper issues to identify the real situation that individuals deal with, the complexity of their positions, behaviours and experiences (Yin, 2014; Saunders *et al.*, 2012:15). Generally, interviews are used to conduct explanatory discussions to understand the what and the how of things and to add dimension to the data since participants have time to reflect (Yin, 2014; Saunders *et al.*, 2012:179). Similarly, other qualitative research scholars agree that interviews can be used where ontological and epistemological questions on what and how with the interpretivist philosophical stance are adopted to conduct exploratory discussions (Leedy & Ormrod, 2016; Creswell, 2014:37-38; Yin, 2014:10-11; Saldaña, 2016; Cooper & Schindler, 2006:204-211).

In general, interviews in qualitative research come in a range of formats. Examples include specifically focused interviews, semi-structured interviews and in-depth interviews (Mason, 2018a; Zikmund, Babin, Carr & Griffin, 2010:151). Interviews are usually in writing and ask respondents for short essay responses or are allow them to write freely on specific open questions in a short time. The interviews are often useful for peer-review evaluations where a population(s) directly affected by the activity is asked questions in a semi-structured manner to comment or provide insight about certain events.

Semi-structured interviews formed part of the scope of this study, at the early stages with individual one-on-one interviews (see Table 4.8).

Table 4.8: Profile of SME case participants for one-on-one interviews

Enterprise Category	Ent-A Interview date: 28 January 2015	Ent-B Interview date: 09 February 2015	Ent-C Interview date: 27 January 2015	Ent-D Interview date: 21 January 2015	Ent-E Interview date: 26 January 2015
No of employees	6-20	6-20	1-5	1-5	6-20
Sector operations	Manufacturer	Training and Consulting	Business Consulting	Wholesale, Retail and End-Users	Service provider
Core business	Home textile	Public courses and Social media	Consulting, Training and Coaching	Cleaning equipment and related parts	Restoration of wood
Years in business	10	17	5	+15	25
Position in the firm	Owner and CEO (Male, White)	Owner and CEO (Female, White)	Owner and Director (Female, White)	Owner and Manager (Male, White)	Owner and Manager (Male, White)
Owner and CEO background information	Degree (<i>chemistry/physics</i>) Worked in big manufacturing corporate (<i>held senior position</i>)	Degree (<i>BSc, Hons</i>) Worked in Financial Service Providers	Degree Worked for an accountant (<i>held senior position</i>)	National Diploma (<i>food technology</i>) Worked in a large corporate and family business	DegMMree (engineering design) Worked in a large corporate
Staff complement (area of expertise)	Owner-manager (business and strategy) Partners/managers (creatives, financials, strategy, business) Other personnel (operations) Independent agents (marketing, sales)	Owner-manager (Finance and strategy, creatives) Partner/managers (business) Other personnel (operations, marketing, sales)	Owner-manager (Accounting, coaching and strategy) Partner/managers (Training and sales, strategy, business) Other personnel (operations)	Owner-manager (business, strategy, sales) Partners/managers (academics in the USA) Other personnel (operations and administration) External parties (marketing and sales, audits)	Owner-manager (business and strategy, creatives, financials, business, marketing, sales) Other personnel (operations) External parties (accounting, law and tax)

Source: Author's compilation

At a later stage of this study, focus group discussions were used to validate the case interview results (Table 4.9).

Table 4.9: Profile of SME members for Focus Group discussions

FOCUS GROUP ONE - Interview date: 12 th September 2018					
Enterprise Category	FSG1 - Ent-B	FSG1- Ent-C	FSG1 -Ent-D	FSG1 - Ent-E	FSG1 - Ent-F
No of employees	fewer than 50	fewer than 50	No show on the day of focus group discussion	fewer than 50	more than 50
Sector operations	Service (Marketing and Branding)	Service provider (Skills development)	Logistics (Shipping)	Business development (Training/Skills development)	Service provider (Built environment)
Core business	Brand Image Analysis/Mentoring/Funding and Opportunity development	Distribution and Consulting	-	Innovation Accelerator	Facilities Management
Years in business	+5	+5	-	+12	+20
Position in the firm	Owner and CEO (Female, White)	Owner and CEO (Male, Black)	-	Owner and Manager (Male, White)	Manager / Director (Male, Black)
FOCUS GROUP TWO - Interview date: 26 th July 2019					
Enterprise Category	FSG2 - Ent-A	FSG2- Ent-B	FSG2 -Ent-C	FSG2 - Ent-D	FSG2 - Ent-E
No of employees	fewer than 50	fewer than 50	fewer than 50	fewer than 50	fewer than 50
Sector	Tourism	Manufacturing	Construction	Advertising	Hospitality
Core business	Transportation	Recreational Facilities and Services	Construction (innovative housing)	Photography and Videography	Food services
Years in business	-2	+2	-2	10	-2
Position in the firm	Owner and CEO (Male, Black)	Owner and CEO (Male, Black)	Manager and Director (Female, Coloured)	Owner and Manager (Male, Coloured)	Owner and Director (Male, Black)

Source: Author's compilation

In considering both Tables 4.8 and Table 4.9, altogether, 14 SMEs participated in this study.

Cooper and Schindler (2006:204, 209, 210-11) recommend the use of a face-to-face approach as the study necessitates obtaining evidence. So as not to limit the data supplied by SMEs, open-ended questions were used to address the main research and subsidiary questions. To re-orient the reader, the research questions in this study were typical questions categorised by Saldaña (2016) as ontological and epistemological, seeking both attributes and process-oriented data types.

The primary data collection instruments used were developed in consideration of the key research questions formulated in the literature review chapters. At the early stages, the semi-structured interview instrument was adapted to some of the questions used in the research by Gotore (2011:92) and Ferreira and Otley (2009:266-267) (Appendix E). The instrument consisted of 21 questions which were divided into two (2) sections, and in each section, the opening question was followed by some probing (Ismaila, 2011:9).

In the case participants' interview instrument the questions were designed to:

- obtain the participants' geographical information and general opinion on the typical traits or features expected of an SME (Section A: General questions)
- obtain the participants' understanding in identifying the characteristics of organisational, structural or strategic activities in the design and implementation of strategy and PM in the enterprise (Section A: Interview questions 1 to 4) (see Saunila, 2017; Pourmoradi *et al.*, 2016: 52-56; Basuony, 2014:14; Cocca & Alberti, 2010).
- understand the participants' processes and activities used to organise and coordinate the design and deployment of strategy and PM (Section A: Interview questions 5 to 7) (Liedtka & Kaplan, 2019; Follett & Treseler, 2017; Carneiro-da-Cunha *et al.*, 2016; Kaplan & Norton, 2015; Liedtka, 2015; Bititci *et al.*, 2012; Ferreira & Otley, 2009; Neely *et al.*, 1995).
- understand the participants' processes followed in the implementation of PM using BSC and DT related principles, strategies, processes or techniques in the daily activities of the enterprise (Section A: Interview questions 8 to 15) (Follett & Treseler, 2017; Saunila, 2017; Carneiro-da-Cunha *et al.*, 2016; Pourmoradi *et al.*, 2016; Rapp & Stroup, 2016; Kaplan & Norton, 2015, 2001,1992; Liedtka, 2015; Neely *et al.*, 1995).

- obtain the participants' opinion and about their PM experiences of processes in the enterprise and its operational activities relative to the integration of the principles of BSC and DT strategies (Section B: Interview questions 1 to 5) (Saunila, 2017; Carneiro-da-Cunha *et al.*, 2016; Pourmoradi *et al.*, 2016; Rapp & Stroup, 2016; Kaplan & Norton, 2015, 2001,1992; Liedtka, 2015; Neely *et al.*, 1995).

Later, the focus group interview instrument (Appendix T) consisted of two (2) general and five (5) open-ended questions that were based on the developed integrated PM framework from the case interview results, to:

- obtain the focus group participants' significant experiences with PM (General questions).
- obtain the focus group participants' opinions and agreement on the typical traits or knowledge of SME features results, and identify those that needed to be added (Question 1).
- obtain the participants' opinion on the strength of the integrated PM framework (Questions 2 to 3).
- obtain the participants' opinion on the gaps and areas for improvements on the integrated PM framework (Question 4).
- obtain the participants' final reflections and transferability of integrated PM framework to their own situation or most of the SME population (Questions 5).

Accordingly, the researcher managed to capture the case participants' real-life perspectives and perceptions on PM and its integration.

4.9.2 Document analysis (documentary evidence)

Document analysis is a qualitative research method by which the use of documents, and their interpretation gives voice and meaning to a research topic (Rapley, 2018; Bowen, 2009). It is a social research method or tool in its own right, an important and invaluable part of most schemes of triangulation in terms of using a combination of methodologies in the study of the same phenomenon (Bowen, 2009). It is used in this qualitative study to seek corroboration of data utilising case interviews and documentary sources, to reduce potential bias and provide triangulation of a confluence of evidence to give credibility as recommended by Bowen (2009).

O'Leary (2014) identified three (3) primary types of documents in the categories, namely:

- **Public records:** these are official and ongoing records of an organisation's activities. Examples include, among other records, the mission statements, strategic plans, reports and policy manuals.
- **Personal documents:** these represent first-person accounts of an individual's actions, experiences and beliefs, for example, e-mails, blogs, Facebook posts, newspapers, incident reports and reflections or journals.
- **Physical evidence:** these consist of physical objects (or artefacts) found in the setting of the study and includes, for example, flyers, posters or training materials.

For reliable results, it is advisable that researchers address issues such as the type of texts to use (for example, written documents), how many documents to gather, the biases of the author or creator of the document (evaluate the original purpose of the document and the target audience and those of the researcher) (O'Leary, 2014; Bowen, 2009). A wide array of documents is suggested as the best option, with emphasis on the quality of the document rather than quantity (Bowen, 2009). The document sources used in this study were identified by their relevance to strategy-related aspects using the categories of O'Leary (2014), sourced and retrieved mostly from the case participants' websites (Table 4.10).

Table 4.10: Documentary evidence sources obtained from case participants' websites

Participants Documents	Case: Ent-A	Case: Ent-B	Case: Ent-C	Case: Ent-D	Case: Ent-E
Type of documents (Alphanumeric are allocated per document in line with the enterprise identity, for example, A1 represents Ent-A)	A1 Organisational Profile A2 Organisational Strategic Plan A3 Organisational Structure A4 Website: Blogs A5 Digital catalogue	B1 Vision and mission B2 Testimonials and Blogs B3 Digital catalogue	C1 Mission and vision C2 Number of employees C3 Testimonials C4 Catalogue: services offered	D1 SME Manual 2015 D2 Organogram of products D3 Warranty document D4 Testimonials customers D5 Organisation overview (vision/ mission)	E1 Mission and vision E2 Organisation overview E3 Catalogue of services offered (aftersales) E4 Testimonials and Frequently asked questions

Source: Author's compilation

In general, strategy documents are known to contain information that could involve or are about strategic aspects of an enterprise (Cardno, 2018:631-634). For example, documentation can be used as a good indicator of the quality of information of involvement of stakeholders or views about the enterprise or various other matters concerning organisational performance. For this study, the use of documentary evidence was to analyse information that could involve strategy and PM-related aspects of SME case participants. Additional valuable insights from the data collected were included in the analysis and findings of this study.

4.9.3 Pilot testing data collection instruments

A pilot study is known to be useful for large-scale studies, clinical trials and to test recruitment procedures (Thompson-Elliott, 2016; Kannan & Gowri, 2015; Friedman, 2013). Simon (2011) and Saunders *et al.* (2009) highlight the view that increased validity and reliability of test procedures is dependent on how carefully individual questions are designed, the layout of the data collection instrument and clear articulation of its purpose, and pilot testing for efficiency and effectiveness of questions asked. Although the interview questions for this study were adapted from Gotore (2011:92) and Ferreira and Otley (2009:266-267), a pilot study was conducted to check for clarity, relevance and suitability of questions asked and the overall quality of the instruments' layout to ensure the success of each interview and focus group discussion. Both data collection instruments were initially sent to the researcher's supervisor (promoter) for input, adjustments and consensus.

Additional input was obtained from colleagues who are well-established academics and researchers in their own right, particularly, those who were directly involved in the training of entrepreneurship in the faculty of business and management at UNISA. Finally, valuable input was provided by three (3) expert SMEs who were registered members of the CCoC. At the early stage, one of the important insights obtained for the semi-structured interview instrument (Appendix E) was the realisation that acronyms must be clarified and the language should be simplified to a level that is understandable by SMEs.

The other example involved the question of the focus group instrument, "What characteristics, knowledge or skills do you feel an SME needs the most for or about

PM?” would lead to repetition of similar answers obtained in case interviews. The question was rephrased to, “Based on the developed integrated PM framework, what characteristics, knowledge or skills do you agree with? If not, what characteristics, knowledge or skills need to be added?” Adjustments were made where necessary to allow for more complex answers to emerge; the final refined instruments are in Appendix T.

The instruments ensured that the nature of the data collected included the business profile data, business processes, performance-measurement data, data on strategies and design-thinking systems. During the fieldwork, interviews with managers and owners about their experiences and perceptions were recorded using a digital audio device and transcribed. The data was collected over four months, with participants allocated 60-90 minutes per session. The interviews and focus group discussions were conducted at pre-determined and agreed times at the agreed premises scheduled between participants and the researcher.

4.9.4 Data collection using one-on-one case study interviews

Five case study interviews were conducted at the business premises of each SME, which met the set criteria. The researcher engaged decision-makers (that is, the owner-managers) who worked with the PM systems (see discussion in previous sections above – unit of analysis). The researcher followed up with telephone calls to revisit the protocol and documents (participant’s research information package and consent forms) that were exchanged by email before the official interviews with the participants, ensuring a clear understanding of what was required of the participants and also serve as a gentle reminder of the appointments.

The interviews took place in venues where it was conducive to do so; where unplanned disruptions occurred, efforts were made to mitigate those within the researcher’s control. Before starting the interviews, the background of the research was revisited and ethical considerations and consent forms explained to facilitate each participant’s understanding and gain permission for the use of audio-recorders.

The interviews followed the semi-structured questions contained in the interview instruments in this study. More probing questions were occasionally necessary to seek clarity or in-depth explanations or details on a specific area of the question. At certain

intervals, the researcher would repeat the answers provided by participants to facilitate clarity and consensus.

In some cases, minor disruptions occurred during the interview when the owner-manager's attention was urgently required to assist with certain matters of the enterprise. When this happened, it was noted during the transcription of data to facilitate the full representation of the interview. The interviews progressed to the end of the questions, a substantial amount of data was collected, and the researcher thanked the participants. Follow-up emails were sent to reinforce appreciation and to set out the next procedures for member checking to facilitate trustworthiness in this study.

Interviews were conducted over two (2) months (of the total four months of data collection) using the interview questions developed (Appendix E), recorded using an audio recorder (digital voice recorder) and downloaded from the device and backed-up on the researcher's password-controlled laptop.

4.9.5 Data collection using documentary evidence from case participants

Relevant documents collected depended on availability and ranged from:

- the organisational chart (to determine if the design activity was accommodated);
- the process flow of business activities (for clarity and to verify process explained);
- the structure of business performance-measurement systems (to verify what type of business PM were adopted in the enterprise); and
- any other strategy-related documents.

These were requested during the interview, and as the need arose.

The documentary evidence obtained came in different formats, for example, one case interviewee provided hard copies during the interview and 21 electronic documents (eDocuments) were retrieved from participants' websites (Appendix G). The documentary evidence was used to corroborate the data obtained in the interviews, in line with recommendations by Yin (2014) and Saunders *et al.* (2012), ensuring triangulation between the data collected from different sources. The documentary analysis provided additional insights that were incorporated into the findings.

4.9.6 Data collection using focus group discussions

Two (2) focus group discussions were conducted, the first took place at a predetermined and agreed library training room at UNISA. The second took place at a predetermined and agreed training room offered by the CfERi. Similar follow-ups to the case interviews were done for each member of the focus groups. Before the official dates for focus group discussions, the researcher facilitated a briefing (explanation and focus group questions instruments provided) with the focus group moderator and note-takers to clarify the procedure to follow during the group sessions.

The group discussions took place in venues where it was deemed conducive to do so. Where unplanned disruptions occurred, an effort was made to mitigate those within the researcher's control. Before starting the group discussions, the moderator began by explaining the background of the research and ethical considerations and consent forms to facilitate the participant's understanding and obtain permission for the use of audio-recorders.

Each focus group started by following the questions contained in the focus group discussion instruments. When and where probing questions were necessary, they were asked to seek clarity or in-depth explanation or details on a specific area of the question. At certain intervals, the moderator would repeat the questions and summarise the answers provided by member participants to facilitate clarity and consensus.

In some cases, minor disruptions occurred during the second focus group discussion due to some noise that came from the surroundings of CfERi but subsided as the discussions progressed. Where these occurrences appeared, it was noted during the transcriptions of data to facilitate full representation of the discussions. The focus group discussions progressed to the end of the questions, a substantial amount of data was collected, and the moderator thanked the members. Follow-up emails were sent to reinforce appreciation and to set out the next procedures for member checking to facilitate trustworthiness in this study.

The process of collecting data from the two (2) focus groups was not without problems. It resulted in a prolonged process and almost two (2) years spent using various methods to secure potential participant members. Nevertheless, both focus groups were conducted over two (2) months (of the total four months of data collection) using

the focus group questions (Appendix T). The discussions were recorded using an audio recorder (digital voice recorder), downloaded from the device and backed-up on the researcher's password-controlled laptop. The discussions validated the developed integrated framework, and additional valuable insights from data collected were included in the findings of this study. By so doing, the three (3) ways used for data collection provided triangulation and, by multiple phases of coding and analysis, enabled the determination and verification of data saturation discussed in the data analysis section that follows.

In considering the reflexivity issues associated with qualitative studies, at this point, the researcher sought to understand the common problems of having an adequate number of SME case participants in the South Africa context. A small scale review was conducted, and sources gathered. Results indicated a common pattern of low SME responses and participation for qualitative case studies in the various provinces of the Republic of South Africa, which seem to indicate that the current qualitative study may not be unique (Appendix AD).

4.10 DATA ANALYSIS

Qualitative case study data analysis denotes the search for meaning by direct interpretation of what is observed or experienced and reported by the subjects (Yazan, 2015:149). Bogdan and Biklen (2007) equate qualitative data analysis to working with the data, organising it, breaking it into manageable units, coding it, synthesising it and searching for patterns. In this study, we aimed to discover the patterns, concepts, themes or meanings that would emerge from the raw data, help provide a full view of current processes and expose inadequacies of existing PM systems and enable a possible integration of the principles related to the BSC and DT systems into business activities.

4.10.1 Qualitative analysis techniques and tools

The most appropriate analysis techniques applied in this study are a mixed analytical strategy of theoretical propositions according to Yin (2014:30) and thematic content analysis by Ponelis (2015:541) and Welman *et al.* (2005:221). The former is to relate the empirical data to the research questions, and the latter technique involves counting the frequencies and sequencing of particular words, phrases or concepts to identify themes. The role of software in the processes of qualitative analysis should be noted,

despite the real work of analysis occurring in the researcher's head (Patton, 2015:530-531). The software used in the analysis of data in this study was ATLAS.ti™ version 7, Microsoft® Excel and Microsoft® Word.

Studies in the literature show the involvement and integration of data analysis software to systematise data analysis (Paulus & Bennett, 2017). For example, ATLAS.ti™ qualitative coding and theory-building software are used for coding to analyse the data (ATLAS.ti™, 2018). The software has similar functions to NVivo and other qualitative data analysis packages for social science research; however, the difference is that it can use multi-media data such as text and digital sound files. The researcher received brief background information from a data analyst on the use of ATLAS.ti™, then undertook months of intensive self-training to understand the workings of the software and process transcripts and conduct coding and analysis.

4.10.2 Qualitative data analysis processes

Studies suggested diverse steps to follow when doing qualitative data analysis (Creswell & Guetterman, 2019; Creswell & Poth, 2018;; Merriam & Tisdell, 2016; Creswell, 2014:197). These include:

- Proper preparation and organisation for data analysis
- Transcribing the interviews in *verbatim*.
- A thorough reading of transcripts and gaining a general sense of the data obtained from interviews.
- Coding or categorising data into similar themes and labelling according to categories.
- Using the coding process to generate a detailed description of the setting, people or themes for analysis.
- Describing how the themes will be represented in a qualitative narrative using narrative passages to convey the findings of the analysis.
- Interpreting the data.

Creswell (2013:182-188) provide a summarised depiction of the processes and steps using a data analysis spiral, as illustrated in Figure 4.5.

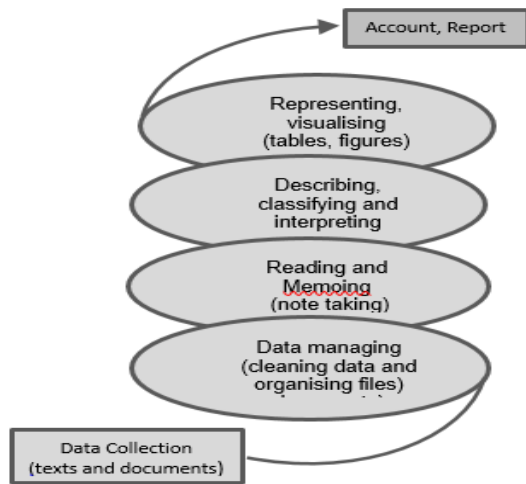


Figure 4.5: Adapted from Creswell’s Data Analysis Spiral

Source: Creswell (2013:182-188)

These recommendations were considered to ensure that data analysis was conducted in a planned, prepared and organised manner. Multiple methods of data processing were used, including those of Saldaña (2016) and Creswell (2015), as described in the sections that follow.

4.10.3 Preparation of transcript for coding and analysis

Before the coding and analysis, the transcripts were prepared to enable the use of ATLAS.ti™ computer-aided qualitative data analysis. Following the recommendations of Friese (2014:96), all case participants’ transcripts were converted to a rich-text file format (RTF) in line with the standard format used for ATLAS.ti™ purposes. All participants were marked to avoid ambiguity, and an empty line entered between each participant.

In this study, the identifier INTVR (abbreviation for interviewer) was used to mark the researcher or moderator as the interviewer and the prefix ENT (abbreviation used for ‘enterprise’) followed by an alphabet letter for each case participant, for example, Ent-A. Long speeches by each participant were broken into smaller units. These units consisted of multiple paragraphs for the unique marking of every paragraph and ease of coding while more exact quotation (*verbatim*) references were kept. For each transcript, font type, size, line spacing and alignment were reformatted for consistency. Table 4.11 is an example of an abbreviated transcription guide with some of the symbols used for formatting:

Table 4.11: Abbreviated transcription guide with symbols

¶ Indicates an empty line entered to an alternate participant

¶¶ Indicates lines entered twice to separate long speech paragraphs
(to enable the ATLAS.ti™ processes of coding)

Uhm - Indicates the sound to gather thoughts before a response. The repetition of sound indicates the length of the thought-gathering.

... A row of prefix dots indicates an inhalation, either once, repeatedly or throughout a single or a few responses

Source: Adapted from Silverman (2001:303)

4.10.4 Transcription of interviews and discussions

The researcher transcribed the first interview audio recording and notes taken were used as a reference for verification (Creswell, 2014; Myers, 2013). By repeatedly listening to the audio recording, the researcher could assess how closely the participant had followed the PM processes and what frameworks or principles had been applied. Furthermore, the researcher could also evaluate how the interview had been conducted, the pacing of the conversation flow and how comfortable the participant was with the interview process. This reflection process assisted with the awareness of areas requiring improvement to ensure proper pacing of questions and comfort with the rest of the participants, allowing the creation of rich source data for analysis. Interviews for the remaining four participants were also transcribed and verified by repeatedly listening to the audio recording and constantly referring to field notes as additional data sources.

The field notes were not extensive or overly-detailed but contained short notes of data similar to the interview transcripts and contributed to the research processes. Member-checking (Appendix X) was ensured to facilitate correction(s) of any unintended

spelling errors and confirmation of truthful representation and transparency in terms of the contents discussed.

4.10.5 Coding of text and content data

Creswell (2015:152) emphasises the importance of collected text being converted by coding to make sense. Pertinent questions should be asked to decide which of the approaches illustrated in Table 4.12, are suitable for a study.

Table 4.12: Suggested number of codes in data analysis

Question	Number of codes	Suggested by authors
How many codes?	Range from 50-300 codes	Saldaña (2016) Friese (2014)
	80-100 codes divided into 15-20 categories, eventually grouped into 5-7 major concepts	Lichtman (2013)
	30-50 codes, reduce the number to, say, 20 codes, then collapse further into about five to seven themes that become the major headings in the findings section of the qualitative report.	Creswell (2015:155-156)

Source: Adapted from Saldaña (2016), Creswell (2015), Friese, (2014), Lichtman (2013)

In this study, the questions in Table 4.12 were considered, however, determining how many codes to use proved to be a significant problem, as Saldaña (2016) cautions swelling data codes into frightening numbers. The researcher coded the data using sound qualitative analysis methods (Saldaña, 2016). The data retrieved and gathered by interviews, documentary evidence (hard or electronic copies) and focus group discussions were organised and assigned codes using gerund coding, analysed consistently and categorised to facilitate thematic analysis.

4.10.6 Gerund coding

Gerunds are verb forms that can replace a noun and are identifiable by ‘-ing’ words, which, according to Charmaz (2014:111) and Saldaña (2016), can be used exclusively to denote action in the data. Charmza (2014) maintains that this method enables moving beyond concrete statements and focusing on actions to reduce or limit making premature conceptual leaps before the analysis is done sufficiently to develop themes. Additionally, coding using gerunds allows researchers to detect processes and stick to

data by asking questions to understand what it suggests and from whose point of view (Charmaz, 2014; Dunne, 2008:91). In Section 4.6.1 of the data collection for case interview and focus group discussions, engaging the decision-makers (that is, the owner-managers of the unit of analysis, namely the SMEs) as key participants of the SMEs was explained and justified. The data, therefore, reflected their points of view. Gerunds involve qualitative coding, which is best suited for studies of processes (Babchuk, 2019:5). This type of coding was, therefore deemed suitable in this study.

4.10.7 Coding of data collected

Creswell (2014) recommends that an initial coding table be developed on reviewing the theory, then allowing the codes to develop and change as additional information is discovered during the analysis process. Similarly, categories should emerge from the data to formulate concluding theories, without assuming or prescribing pre-existing ideas (Holton & Walsh, 2017). The process of data analysis should involve exploring the evidence and actual content from transcripts to highlight the relevant information and noting occurrences or content analysis for particular words, phrases and concepts (O'Leary, 2014).

In this study, initial coding was done without using any existing published code list but was guided by the research questions and the gerund type of coding. The research questions developed in Chapter One were initially used in line with Creswell's recommendation, to create and organise categories in the qualitative data analysis. As the data analysis intensified, the well-delineated research questions to progress with coding from Miles, Huberman and Saldaña (2020:14) were used to overcome data overload. This helped to facilitate data retrieval and allowed linkage of the key components of the research questions with data at an early stage (Miles & Huberman, 1994:56). Later tasks required the coding of categories to allow theoretical themes to emerge from the coded data and contribute to developing a more general abstract framework.

4.10.7.1 The coding list and use of research questions

The key components based on the research questions as recommended in Miles *et al.* (2020:14) and Miles and Huberman (1994:56), were used in this study to develop an initial draft of the main topics to use when coding the qualitative data. The list was not in a linear format. It gradually progressed into a complete list once applied to the

qualitative data from the first case participant and then to the data analysis from the remaining four case participants. The four main aspects from the research questions representing the PM, namely PM processes (comprising the design 'formulation' phase, use 'implementation' and revision 'review'), PM activities (related to various strategic activities and strategies), PM methods and tools (related to PM, BSC and DT techniques, process and other strategies) formed the basis for the list of codes.

Categories and themes from the summary of statements, keyword or phrases from the interviews and document analysis, initially using qualitative data from Ent-A, was explored. The statements, keywords or phrases were coded according to the categories of PM processes and PM activities were coded against the meaning or representation of each unit of activity, including PM methods and tools. Where necessary, the literature reviewed in Chapters Two and Three were consulted for a clearer understanding or explanation of phases or activities. Based on the data from Ent-A data, the coding exercise progressed by focusing on developing the list of codes while ensuring that categories and themes emerged from the raw data. The first round of coding was not without problems due to lack of experience with the use of grounded theory, concern about maintaining consistency and the large number of generated codes that seemed to be unconnected.

4.10.7.2 First-round coding (initial codes)

Relevant data and texts for each case interview transcript were converted to gerunds in Microsoft® Word where applicable. Each line in a text passage was assigned a number. Long speech passages were broken into multiple numbered paragraphs to standardise the document sources for uniformity across responses in preparation for the identification of items to code. Initially, the identified texts were used in the next step for open coding of items concerning the main aspects of interview questions and the answers to gain an early perspective of typical actions, activities, attributes or processes and any other relevant aspects mentioned by participants (Saldaña, 2016). Table 4.13 is an extract from the interview transcript from participant Ent-A as an example of initially identified line-by-line items labelled numerically using gerunds (Appendix F).

Table 4.13: Example of one case participant gerund labelled code items – MSWord format

Case Participant Ent-A - LDra: SECTION A – STRATEGY OF SME			
Interview Lead Question: Please take me through an overview of the strategy of your business? (vision, mission, core business focus, strategic objectives and how are these achieved or coordinated).			
INTERVIEWER (INTVR)	Paragraph	INTEVIEWEE	Initial coding
Please provide a brief overview of the strategy of your business? (vision, mission, core business focus, strategic objectives and how are these achieved or coordinated).	Para 1	Response from interviewee: In Principle, The 1) reason why we exist we want to be able to 2) provide a) good quality bedding and at b) affordable price, and to afford c) people with good sleeping patterns and to d) creating job & e) community empowerment, basically to 3) benefit our customer and the f) people who work for us.	1) Existing by 2) Providing: a) good quality bedding b) affordable price, c) afford people with good sleeping patterns d) creating job & e) community empowerment 3) Benefiting: 3) benefit customer f) people who work for us
Basis Of The Strategy (Target Customers, Markets, Environment) How often do you review your strategy?	Para 2	Respondent provides a 1) documented strategy for the organisation, and reads from the document. 2) (Every 3 Months) reading from the document Respondent clarifying discrepancies "...meaning we did not achieve it..." "there are specific things and certain strategies in terms of growth the document we would wish not to be shared with other people in our industry"	1) Documenting strategy 2) Reviewing quarterly Achieving or not achieving Specifying strategies for growth and documenting it but not sharing with competitors
What Does It Aim To Achieve (Provide New Or Existing Product To New Or Existing market, Differentiation On Price, Quality And Other Values Comparing Competitors)	(see para 1 above)		2) Providing a) good quality bedding and at b) affordable price, and to afford c) people with good sleeping patterns and to d) creating job & e) community empowerment.
Who Is Part Of Planning The Co's Future (Are Employees Part Of It Value Their Ideas) When you say business partners, we talking external stakeholders or consultants?	Para 3 Para 4	Primarily the 1) business partners involved in the 2) planning process but 3) implementation process is shared throughout the organisation. Umm... and certain 4) values shared within the organisation. Partners or members of the CC. If I may explain the 5) set-up of the structure. We have 1) two members in our business (there are basically my wife and a friend of ours). My wife is also the 2) financial	1 & 2) Involving business partners (planning process) 3 & 4) Sharing values & implementation process organisation-wide 5) Setting up structure capabilities a) Having members, partner and friend with skills - financial accountant, marketing director Composition of participants in setting strategy

Source: Author's compilation

The phrases or keywords or meaningful sentences that reflected a concept(s) or idea(s) emanating from labelled texts were used for the line-by-line open coding. Table 4.14 provides an example of the interview data of participant Ent-A to illustrate how segmented texts were given open codes based on key conceptual meaning derived closely from the terminologies used by the participant (Appendix H).

Table 4.14: Example of participant Ent-A's open-coding, illustrating the derivation of open codes based on text concepts and attached meanings

INTERVIEW QUESTION 1: Please take me through an overview of the strategy of your business?				
	Initial coding (Gerunds)	Description	Analytical meaning	Open code
Participant Ent -A	1) Existing by 2) Providing: a) good quality bedding b) affordable price,	Interviewee: a) Uses quality product as way to describe strategy.	Has factors or measures:	Prod: Product quality delivery (P.Qty)
	b) affordable price,	b) Uses price as way to describe strategy.	a) quality, c) people/ customer d) staff employment e) community (non-financial factors);	Fin: Financial (price)
	c) afford people with good sleeping patterns	c) Uses people (customer experience) as way to describe strategy	and	Cus: Customer (people experience)
	d) creating job &	d) Uses job creation as way to describe strategy	b) prices (financial factor) as way to describe enterprise strategy.	Staf: Jobs
	e) community empowerment	e) Uses community as way to describe strategy		Com: Community service
	3) Benefitting: f) benefit customer g) people who work for us	Justifies the purpose of strategy for customer and staff benefit	Understands the benefit of enterprise strategy to customer and staff	Why: Cust: Customer stakeholder (Cus) Why: Workforce/Staff (Stf)
	1) Documenting strategy	Recognises relevance of aspects such as documenting strategy	Knows about the importance of formalising enterprise strategy	Form: Formalising strategy (document)
	2) Reviewing quarterly	Recognises relevance of aspects such as reviewing strategy and frequency of reviewing	Knows about the importance of strategy review and frequency	Freq: Frequency of reviewing
	Specifying strategies for: Achieving or not achieving	Understand the purpose for reviewing strategy	Knows about purpose for reviewing, documenting and protecting growth strategy	Why: Benefits measuring achievement or non- (Ach-NonAch)
	growth and documenting it			Why: Growth (Grow) and
but not sharing with competitors	Why: Competitive advantage (CompAdv)			
Participant Ent B	Initial coding (Gerund codes)	Description	Analytical meaning	Open code
	1) Earning money	Uses earning money as way to describe strategy.	Has money factor as way to describe strategy	Fin: Financial (money)
	2) Speaking to target audience	Uses target audience (customer) as way to describe strategy	Has target audience (customer) as way to describe strategy	Cus
	3) Running public-speaking oriented product and training people in-house or conferences	Uses products type as way to describe strategy	Has product type factor as way to describe strategy	Cus
	4) Building Expert reputation for organisation and personal	Recognises importance of reputation for organisation and personal	Builds expertise reputation	Reput
	5) Developing reputation and producing products	Recognises importance of reputation for products	Develops product reputation	Reput
1) Joining Training bodies	Uses professional bodies	Has training networks	Netw	

Source: Author's compilation

Once all five interview transcripts were open coded, the items were transferred to Microsoft® Excel (Appendix I) so that data could be arranged (and re-arranged) flexibly using multiple columns and rows. This helped with the ease of aggregating the identified number of items or codes. Figure 4.6 provides an example of the labelled interview data from the five participants in a spreadsheet, by which segmented texts per case were presented vertically in columns, and each case response per interview question represent horizontally in a row.

	A	C	G	K	O	S
1		Case interview: CI: Ent-A Manufacturer	Case interview: CI: Ent-B Business Training/Skills	Case interview: CI: Ent-C Business Training/Skills	Case interview: CI: Ent-D Wholesale and retailing	Case interview: CI: Ent-E Manufacturing/Upcycli
2	Participant Profile					
3	Type of business	Home Textile	Public courses/speaking	Consulting/Training/Coachin g	Cleaning systems & equipments	Wood Restoration
6	Number of employees	Less than 50	Less than 50	Less than 50	Less than 50	Less than 50
7	Number of years	7 - 15	More than 15	3 - 7	More than 15	More than 15
8	Owner or manager (or both)	Yes	Yes	Yes	Yes	Yes
9	Sector	Manufacturing	Training/Consulting	Business consulting	Wholesale/Retail	Service industry
11	Interview questions					
12	Please provide a brief overview of the strategy of your business? (vision, mission, core business focus, strategic objectives and how are these achieved or coordinated).	1) Aspiring to exist	1) Earning money	1) Focusing of two strategic aspects of sales training and sales staff.es	1) Starting with cleaning products side of Strategy using diverse brands	1) Holding a niche market with special requirements
13		2) Providing: Quality, Affordable prices, Affordable prices,	2) Speaking to target audience	2) Running workshops	2) Having represented international company brands	2) Recognising limitations to niche market (Not necessarily for growth)
14			3) Running public-speaking oriented product and training people in-house or conferences	3) Building good business, people finding out and learning of our reputation	3-5) Stopped doing some brands due to costs compared to locals or relocated to the East and quality related-issues	3) Hoping for growth in future
15			4) Building Reputation for organisation and personal	4) Getting bigger clients		4) Relating to limitations of growth
16		Customer experience,	5) Developing reputation and producing products	5) Building long term working relationship		
17		Creating jobs,	6) Writing using social media, blogs			
18		Empowering community	7) Involving profession organisations			
19		3) Benefitting:				
20		Customers				
22		Basis of strategy	1) Documenting strategy (see Hard copy document)	1) Joining Training bodies	1) Deriving key income not from workshops only	1) Focusing on narrowed brands
23		2) Achieving (or non-) time- based target	2) Knowing most business come from referrals	2) Marketing and working with client weekly good income drivers weekly	2) Spending time establishing 'one main brand' focus	2) Gaining access to market unlimited
		3) Having specific growth	3) Specialising in social	3) Consulting, coaching and	3) Doing business in Europe	3) Doing lots of marketing

Figure 4.6: Example of case participants’ text and data per case (horizontal columns) and responses aligned to interview questions (vertical rows) representation

Source: Author's compilation

The researcher created **994 initial codes** from the transferred line-by-line open code aggregated items, and many were loosely grounded. A closer look at some of the details of coded items seemed to indicate gaps in certain critical areas of business strategy, or that certain data types as provided by the respondents were completely different from what the interview question(s) intended. As a consequence, the recommendations outlined by Corbin and Strauss (2015) were applied by memoing questions on what data type could have been represented or would offer as scope for use in further phases of the data coding process or what other additional data might be available to provide more complete insights.

The process also involved data extracted from the documentary sources obtained from each participant’s website. The content and data from each document source were captured in Microsoft® Excel (Example in Figure 4.7 and full list in Appendix J) at a later stage following the initial coding of interview transcripts in preparation for the document analysis. The process entailed finding the relevant data, specifically, the visibility of stated strategy (vision, mission, values), the types of performance dimension to back the strategy, strategic planning, PM process or other related concepts.

	A	B	C	D	E	F
1		Document analysis: Cl: Ent-A	Document analysis: Cl: Ent-B	Document analysis: Cl: Ent-C	Document analysis: Cl: Ent-D	Document analysis: Cl: Ent-E
3	Documentary evidence - Profile	Organisational Profile (vision and mission and other activities) (hardcopy/website)	Vision and mission (website)	Mission and vision (website)	Organisation overview (vision and mission and other activities) (website)	Mission and vision (website)
4		Organisational Strategic Plan (vision and mission and other activities) (hardcopy only -		Number of employees (website)	Warranty document (website)	Organisation overview (website)
5		Organisational Structure (hardcopy and website)			SME Manual 2015 (lists the types of records/accessibility) (website)	
6		Testimonials and Blogs (hardcopy and website)	Testimonials and Blogs (website)	Testimonials (website)	Testimonial from customers (emails and website)	Testimonial and FAQs (website)
7		Digital catalogue (product focused) (hardcopy and website)	Digital catalogue (services offered) (w	Digital Catalogue: services offered (w	Organogram (Digital catalogue product focused) (website)	Catalogue of services offered/After-sales services
9	Key concepts of Strategy and PM, BSC and DT principles					
10	Organisational Profile (vision and mission and other activities): Strategy	Vision (NOT STATED) and Mission (Clearly stated) use of words 'high quality, comfortable and stylish products "customers globally" through innovative, ethical, inspired and world-leading organisation', 'educate our customers on the benefits and care of our products'	Vision and Mission (NOT STATED) but use of words informative and entertaining 'world class sales training' to 'grow customers base' and 'increasing bottom line', and give teams 'performance improvement' skills and 'motivation' for application.	Vision (NOT CLEARLY STATED) but on website use of words 'helps organizations increase sales' 'improve profitability' 'build championship teams' 'the prerequisite of success' "; and Mission use of words 'improve the quality' 'transformation of the marketplace' and 'powerful	Vision and Mission (NOT CLEARLY STATED) but on website use of words 'offer range of innovative products' 'strive for service excellence' "products are serviced and supported with spares and training" 'import international brands' 'national distribution networks'	Vision (NOT CLEARLY STATED) but on website use of words 'eco-friendly, 'green building' focus; and Mission use of words such as using 'unique stripping techniques, 'not to harmful to the environment' and 'recycled products'
11		Diverse industry as part targeted-market focused strategy			NB: Environmental consciousness through new natural	
12		Differentiator from competitors includes efficient service and delivery, committed team, meeting customer requirement, integrity, top quality products, in-depth knowledge about			Customer relationship (customer experience building, support and product-education/knowledge development; open communication/transparency and quality product guarantee)	
	Organisational Strategic Plan (vision and mission	Vision (NOT STATED) and Mission (Clearly stated) similar as in				

Figure 4.7: Example of participants’ documentary analysis with content and data extracted per document source

Source: Author’s compilation

The constant searching, comparing, and clustering of similar concepts facilitated the identification and addition of **55 new emerged codes** which were added to the list of coded items. Table 4.15 presents an example of open codes from participant Ent-A and illustrates how 12 codes emerged from the interview transcript. Ten new codes

were added from the documentary analysis to complete the 22 open codes for interview question one (full list in Appendix H).

Table 4.15: Example of participant Ent-A’s documentary analysis with content and data extracted per document

INTERVIEW QUESTION 1 (IQ1): Please take me through an overview of the strategy of your business?						
Initial coding IQ1 (all participants - interviews only) = 142 codes Initial coding IQ1 (all participants - document analysis) = 31 codes (added) TOTAL CODES (IQ1) = 173 CODES						
Ent A (12 + 10 = 22 codes)	Interviews only				Document source	
	Initial coding (Gerund codes) interviews	12	Open code (Interviews)		Initial coding (Doc Analysis)	10
	1 e) community empowerment	1	1. Com: Community serviced (Comm)		1. Inpx:	1
	1 c) afford people with good sleeping patterns	1	2. Cus: Customer stakeholder (Cust)		2. Ethic / Integ:	1
	1 b) affordable price,	1	3. Fin: Financial (Rev)		3. Lead: (globally)	1
	1 1) Documenting strategy	1	4. Form: Formalisation of strategy (DocStr)		4. Sex:	1
	1 2) Reviewing quarterly	1	5. Freq: Frequency of reviewing (FreqRev)		5. Team:	1
	1 a) good quality bedding	1	6. Prod: Product quality delivery (PDQty)		6. Knowl:	1
	d) creating job &	1	7. Staf: Jobs		7. Resour:	1
	1 Specifying strategies for: Achieving or not achieving	1	8. Why: Benefits measuring achievement or non-(Ach-NonAch)		8. Copt: IMOC:	1
	1 but not sharing with competitors	1	9. Why: Competitive advantage (CompAdv)		9. KPA:	1
	Benefitting: f) benefit customer growth and documenting it	1	10. Why: Cus: Customer stakeholder (Cus)		10. Mark:	1
	1 g) people who work for us	1	11. Why: Growth (Grow) and			
		12. Why: Workforce/Staff (Stf)				
	Initial coding (Gerund)	25	Open code (Interviews)	Initial coding	6	
				Document source		

Source: Author’s compilation

The documentary sources provided additional insights to corroborate or complement the initial list of open coded items once all other participants’ documents were analysed. Overall, the coded items resulted in **1049 initial line-by-line emerged** open codes.

It was important to be constantly mindful of the potential complications a large number of codes might present to further analysis and to ensure that the data allowed the codes to emerge. These results and memoing questions (Table 4.16) were discussed with the data analyst, and member-checking (Appendix X and Y) was conducted and communicated to participants for any potential researcher biases or consistency.

Table 4.16: An example of a memoing note

What data type could have represented how an enterprise described an overview of strategy?

This question frequently came to mind in the collection and the analysis of the data. Following repeated engagements with data and after careful reflections, it became clear that the answer to 'What defines strategy overview?' is determined by what they say is important and relevant to each participant. This presented a problem when interpreting data, as the participants used a range of words or phrases and sentences interchangeably when defining their strategy. Examples include target audience, people, customer, enterprises, target corporates, SMEs, staff, interns, product quality, price, earning money, community. Participants also referred to related intended benefits including for example lower or more affordable prices and giving people sleeping patterns.

Source: Author's compilation

The consultation also involved preliminary views of typical categories represented by codes considering the interview questions and, only once consensus was reached, could the coding process progress to the next phase. The case interview transcripts were imported into ATLAS.ti™ software which automatically assigned primary documents 'P2 to P5' for each participant. Figure 4.8 (see also Appendix K) illustrates the sequence of steps from which the initial coded items were identified by highlighting quotations in line with their numbered paragraphs (Example in Table 4.13).

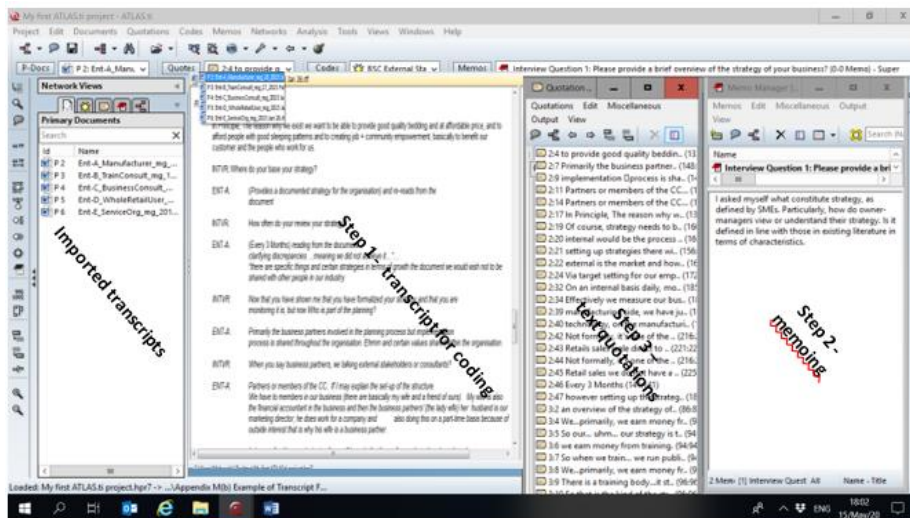


Figure 4.8: Example of ATLAS.ti™ screenshot of quotations highlighted per paragraphs and memoing

Source: Author's compilation

The identification of quotations into paragraphs primarily helped to facilitate the second-round coding process by which sub-categories would develop.

4.10.7.3 *Second-round coding (arriving at the sub-categories)*

The initial concepts identified from the first-round coding were screened and compared with assigned numbered paragraphs to classify and cluster common actions, activities, attributes or processes. The coding process and memoing continued iteratively; codes were merged or grouped by similarities of features or those having a similar meaning.

By this focused coding, it quickly emerged that almost all the participants' actions reasonably presented a pattern of typical activities, attributes and concepts related to strategy or PM development, implementation or perspectives and principles of the BSC or DT. Table 4.17 illustrates an example summary for the number of items coded resulting in the derivation of sub-categories 'Defining strategy' associated with the key concept in interview Question 1 to show how codes were merged and emerged as extracted from Appendix I).

Table 4.17: An example illustrating the number of coded items (merged and emerged) for the derivation of sub-category from open coding of key concept 'Defining strategy' for interview Question 1 in Appendix E

First-round coding (gerunds)		Second-round coding	
Semi-structured interviews = Interview question 1 (IQ1) answers		Document Analysis	
<p>Codes</p> <p>Initial concepts (extracted from five interviews transcripts only)</p> <p>Total = 142 codes</p>	<p>Codes</p> <p>(Screened 142 initial codes with similar concepts)</p> <p><u>Merged</u> similar codes and emerged with = 22 codes</p>	<p>Codes</p> <p>Additional concepts (extracted from 21 document analysis) - Total = 31 codes</p> <p>Compared and clustered codes</p> <p><u>Deleted</u> redundant = 29 codes</p> <p><u>Added</u> new codes = 2 codes</p> <p><u>Emerged</u> with = 24 codes</p>	<p>Sub-category</p> <p>(Screening 24 codes)</p> <p>Emerged with = 21 sub-categories</p> <p><u>Merged</u> similar sub-categories and emerged with = 7 sub-categories</p>

Source: Author's compilation

In this phase, the text quotations on ATLAS.ti™ were grouped and sub-categories preliminarily assigned per paragraph to facilitate the introduction of diagrammatic

visualisation stemming from this phase and throughout the other analysis processes. Figure 4.9 provides an example for a view of ATLAS.ti™ code manager on paragraphs focused-coding, memoing and derivation (Appendix L).

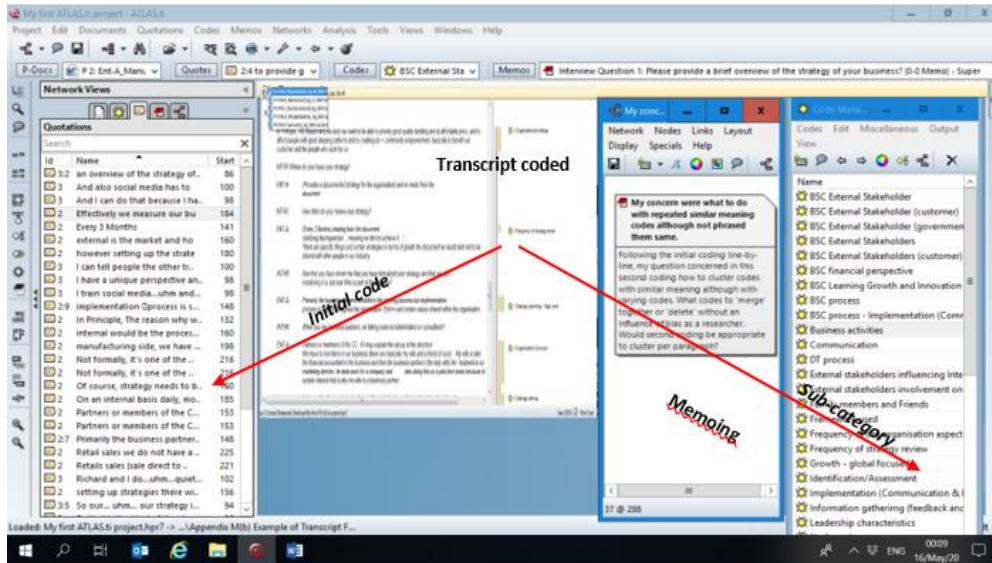


Figure 4.9: View of ATLAS.ti™ code manager for examples of paragraphs focused on coding and memoing

Source: Author's compilation

Further analysis progressed in this phase as codes with similar meaning or that represented similar concepts were identified and clustered using ATLAS.ti™ redundant coding analyser (Figure 4.10).

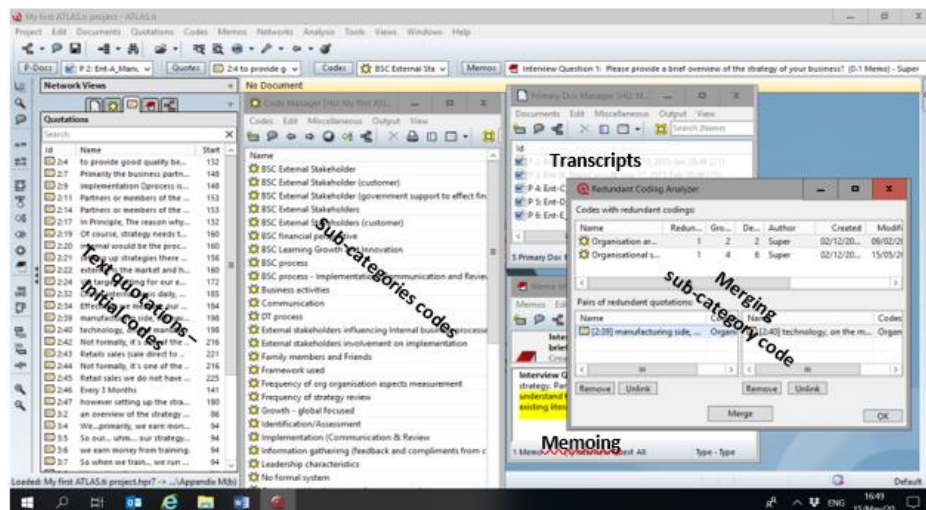


Figure 4.10: Example of ATLAS.ti™ code manager view for the derivation of sub-category from text quotations

Source: Author's compilation

Duplicate codes were merged and followed with memoing when deemed unnecessary by consensus with the data analyst, and the researcher would be deleted or renamed. After this process, it became clear that there were semantic or meaning-based links (see also an overview of initial network ‘the circle’ in Appendix M), being formulated between initial codes (quotations) and sub-categories in this phase, as illustrated by ATLAS.ti™ network mapping (Figure 4.11).

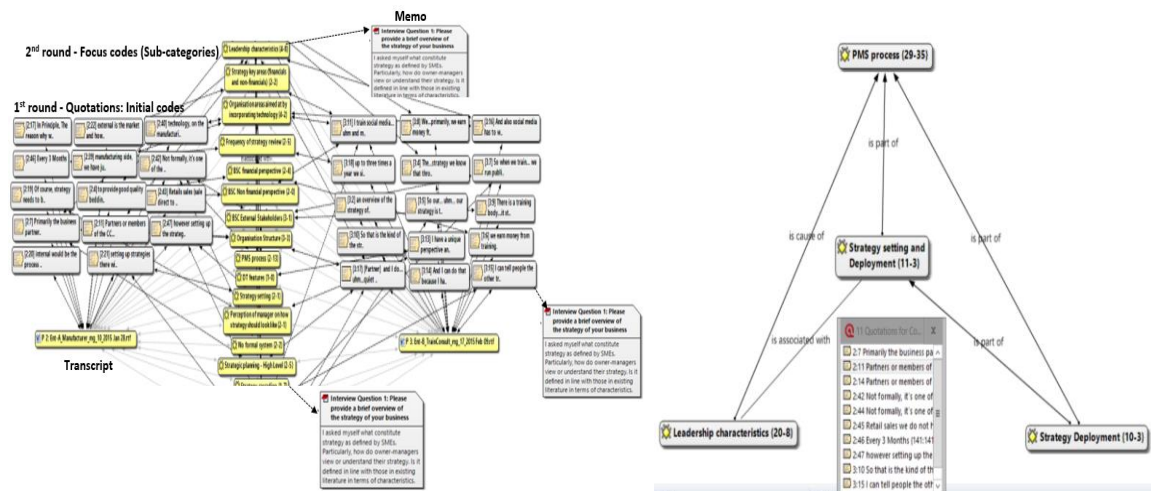


Figure 4.11: Example of ATLAS.ti™ view manager and networks of initial quotations codes and linked sub-categories

Source: Author's compilation

Additional expanded enquiries in ATLAS.ti™ networks maps from the sub-category ‘Strategy setting and deployment’ could be extracted (Figure 4.11 and Appendix N) with linked quotations. These were discussed with the data analyst and other colleagues and, where unallocated code items occurred, they were either combined into the sub-category or deleted and, only once consensus was reached, did the coding progress to the third round for final categories to form.

4.10.7.4 Third-round coding (arriving at the main categories)

The 127 sub-categories from the second-round coding were screened compared, and merged into 32 higher-order categories (each with a detailed description)). After consultation and discussion with the data analyst, it was deemed necessary that these categories be narrowed down and merged into nine (9) thematic categories, as shown in Table 4.18.

Table 4.18: Thematic categories

1. Factors for defining strategy: BSC- / DT- / PM-related	2. Factors for defining strategy: Leadership-related	3. Factors for defining strategy: Business activities-related	4. Factors for defining strategy: Formalisation	5. Factors for defining strategy: Strategy-related	6. Factors for defining strategy: Perceptions (SME and PM traits)	7. PM process (BSC and DT design) development	8. PM process (BSC and DT) implementation	9. PM process (BSC and DT links)
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Source: Author's compilation

The thematic categories from ATLAS.ti™ are shown in Figure 4.12 (see also Appendix O and Appendix P) to reflect the merging of the sub-categories into categories better.

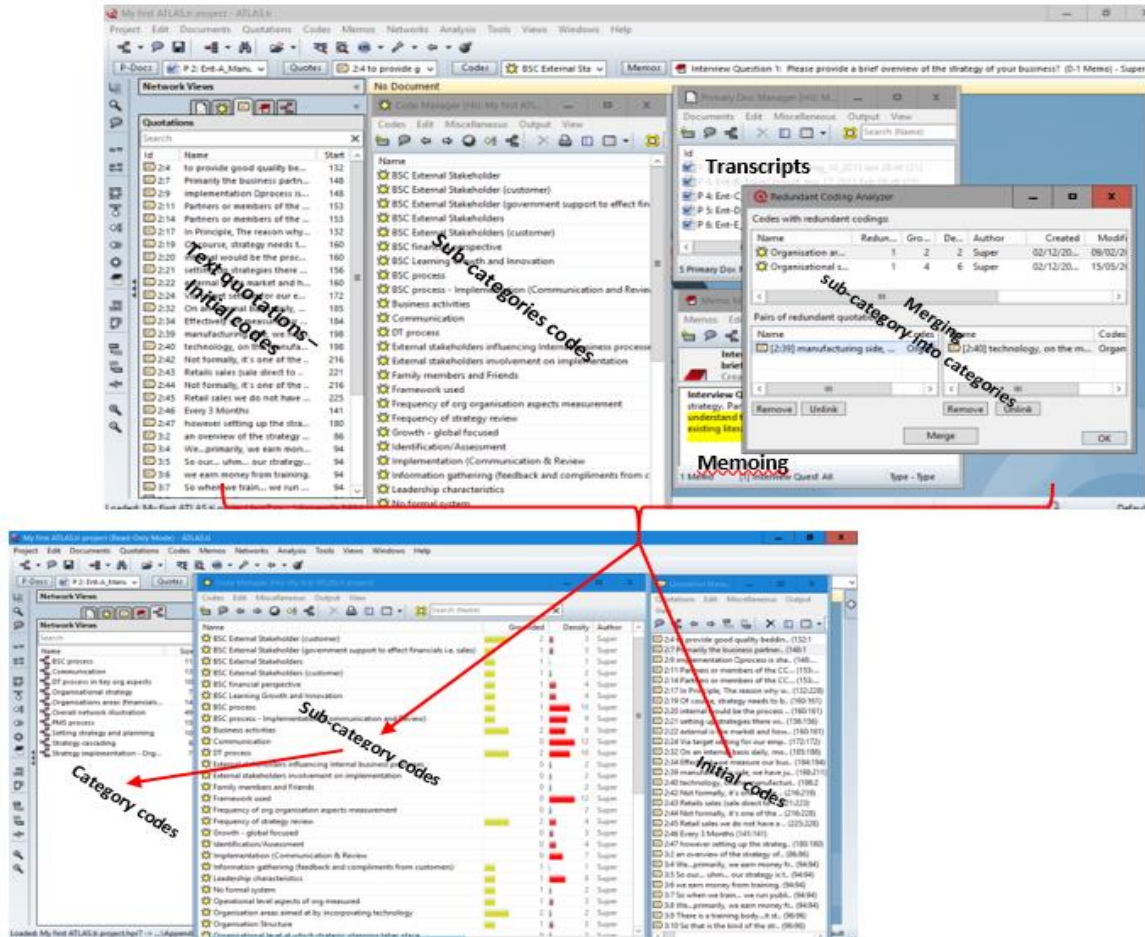


Figure 4.12: ATLAS.ti™ code manager view of merged sub-categories into categories

Source: Author's compilation

The merged categories were used to facilitate theme formulation of concept maps in the final round of coding.

4.10.8 Final-round coding (arriving at the themes)

After the sub-categories and emerged main categories had been processed, connections were identified between concepts and categories, and five themes were derived mapping relationships where categories were associated with other data or had a meaningful association to other variables (Figure 4.13).

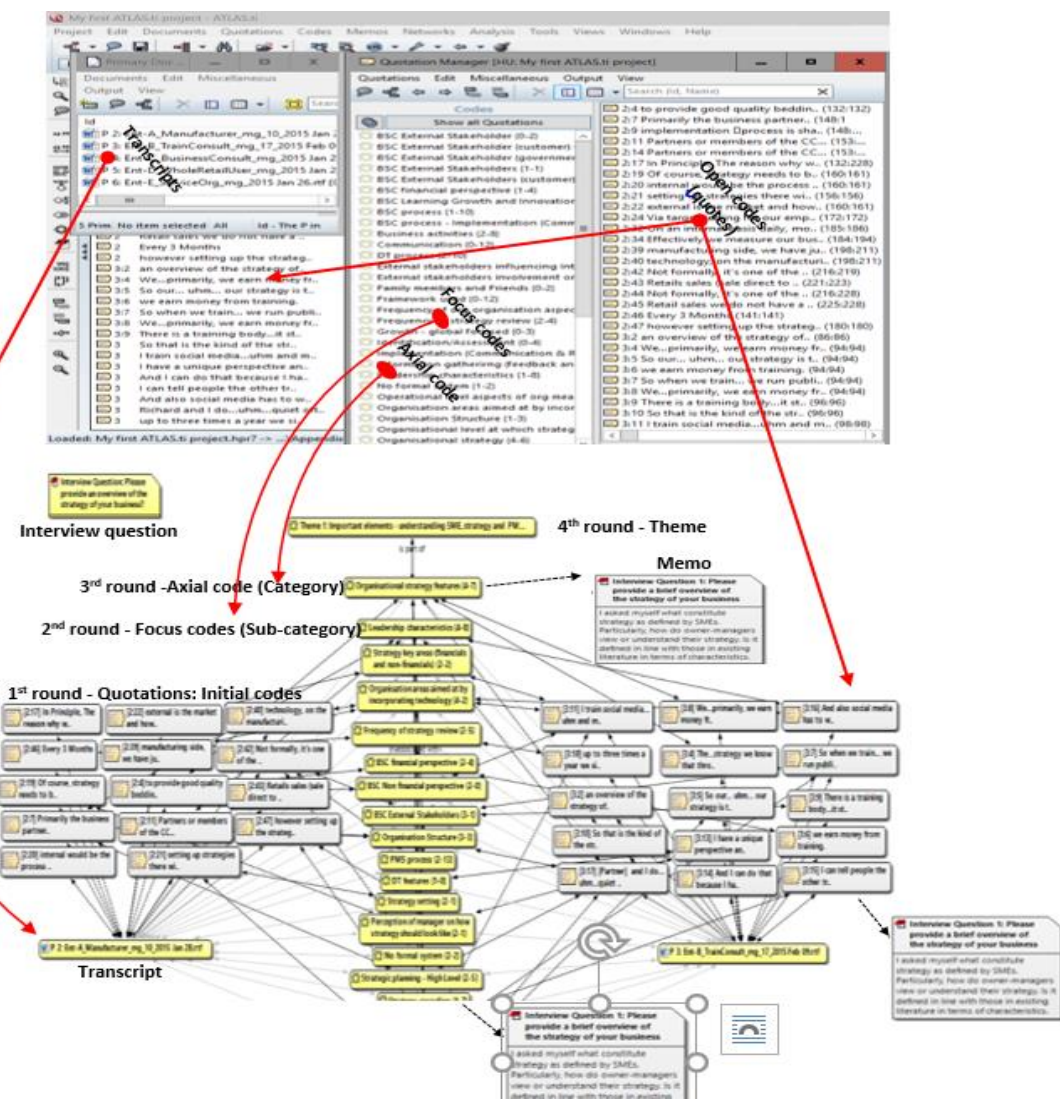


Figure 4.13: Screenshot illustration of ATLAS.ti™ view manager and networks to show elaborate coded items and derivation of categories and themes

Source: Author's compilation

The final round of coding helped the theory to develop (Figure 4.14 and Appendix R), and four themes were derived (Table 4.19) and their connections with the main

categories established. A theme represents the apex of the analytical process and is used for the presentation and interpretation of data.

Table 4.19: An illustration of the derivation of themes based on linked categories

Thematic categories	Description of category	Main themes
1. Factors for defining strategy - BSC factors / DT factors / PM factors	Features and factors deemed instrumental concerning their strategy and PM processes in daily operations (Research Question 1)	Theme 1: Important and Instrumental elements: Understanding SME, Strategy and PM (traits and features) (Research Question 3)
2. Factors for defining strategy - Leadership		
3. Factors for defining strategy - Business activities		
4. Factors for defining strategy - Formalisation		
5. Factors for defining strategy - Strategy		
6. Factors for defining strategy - Perceptions (SME and PM)		
7. PM process (BSC and DT design)	Processes followed to develop strategy and PM (Research Questions 2 and 3)	Theme 2: Processes to Design, Develop and Deploy Strategy and PM (Research Question 3)
8. PM process (BSC and DT implementation)	Processes followed to implementation of strategy and PM within organisational and operational activities and review (Research sub-Questions 2 and 3)	Theme 3: Processes to Implementation of Strategy and PM in organisational and operational activities and review, (Research Question 3)
9. PM process (BSC and DT links)	Experiences and perceptions with PM integrating BSC-related and DT-related principles (Research sub-Questions 2, 3 and 4)	Theme 4: Processes and Experiences with PM / BSC / DT / integrating BSC and DT principles (Research Question 3)

Source: Author's compilation

In this final cycle, the data were re-contextualised, as illustrated in Figure 4.14. This is an example of adopting the principles of the BSC and DT for an integrated PM approach. The core categories derived (elements and processes) and their related sub-codes (such as organisational structure and strategy factors) are connected to create the final storyline of an IPMF in an SME context that could be adopted and customised in their limited-resource environment using the principles of well-established frameworks.

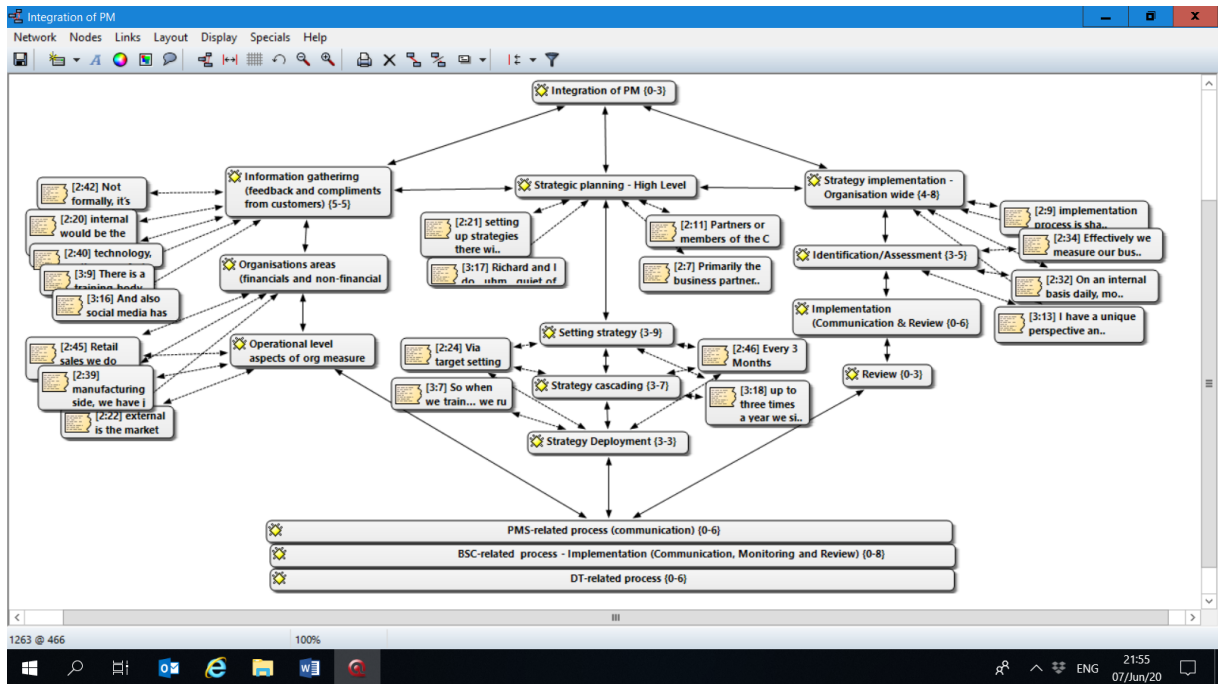


Figure 4.14: An example of an ATLAS.ti™ network view showing the preliminary development of theory derivation from coded sub-categories and categories and the looping of non-directed and directed relations

Source: Author's compilation

Further SME validation needed to be conducted concerning pertinent aspects of the IPMF to facilitate the completion of the data analysis. It was imperative to do this specifically, as the data analysed came from a small sample size. The small sample may be viewed as a limitation for this study, but the rich data collected and analysed provided significant valuable insights to compensate.

4.10.8.1 Focus group discussions coding

In this study, the validation procedure for the developed framework was conducted in two focus groups. The coding of the focus group discussions (Figure 4.15, Appendix U and Appendix V) was subject to similar analytical rigour as was applied to the IPMF. The focus group interview questions guided the process concerning the IPMF's comprehensiveness, its suitability in a typical SME context, comprehension of and perceived participants' own experience with concepts of the framework.

The screenshot shows an Excel spreadsheet with the following structure:

- Columns:** Labeled with letters B through N. Column B is for 'Participant Profile', C for 'FOCUS GROUP ONE: SMEs experts involved in the development of other SMEs', D for 'FOCUS GROUP 1: F01, Ent-A', E for 'FOCUS GROUP 1: F01, Ent-B NPD', F for 'FOCUS GROUP 1: F01, Ent-D', G for 'FOCUS GROUP 1: F01, Ent-E: Service industry', H for 'SUMMARY FINDINGS: FOCUS GROUP ONE', I for 'FOCUS GROUP 2: SMEs at early stages of their enterprises (1 year or more)', J for 'FOCUS group 2: F02: Ent-A (Vashal) Tourism', K for 'FOCUS group 2: F02: Ent-B: Food table', L for 'FOCUS group 2: F02: Ent-C: Shwella', M for 'FOCUS group 2: F02: Ent-D: Michael', N for 'FOCUS group 2: F02: Ent-E: Hospitality (Food services)', and O for 'SUMMARY FINDINGS: FOCUS GROUP TWO'.
- Rows:**
 - Row 2: Headers for the columns.
 - Row 3: 'Participant Profile' for Focus Group One and Focus Group Two.
 - Row 4: 'Interview question' for Focus Group One.
 - Row 5: 'Based on the developed Integrated Performance Measurement (IPM) framework...' for Focus Group One.
 - Row 6: 'Describe how it would help an enterprise fulfil its mission or meet its objectives?' for Focus Group One.
- Data:** The cells contain text from interviews, with various codes and categories applied. For example, in the 'SUMMARY FINDINGS' section, there are columns for 'Strengths' and 'Weaknesses' for both Focus Group One and Focus Group Two.

Figure 4.15: Example of focus group coding document per member per group

Source: Author's compilation

It followed from discussions and brainstorming between the researcher and the data analyst on the data analysis from focus group one (see Appendix W). The data analysed confirmed the outcomes of the case study interviews and document analysis extracted codes and categories and contributed to enhancing the developed IPMF.

The second focus group data analysis was done the same way, and the consultation with the data analyst continued until consistency and consensus were reached on the final coding. Member-checking was conducted with the participants for accuracy in the presented data (Appendix X). At this stage of the analysis, a substantial amount of data coding was captured as no further codes would develop (Saunders, 2012:37-55), a final round of discussions with data analyst followed and a consensus was reached (Appendix Y).

4.10.9 Data saturation

As in any qualitative study, the issue of data saturation needed to be addressed in this study. Hennink *et al.* (2017) and Saunders *et al.* (2018) claim that data saturation can happen in a range of participants. Moreover, influential factors such as homogeneity or heterogeneity, context and the phenomenon of interest complexity determine when data saturation happens (Squires, 2018:16). Patton (2015) argues that saturation can occur when the researcher has conducted sufficient interviews, and information gathered from participants produces no new data. According to Sebastian (2019:5),

saturation should occur by constantly comparing data against each other or certain incidents continually until themes appear. Squires (2018:16) suggests continuing with the study until data saturation is reached.

For this study, the data saturation was deemed to have occurred when the data from the second focus group were processed and coded following the final discussions and agreement between the researcher, colleagues and the data analyst (Appendix Y). No new data came from this particular group; input to add to the processing of data repeated similar minor suggested improvements to the developed integrated PM framework.

In sum, the data analysis was conducted following an iterative process using an inductive and spiral approach to derive the results (Saldaña, 2016; Creswell, 2018). An summary of the processes for content and thematic analysis in this study is presented in Figure 4.16.

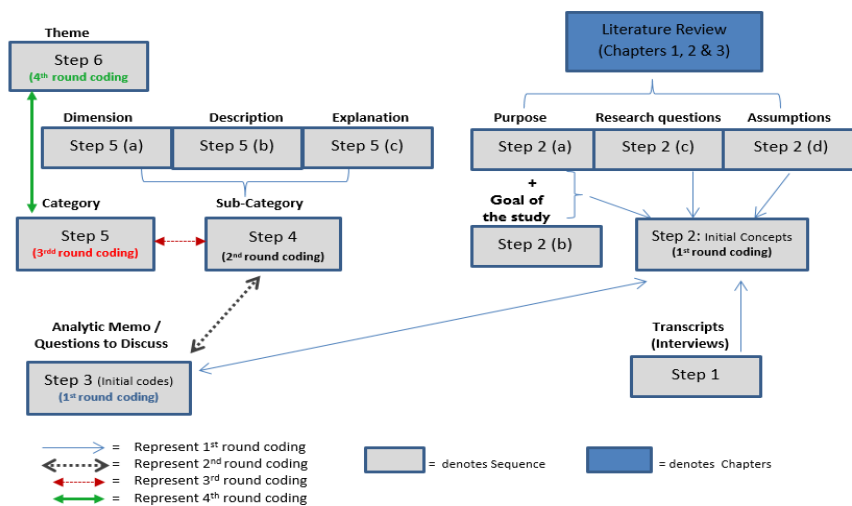


Figure 4.16: Illustrative summary of content and thematic analysis framework

Source: Author's compilation

The interview transcripts informed the content and thematic analysis framework in Figure 4.16 by purpose, goals, research questions, reviewed literature and variables of interest (namely, assumptions of the study in the introductory chapter). Framing content and thematic analysis using Microsoft® Word formatted transcripts and Microsoft® Excel spreadsheets, after that ATLAS.ti™ software used for coding and analysis.

Following thematic analysis, the various subsequent categories and four emerged themes are described in detail in the Findings chapter to follow. The quotations from the case participants (primary data) are presented to demonstrate the analytical emerging themes and findings. Quotations are presented then followed by information about the case-participant name created for confidentiality purposes (that is, Ent-A or Ent-B) in the study.

This is deemed appropriate in this study to determine whether empirically identified processes, methods and activities of PM and improvements enable the integration of these aspects in the performance of participant SMEs, and matched those characterised in the principles, perspectives and processes of the BSC and DT techniques or strategies. Particularly, research conducted by Monte and Fontenete (2012:269) is used to demonstrate the process of implementing the BSC and strategic phases leading to developing such a framework (discussed in the previous literature review chapters). Monte and Fontenete's work is considered in this instance to assist in identifying the gaps or phases where the integration of newer thinking strategies (such as DT) could be positioned in the integrated PM framework to be developed. Subsequently, the findings are used to develop the integrative framework (as elaborated in the chapters that follow) according to the patterns or trends discovered in practice. The findings assisted the researcher to triangulate the findings from the literature review to answer the main research question.

4.10.10 Quality assessment (rigour)

The comprehensive self-check of this study is presented in Table 4.20 to assess pertinent aspects concerning the criteria set in the qualitative research framework adopted by Fletcher, Hinton, Hartmann-Boyce, Roberts, Bobrovitz and McManus (2016:214-215). The checklist was initially used to focus on the domains of the researcher and data analyst and reflexivity, experience, training and characteristics of the interviewer concerning bias, assumptions and interest in the research topic. It also checked the study design, the interviews, the review of transcript findings to participants for comment or correction, and the methodological orientation underpinning the study. Finally, the analysis and findings, description of the coding, feedback on findings from participants and the use of software for analysis were checked.

Table 4.20: Framework for qualitative research with criteria

Domain: Research team and reflexivity		
Interviewer/facilitator	<i>Primary:</i> Researcher in this study. <i>Secondary:</i> Colleague and expert for reviews and opinions on coding/ themes	Reported in Chapter 4. See email from an expert analyst
Credentials	Master's degree	
Occupation	Lecturer (previously Acting Head of Department). Study leader for undergraduate Research Methodology programme	
Gender	Female	
Experience and training	Industry experience, academia and research	
Relationship established	None (only during and on the follow-up of the interview process)	Reported (see an email from CCoC)
Participant knowledge of the interviewer	None (only by this research study)	Reported (see an email from SMEs)
Interviewer characteristics	Participate in research conferences, workshops and forums and colloquiums	
Domain: Study design		
Methodological orientation and theory	Reported in Chapter Four	
Sampling	Reported in Chapter Four	
Method of approach	Reported in Chapter Four	
Sample size	Reported in Chapter Four	
Non-participation	See Appendix Z (potential participant declined) Non-participation of the researcher in any activities of enterprise except to conduct and collect interview data at SMEs premises	

The setting of data collection	Reported in Chapter Four	
Presence of non-participants	Reported in Chapter Four	
Description of sample	Reported in Chapter Four	
Interview guide/questions	Reported in Chapter Four	
Audio/visual recording	Reported in Chapter Four	
Fieldnotes	Reported in Chapter Four	
Duration	Reported in Chapter Four	
Data saturation	Reported in Chapter Four	
Transcripts returned	Reported in Chapter Four	
Domain: Analysis and findings		
Number of data coders	Reported (Chapter Four)	
Description of the coding tree	Reported (Chapter Four)	
Derivation of themes	Reported (Chapter Four)	
Software	Reported (Chapter Four)	
Participant checking	Reported (Chapter Four) (for example, Appendix X)	
Quotations presented	Reported (Chapter Five)	
Data and findings consistent	Reported (Chapter Five)	
Clarity of major themes	Reported (Chapters Four and Five)	
Clarity of minor theme	Reported (Chapter Four)	

Source: Adapted from Fletcher et al., (2016:214-215)

4.11 QUALITATIVE CRITERIA FOR QUALITATIVE RESEARCH

In general, qualitative research requires rigour and discipline in planning and execution to pass the true test of replication from one study to another. The value of qualitative studies is established when criteria of credibility, transferability, dependability, confirmability and authenticity are applied holistically to validate the trustworthiness of the research project (Korstjens & Moser, 2018; Gunawan, 2015; Creswell, 2014; McMillan, 2012:302; Carcary, 2009; Guba & Lincoln, 2005:204; Miles & Huberman, 1994). Yin (2014:45-47) views the research design as a catalyst to develop the rigour of a study to enhance its quality. This qualitative study was established in the interpretivism paradigm, and the research design and methodologies adopted should be measured following relevant notions or strategies of trustworthiness to establish its true value.

The strategies used to strengthen and enhance the credibility, transferability, dependability, confirmability and authenticity of the findings and trustworthiness of this study were as follows:

- Credibility was initially evaluated by ensuring that the research aims, main, investigative and interview questions were appropriately identified and described underpinned by the relevant literature review and theories conducted in the earlier chapters of this thesis.
- Generally, in any research, including qualitative studies, it is acknowledged that data cannot speak for itself and an interpreter with the ability to observe and analyse the phenomenon is important to producing useful thick or rich descriptions for the study to be of true value. For the credibility of data analysis in this study, the researcher engaged extensively and was immersed in the data to appreciate all the information as represented by numerous Appendices generated in this process. Consequently, the researcher demonstrated the coding processes, identified codes, constantly compared and memoed, established categories and facilitated that saturation was reached, themes were formulated, and theory was developed from the data collected, while remaining mindful of bias and limiting the influence of the existing literature, thus enhancing dependability.
- Member-checking: the transcripts and initial results were displayed on a draft document, and the participants in the study were invited to review and comment

on them. The findings from the data analysis were shared by peer reviews and with colleagues for inputs and opinions to enhance confirmability.

- The researcher facilitated reflexivity in the research processes by constantly checking that each process remained logical, was traceable and clear documentary evidence was provided to detail the research processes (as illustrated in research design sections). The resultant data analysis and results (Chapter Five) which informed the discussions and interpretations (Chapter Six) further enhance credibility.
- The researcher independently coded the data, held numerous discussions with colleagues who contributed input and kept constant consultation with research experts in qualitative data analysis to refine the categories and themes and, therefore, enhanced the credibility and dependability testing of coded items.
- The audio recording of interviews, documentary sources and focus group discussions enhanced triangulation in this study, provided corroborating and validating evidence, and also facilitated that transcripts were produced verbatim to conduct detailed open coding if the audit trail study is challenged. Furthermore, the use of verbatim transcripts with the thick descriptions in data analysis ensured that transferability was enhanced. The sequence of steps for data and content analysis provides scholars with an illustrative framework to follow (Figure 4.16).
- The research processes and all documents used for this study were recorded and kept in structured software programmes (MSWord®, MS Excel® and ATLAS.ti™ software). Reports could be retrieved and printed from these records, detailing the processes and various stages of the research to produce evidence and its transparency in how the theory developed, based on empirical data, and for potential replicability by a researcher(s) who might use this study in future.
- The researcher remained committed to confidentiality and anonymity throughout the collected data processing and reporting of results, thus ensuring integrity.
- The findings of this study could not be generalised to the whole population of various SMEs due to the small sample of participants who came from the Cape Chamber of Commerce. However, potential generalisability would remain in the hands of the researcher(s) and scholar(s) and other interested parties who might use these processes and strategies in the future.

4.12 ETHICAL CONSIDERATIONS

Ethics is determined by how appropriate the behaviour of the researcher is to the rights of those affected or are subjects of the research work (Saunders *et al.*, 2012:231-232). This being a qualitative study, the researcher interacted extensively with the participants by interviews, emails and focus groups and, as a result, entered their domains of values, weaknesses, individual inefficiencies on management style, business culture and the like, to collect data. Silverman (2000:201) reminds researchers always to remember that, while they are doing their research, they are entering the private spaces of the participants. Understandably, this raised several ethical issues that needed to be addressed during and after the research had been conducted.

The researcher made sure that the participants understood pertinent ethical requirement issues, before, during and after the interview and assured that:

- No enterprise managers were marginalised or disempowered by this research.
- The purpose of the research was explained to the participants.
- Written consent to participate was obtained from each participant.
- The research posed no risk to an enterprise as no manipulation of variables took place.
- Participants were informed that they could withdraw at any stage of the research.
- Data obtained were kept confidential and used solely for academic purposes.
- Names of participating SMEs, owners or managers were not disclosed anywhere in the study to preserve anonymity. They therefore were referred to Manager A as Man-A or Enterprise-A as Ent-A.

Other data or ideas without due acknowledgement and permission were not used. The researcher also endeavoured to be honest and objective in the presentation of the research results and findings. In this light, the researcher addressed the University of South Africa's (UNISA) compliance requirements for ethical clearance and received a clearance certificate for this study (Appendix A). Initially, the researcher requested and obtained permission to access the database of the Cape Chamber of Commerce for registered SME members. Based on the responses to the launch of the study on the Chamber's website, invitations were sent via e-mail to the managers or owners of the

selected SMEs. They indicated they were willing to participate in the study (Appendix B).

The SME participants who consented to be part of the study (Appendix C) were requested to complete the participant-information sheet (Appendix D). They assisted the researcher in mitigating the risk of information incompatibility, thereby facilitating the accurate identification of associating participants with their specific and respective business, area, or activity. On receipt of a signed consent form, a schedule and dates for a meeting were made telephonically and confirmed via e-mail to explain what the purpose and scope of the case study was and provided clarity on documents which were required before beginning fieldwork. The semi-structured interviews (Appendix E) and focus group interviews (Appendix T) were administered, explained and conducted directly by the researcher with the case participants at their premises and at mutually arranged venues for the focus groups members.

4.13 DELINEATION AND LIMITATIONS

The primary limitation to this research was that the literature review conducted by the researcher on the integrated PM in SME context returned mostly research from an international perspective and did not necessarily map the practices and challenges from a South African perspective. It was important to note that the sample in this study came from SMEs operating in various business segments. As a result, it was not possible to guarantee that these SMEs would compare accurately to those in other sectors. However, the study was also limited to SMEs registered with the Cape Chamber of Commerce and Industry and which had been in existence for one or more years in various sectors in the CMSA.

It was important to recognise the potential research bias that would have developed concerning the significance of the time when these enterprises were created and the timing of this research study. For this reason, the research took into consideration that some of the participants consisted of those enterprises faced with survival issues or were at early survival and thriving with growth. Consequently, this research would not reflect an SME's ability to grow or to compete across industries in general. Furthermore, as mentioned earlier, there was limited literature on the subject of integrated PM of SME from a South African perspective; therefore, it necessitated building the study on sound theory.

4.14 SUMMARY

This chapter provided insights into the variables considered to conceptualise and execute this qualitative study, and that sought to understand the processes of integrated PM using the principles of BSC and DT strategies. The methodology, methods and approaches undertaken helped in how the fieldwork was conducted at the CMSA SMEs, and data analysis resulted in the findings to address the identified lack of empirical work in South Africa. Notwithstanding those various aspects of specific qualitative research techniques applied to achieve the theoretical, methodological, interpretive and triangulation aspects of this study, these could still be questioned and improved.

The lessons learned, extracted by an analysis of literature reviewed and the first-hand experience was the importance of developing empathy and respect for the participants (Easterby-Smith, Thorpe & Jackson, 2012). Research parameters set by the institutions involved be afforded at all stages of the study where an understanding of critical issues was to be gained. This confirmed issues of empathy and respect for participants as recommended by Yin (2014) to build trust and relationships between the parties involved in the study, whilst the researcher remains detached from the participants without being subjective.

The research philosophies, methodology and approaches, as discussed in this chapter, were put into action and are covered extensively in the next chapter, qualitative data findings and results, to present the emerged categories and themes.

CHAPTER FIVE: FINDINGS

5.1 INTRODUCTION

The previous chapter discussed the data collection and analysis by which categories and themes were developed. In this chapter, the data analysis and findings from the interviews, documentary sources and focus group discussions are presented.

5.1.1 Goals of the chapter

The objective of this chapter is to provide the findings based on the responses of the participants, the analysed empirical data, multiple categories and related themes that emerged from the research data analysis found relevant for developing the integrated PM framework.

5.1.2 The layout of the chapter

Section 5.2 begins by revisiting the research questions of this study. The data analysis and findings in the case analysis are presented in section 5.3. The cross-case analysis follows in section 5.4 to present differences, similarities or both. The emerged categories and themes are presented in section 5.5 and used to develop the framework to be validated. Section 5.6 presents the validation of the developed framework from the case analysis of a focus group. Finally, section 5.7 summarises the findings from the individual cases, and cross-analysis and contributions to developing a framework conclude the chapter.

5.2 OVERVIEW OF THE RESEARCH QUESTIONS

The research questions (introduced and justified in Chapter one), are repeated here for ease of reference.

5.2.1 Main research question (MRQ)

How can the BSC-related and DT-related principles contribute to an integrated PM framework for use by South African SMEs?

5.2.2 Research sub-question (RSQ)

RSQ1: Which processes are used by SMEs to design and measure the performance of various business activities, products, internal processes, strategy, or services?

RSQ2: How are DT- and BSC-related PM techniques used by SMEs in the various business activities?

RSQ3: How does the process used for PM and encouragement of design skill sets influence SMEs' business performance and the environment?

RSQ4: How can existing DT- and BSC-related processes in use be merged into an integrative strategy?

The data analysis and findings are presented linked directly to the main research question (RQ) and research sub-questions (RSQs). The findings include interview questions (IQs) and associated tables, smaller conceptual networks with verbatim quotes or words or phrases from interview transcripts and document analysis sources, where necessary, to relate the data (coded) to present emerged categories and themes. The sections that follow begin with the major findings, full narrative transcripts and detailed analysis that can be found in the relevant Appendices.

5.3 WITHIN CASE ANALYSIS FINDINGS

Each participant's demographical information presents the findings first, followed by the interview questions that were asked and responses on activities and processes used when designing and implementing strategy and PM in the enterprise.

5.3.1 Findings: Within case analysis - ENT- A

A summary of the IQs that were asked is provided in the following sections, beginning with the two (2) questions in the general section of Appendix E.

5.3.1.1 Demographic information

General question 1 (GQ1) required the participant to provide the demographic details of the enterprise.

Ent-A is an enterprise that operated in the manufacturing sector, focusing specifically on home textiles as its core business. It has been in existence for more than ten years, employed fewer than 50 staff with external business partners (as part of top management), middle management and numerous independent agents. The owner, as a CEO, held a higher-level degree and a senior position previously in a larger corporate business. The staff expertise ranged from areas of business and strategy (owner-manager), creative, financial, strategy and business (partners/managers), operations (other personnel) and marketing and sales (independent agents).

5.3.1.2 *Perceptions of SME characteristics*

The second general question asked for perceptions of the characteristics of a typical SME to initiate the findings in line with RSQ1 which focused on the organisational and strategical characteristics and activities used to design and implement strategy and PM.

General question 2 (GQ2): What is the business' perception of SME characteristics?

The question was asked initially to seek participant's general opinion on typical traits or features expected of an SME. According to Ent-A, turnover, flexibility (operation and market selection), decision-making, and access reach (niche to product and markets) form part of expected SME characteristics (Appendix F).

Theme 1: operational flexibility and decision-making, access to products and markets selection (non-financial operational and strategic-related) and turnover (financial-related) are traits expected to be associated with an SME.

5.3.1.3 *Strategy and PM activities overview*

The interview questions that were asked are summarised in Table 5.1. These questions sought to identify the characteristics of organisational, structural or strategic activities in the design and implementation of strategy and PM in the enterprise.

Table 5.1: Interview questions

SECTION A

IQ1: Please provide a brief overview of the strategy of your business?

IQ2: How is the strategy deployed? (by frameworks of key processes).

IQ3: Who is part of planning the companies' future (are employees part of it, value their ideas) *What business disciplines and department members are involved in your business strategy team?*

IQ4: In your opinion, is the business strategy supposed to be multi-disciplinary and across the business? (Elaborate). *How do you generate ideas about the business and its strategy?*

Source: Author's compilation

Ent-A expressed the overview of strategy and PM activities in various characteristics of tools, methods, activities and processes that involved distinct PM process phases. Table 5.2 contains summary statements, words or phrases which the interviewee mentioned or that appeared in the documentary analysis.

Table 5.2: Characteristics of strategy and PM activities

Activities and factors for an overview of enterprise strategy	
Related category: Factors and Features of Strategy	Example of summary statements/words or phrases used
<p>Sub-categories: Definition and aim of strategy (vision and mission including stakeholders, products and purpose)</p>	<p>Interview “...quality product; affordable price; people[s] good product experience; creating job[s]; and community empowerment...” to benefit our customer and the people who work for us (Appendix F, paragraph 1 and Document A1-A2, IQ1). Document analysis: Innovation, ethics, lead globally, service, team, knowledge and information, resources, continuous improvement, key performance areas, market-access (Appendix F and Document A1-A2, IQ1)</p>
Formalisation (tools and methods and process)	“...documented strategy for the organisation”; “...reviewed every three months...meaning we did not achieve it...” “to measure strategy achieved or not achieved; to have certain strategies in terms of growth...” (Appendix F, paragraph 2 and Document A2, IQ1, IQ3).
Supporting the strategy definition and development process (<i>leadership, management, stakeholder involvement in processes</i>)	“...business partners; Partners or members; two members; financial accountant; marketing director; two managers; manufacturing manager; showroom manager...” “...do not employ salespeople, we have agents (independent)” (Appendix F, paragraphs 3, 4, 5, 7, 8 and Document A3, IQ1, IQ2 and IQ3).
Activities/steps in conducting strategy definition and development (<i>Process and method</i>)	“...strategy reviewed every three months...”; planning process but; implementation process; values shared; set-up of the structure; setting up strategies, share it our two managers (Appendix F, paragraphs 2, 3, 5 and eDocument A2, IQ3).

Source: Author's compilation

Theme 2: Strategy is based on a mission statement that consists of quality products; price; people - customers and community; and people - staff; lead globally; innovation; organised and coordinated by service, team, ethics, knowledge and information, resources, continuous improvement, key performance areas (KPA's), market-access.

WHY: to benefit customers and staff.

Theme 3: Formalisation is demonstrated by documenting strategy.

WHY: to measure if the strategy achieved or not has growth strategies.

Theme 4: Supporting strategy definition and related processes involve external business partners or internal and external members (with financial, marketing and operational skills).

WHY - BENEFIT: Strategic use of independent agents compared to employing salespeople.

Theme 5: Activities in defining strategy involves the planning, implementation and strategy review processes. The strategy is reviewed quarterly by sharing values and setting up strategies with the set-up structure and leadership.

Ent-A had strong beliefs and opinions on the scope of the strategy across the multiple disciplines of the enterprise, as encapsulated in the supporting quote:

Of course, strategy needs to be both internal and external. So, for external is the market and how one is going to access the market. And internal would be the process in manufacturing specifically and order processing. So... that would be internal to cover all aspects of business, such as financial aspects, manufacturing order processing, quote preparation and external such as marketing and sales (Appendix (Ma) paragraph 6, IQ2).

Theme 6: Business strategy is perceived by operational internal and strategic external aspects of a financial and non-financial nature.

Figures 5.1a, b, c and d present the sample coding of quotes, statements, words or phrases mentioned by the interviewee in Table 5.3 which form part of the open codes (full codes list in Appendix I). The coding aimed to determine the characteristics of preferred tools, methods, processes, people or strategies involved in the designing and implementing of strategy contributing to the sub-categories and category 'Factors and features of strategy'.

SECTION A - INTERVIEW QUESTIONS (and Document analysis where applicable)

Lead-question: Please take me through an overview of the strategy of your business?

IQ1: What is your organisation's strategy? (vision and mission)

Initial coding IQ1 (all participants - interviews only) = 22 codes
Initial coding IQ1 (all participants - document analysis) = 10 codes (added)
TOTAL CODES (IQ1) = 22 CODES

Ent A (12 + 10 = 22 codes)	Interviews only		Open code (Interviews)		Initial coding (Doc Analysis)		Document source
	Initial coding (Gerund codes) interviews				Initial coding (Doc Analysis)		
1	a) community empowerment	f	1. Com: Community service (G000)		1. [000]	f	- Vision (NOT STATED) and Mission (clearly stated) use of words 'high quality, comfortable and stylish products' 'customers globally' 'through innovative, ethical, inspired and world-leading organisation' 'educate our customers on the benefits and care of our products'
1	b) affordable price,	f	2. Cst: Customer stakeholder (Cst)		2. Ethic/ [000]	f	- Diverse industry as part targeted-market
1	c) afford people with good sleeping patterns	f	3. Fin: Financial (Rev)		3. Lead: [globally]	f	- Differentiator from competitors includes efficient service and delivery, committed team , meeting customer requirements
1	d) creating job &	f	4. Form: Formalisation of strategy (Duct)		4. [000]	f	- strategy , top quality products, in-depth knowledge about material and after-sales service.
1	e) good quality bedding	f	5. Freq: Frequency of reviewing (Erad)		5. Team: [000]	f	- Vision (NOT STATED) and Mission (clearly stated) similar as in strategy profile above except for additional words 'provide ultimate customer experience'
1	f) specifying strategies for: Achieving or not achieving	f	6. Prod: Product quality delivery (PQ00)		6. [000]	f	- Core Values includes Business and people growth , Customer focus , Market leadership , Quick response , Innovation , Learning , Community and environmental care , Honesty and accountability , Resource utilisation , Continuous improvement
1	g) people who work for us	f	7. [000]		7. [000]	f	- Strategic goals include targeted key areas and goals set and required resources as well as assigned dates for achievement of objectives.
1	h) not sharing with competitors	f	8. Why: Benefits measuring achievement or non-achievement (Ach-Result)		8. Cst: [000]	f	- Stakeholder engagement and networking as part of marketing , knowledge-gathering and market-access focused strategy
1	i) Benefitting if benefit customer growth and documenting it	f	9. Why: Competitive advantage (CompAdv)		9. [000]	f	- Diverse Products as part of digital product-marketing focused strategy
1	j) growth and documenting it	f	10. Why: Cst: Customer stakeholder (Cst)		10. Mark: [000]	f	
1	k) people who work for us	f	11. Why: Growth (Growth) and			f	
1	l) people who work for us	f	12. Why: Workforce/Staff (W)			f	

Figure 5.1a: Method/Strategy/Tool

INTERVIEW QUESTION 2 (IQ2): How is the strategy deployed? (through frameworks of key processes)

Initial coding (Interviews only) = 4
Initial coding (document analysis) = None
TOTAL CODES (IQ2) = 4

Ent A	Interviews only		Open code (Interviews)		Initial coding (Doc Analysis)		Document source
	Initial coding (Gerund codes) interviews				Initial coding (Doc Analysis)		
1	Setting Target for our employees and everyone	f	1. Setting targets (in-stakeholders)			f	None
2	Calling the process 'Filter it down' and 'break it down' into bits	f	2. Method (process)			f	
3	Translating it into meaningful target and goals clearer	f	3. Translating strategy (targets)			f	
4	Going in detail in other activities of the organisation.	f	4. Translating strategy (operational activities)			f	

INTERVIEW QUESTION 3 (IQ3): Who is part of planning the co's future (are employees part of it, value their ideas)

Initial coding (Interviews only) = 6
Initial coding (document analysis) = 0
TOTAL CODES (IQ3) = 6

Ent A	Interviews only		Open code (Interviews)		Initial coding (Doc Analysis)		Document source
	Initial coding (Gerund codes) interviews				Initial coding (Doc Analysis)		
1 & 2	Involving business partners (planning process)	f	1. Leadership and External stakeholders involvement (partners)			f	
3 & 4	Sharing values & implementation process organisation wide	f	2. Leadership and Internal stakeholder involvement (sharing values)			f	
5	Setting up structure capabilities	f	3. Organization structure (capabilities)			f	
a)	Having members, partner and friend with skills - financial accountant, marketing director	f	4. Stakeholder involvement (family, friend and partners) stakeholder skills (diverse)			f	
	Composition of participants in setting strategy	f				f	
	Setting up strategy	f	6. Setting strategy			f	
	Involving two managers	f	6. Leadership involvement (middle management)			f	

Figure 5.1b: People/Process

INTERVIEW QUESTION 3 (part of question 3): How are the strategies adapted, generated and communicated to managers and employees?

Initial coding (interviews only) = 12 codes
Initial coding (document analysis) = No new addition
TOTAL CODES (IQ3) = 12 codes

Ent A	Interviews only		Open code (Interviews)		Initial coding (Doc Analysis)		Document source
	Initial coding (Gerund codes) interviews				Initial coding (Doc Analysis)		
1	Not using outside consultants to adapt strategy	f	Internal (strategy adapt)			f	
2	Using outside resources for 'implementation'	f	Outsourcing			f	
3	Setting up strategy - internal process	f	Internal (strategy setting)			f	
1	Measuring operational:	f	Operations			f	
2	Everyday	f	Every			f	
3	Internal basis	f	Internal			f	
4	Daily monitoring,	f	Every			f	
5	External basis	f	External			f	
6	Fortnightly or monthly,	f	Every			f	
7	Communicating - not meeting our target then actions stems - 'monthly'	f	Method Every			f	
2	Finding 'what' training is required and 'how' to achieve objective	f	Every			f	
3	Investing in ways to assist	f	Every			f	

Figures 5.1c: Process/Strategy/Method

INTERVIEW QUESTION 4 (IQ4): In your opinion is the business strategy supposed to be multi-disciplinary and across the business, in general. The strategy is developed by yourself [owner]...

Initial coding (interviews only) = 9
Initial coding (document analysis) = 0
TOTAL CODES (IQ4) = 9

Ent A	Interviews only		Open code (Interviews)		Initial coding (Doc Analysis)		Document source
	Initial coding (Gerund codes) interviews				Initial coding (Doc Analysis)		
	Perceiving strategy to the balance with internal and external	f	1. Balanced: internal and external			f	
1	strategy needs be internal & external	f	2. Internal and external			f	
2	external is the market & access to it	f	3. Access to market (external)			f	
3	internal - process in manufacturing (that is, order processing)	f	4. Operations: internal			f	
4	internal covers all aspects of business	f	5. Operations: internal			f	
5	external covers marketing & sales	f	6. Market: external Sales: internal			f	
1	Not employing sales people	f	7. Outsourcing			f	
	Using only agents (on commission)	f	8. Outsourcing			f	
1	Using independent agents to carry a range of our product	f	9. Outsourcing			f	

Figure 5.1d: Opinion/Strategy

Source: Author's compilation

Theme 7: groups together the factors from Figures 5.1a, b, c and d according to open codes classified as tools, methods, processes, activities or strategies and formulating sub-categories.

Figure 5.1a (IQ1): Factors mentioned to describe the overview of strategy or PM include tools and methods. Mission statement (PM-related aspect/BSC-related aspect); KPIs - price (BSC-related financial aspect), people - customers and

community (BSC-related external stakeholder aspects/DT-related user aspect), and people – staff, service, and team (BSC-related internal processes aspect/DT-related user aspect); innovation, and continuous improvement (BSC-related learning and innovation aspect/DT-related innovation aspect); Strategies - lead globally; knowledge and information; ethics; resources; KPAs, market-access; documented strategy; and frequency of strategy review (PM-related aspect). Each one was mentioned once and appeared once in various documentary sources except for innovation and lead globally, which appeared twice and mission statement, which appeared three (3) times. These are classes of open codes which helped to formulate the sub-category defining strategy and operational areas presented in ATLAS.ti™ conceptual networks.

Figure 5.1b (IQ2): Factors mentioned for people and process involved in strategy or PM activities. Setting-up strategy; setting-up structure (PM-related/BSC-related aspects and process) which include external business partners or internal and external members; managers (PM-related and BSC-related external/internal stakeholder aspect); and family and friends (PM-related and BSC-related external stakeholder aspects). All were mentioned and appeared once in document analysis and contributed to formulating the sub-category: Leadership/management support, operational level and strategy planning.

Figure 5.1c (IQ3): Factors used for strategy adaptation, generation and communication to stakeholders include processes, methods and tools. Internal operational strategy setting and adapting (BSC-related internal processes/PM-related aspect); frequency reviews of internal operational and external PM every day, monthly, and bi-monthly (PM-related aspect/BSC-related aspect); communicating - triggers for action on under-performance (PM-related aspect/BSC-related and DT-related aspect) and innovating - finding and investing in ways to improve (BSC-related and DT-related innovation aspect). Among these is outsourcing resources to understand strategy implementation (BSC-related external stakeholder aspect/PM-related aspects).

Figure 5.1d (IQ4): Factors for multi-disciplinary business strategy are presented by views held. Should be internally and externally balanced (BSC-related aspects) and all-operational areas focused (PM-related aspect); should facilitate market-access (PM-related aspect), but the outsourcing of sales activities (BSC-related financial aspect/PM-related aspects) to independent stakeholders (BSC-related

external stakeholder/PM-related aspects) with no internal salespeople emerged unexpectedly. All codes were mentioned once except for outsourcing of sales activities which was mentioned three (3) times.

Most items coded were mentioned once by Ent-A, and some occurred several times when determining the frequency of appearance as presented in a summarised spreadsheet example in Figure 5.2 for IQ1 to IQ4 coding and categorisation (Appendix I).

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
		ENT-A: Transcripts & Document analysis	Raw data gerund coded text	Main Themes and Elements	BSC-related perspective / principle (36 codes)	DT-related phases / principle (8 codes)	PM-related processes involved (41 codes)	PM-related activity (38 codes)	PM-related methods and tool used (23 codes)						
2	INTERVIEW QUESTION 1 (IQ1): Please take me through an overview of the strategy of your business?	Case interview - Ent A	Specifying strategies for - Achieving or not achieving	Measuring achievement	1 Internal process		1 Implementation	1 Execute strategy & PM							
3			community empowerment but not sharing with competitors	Community focused	2 External stakeholder		2 Implementation	2 Execute strategy & PM							
4			afford people with good sleeping	Competitor focused	3 External stakeholder	1 Innovation	3 Implementation	3 Execute strategy & PM							
5			Benefiting benefit customer affordable price	Customer focused	4 External stakeholder		4 Implementation	4 Execute strategy & PM							
6			Documenting strategy	Customer focused	5 External stakeholder		5 Implementation	5 Execute strategy & PM							
7			Reviewing quarterly Growth and documenting it	Financial focused	6 Financial		6 Implementation	6 Execute strategy & PM							
8			good quality bedding	Formalisation	7 Internal process		7 Formulation	7 Alignment	1 Vision & Mission						
9			creating job & people who work for us	Reviewing strategy Growth focused	8 Internal process		8 Reviewing	8 Review Alignment	2 Reviewing Planning						
10			- Vision (NDT STATED) and Mission (Clearly stated) use of words 'high quality, comfortable and stylish products' 'customers globally' 'through innovative, ethical, inspired and world-leading organisation', 'Diverse industry as part targeted-market	Quality, Products' Customers Innovative, Ethical, 'World-leading', Customer benefits Product care	9 Internal process	2 Learning and innovation	9 Formulation	9 Execute strategy & PM	3						
11		Document Analysis - Ent A			15 Internal process	3 Learning and innovation	10 Implementation	10 Execute strategy & PM	5 Ethical World-leading						
12					Internal process External Stakeholders	4 Learning and innovation	11 Implementation								
13					External Stakeholders		12 Implementation								
14					External Stakeholders		13								
15					Internal process		14 Formulation	11 Execute strategy & PM	5 Ethical World-leading						
16					Internal process		15 Formulation	12 Alignment	6 Market-focused						
17					Internal process										

Figure 5.2: Summary example of Ent-A’s PM activities (IQ1 to IQ4) - within analysis

Source: Author’s compilation

In Figure 5.2 the items were identified from keywords in the transcript, statements or phrases (column C of the spreadsheet) into elements (column E of the spreadsheet), to ensure that the analysis remained close to the raw data. For example and activity called ‘community empowerment’ by Ent-A was coded as ‘community-focused’, representing stakeholders outside their daily operations who could be engaged by implementing the strategy of PM processes. Subsequently, it was classed as ‘external

stakeholder' (column G), 'implementation' (column K), and 'execute strategy' (column M). Following the completion of coding and classification to PM processes (represented by 41 codes), methods and tools (23 codes) and activities (38 codes), certain codes revealed a pattern where appearance occurred several times, and key findings emerged as presented in Table 5.3.

Table 5.3: Frequency appearance of coded items for Ent-A (IQ1 to IQ4) - within-case analysis

PM processes (41 codes)	Frequency (# occur)	PM activity (38 codes)	Frequency (# occur)	PM Tool/methods used (23 codes)	Frequency (# occur)
<i>Formulation</i>	15	Setting up strategy	2	Leadership (managers) Financial skills Accounting skills Marketing skills Vision and mission planning Market focus	1
		Adapting strategy	1		1
		Alignment	5		1
		Resource allocation	2		1
		Setting targets	2		1
		Knowledge-gathering	1		1
		Setting goals	1		1
		Planning	1		1
		Sharing values	1		1
		Setting up a structure	1		1
<i>Implementation</i>	24	Executing strategy	17	Ethical World leader team Integrity Core values Quick response Honesty	1
		Translating strategy	2		1

PM processes (41 codes)	Frequency (# occur)	PM activity (38 codes)	Frequency (# occur)	PM Tool/methods used (23 codes)	Frequency (# occur)
		Accessing market	1	Accountability Resource allocation Networking Marketing A process called 'Filter it down' and 'Break it down' into bits Outsourcing sales	1 1 1 1 1 1 3
<i>Review</i>	2	Review	1	Reviewing frequency	1

Source: Author's compilation

Theme 8: Table 5.3. indicates that the 'implementation' phase as represented by 24 out of the 41 codes emerged as crucial to the PM processes of Ent-A, although, the 'formulation' phase follows closely.

Additionally, the findings showcase the emergence of 'executing strategy' by a significant margin of 17 codes out 38 (almost 50%) as critical in the PM activities used by Ent-A. Noteworthy is the outsourcing of sales (with three (3) codes) that emerged as a PM method or tool used by Ent-A when implementing strategy. These findings and other important coded items such as 'leadership (manager)' yielded one code; however, it is a critical role player in the activities of PM. Furthermore, the codes and categories contained in Table 5.3 formed the basis for processing the coding of the data analysis for the remaining questions for Ent-A's data analysis and the four case participants, primarily, to help with the identification of emerging new additional codes and categories. Lastly, the coded items partly contributed to uncovering patterns for emergent categories and themes, and these were imported and presented in ATLAS.ti™ conceptual networks.

5.3.1.4 Patterns of methods, tools, activities and processes

Figures 5.3a and 5.3b depict a sample of smaller ATLAS.ti™ conceptual networks presented with verbatim quotes from participants which assisted in mapping and reducing data (coded) according to patterns of associated codes classified and contributed to developing the main theme(s). The text bubbles present quotations, and the codes bubble presents categories and sub-categories. The uni- and bi-directional arrows indicate one- or two-way relationships and the labels used on the lines present

code relationships and applies to all ATLAS.ti™ concept map figures that follow from this point on.

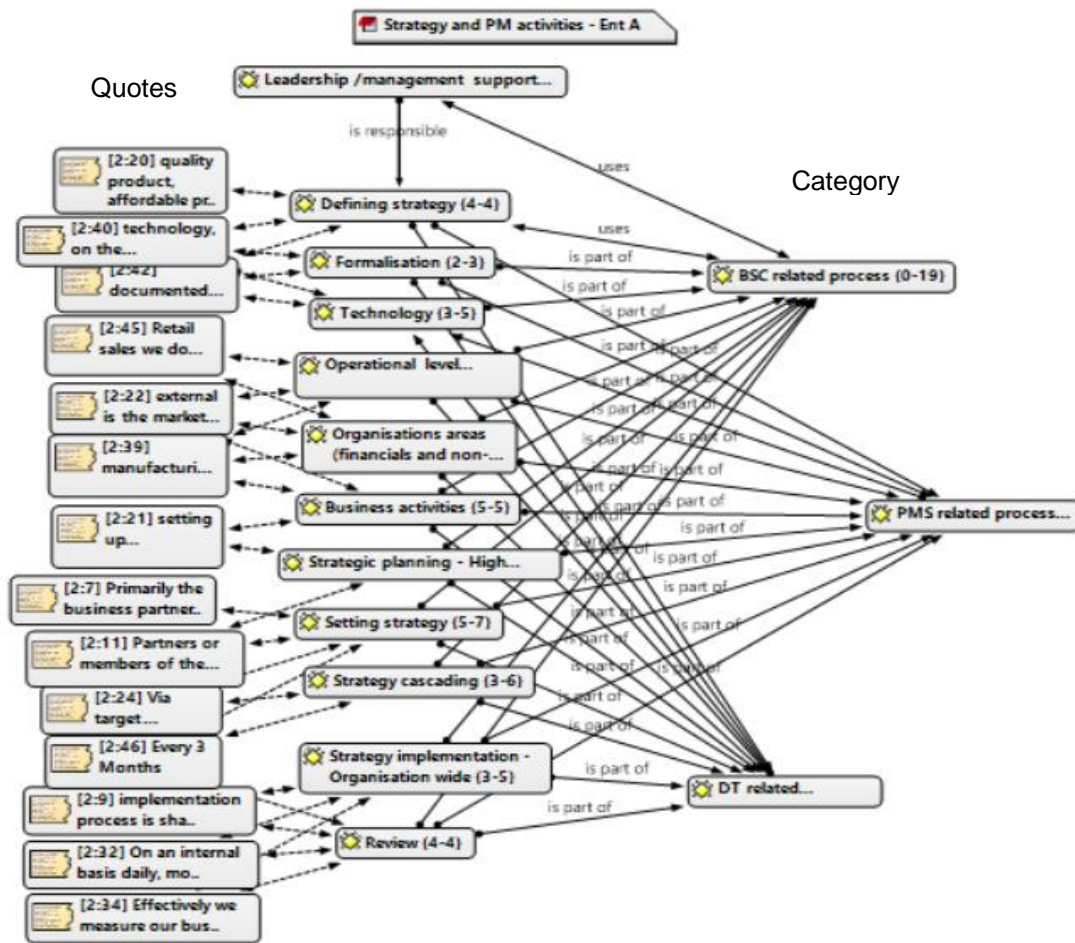


Figure 5.3a: Leadership support linkages (categorised factors)

Source: Author's compilation

Theme 9: in Figure 5.3a, a pattern of open coded quotes are classified of related themes.

Figure 5.3a (IQ1-IQ4): Factors used to describe the overview of strategy related to processes that form the sub-category, defining strategy. Price (BSC-related financial aspect); people - customers and community (BSC-related external stakeholder aspects/DT-related user aspect); people - staff, service, team (BSC-related internal processes aspect); innovation and continuous improvement (BSC-related learning and innovation aspect/DT-related innovation aspect); lead globally; knowledge and information; ethics; resources; KPAs and market-access (PM-related aspect). Figure 5.3a presents conceptual networks with leadership

and management support as a critical theme linked to codes and categories, as shown. Leadership and top management are linked by its support to support strategy and PM activities. They are responsible for defining strategy and its formalisation, use of technology at operational levels and enterprise performance areas for strategic planning, setting, cascading, implementation and review of strategy. These sub-categories are all linked to PM-related process or activities combining BSC- and DT-related processes or aspects (Figure 5.3b).

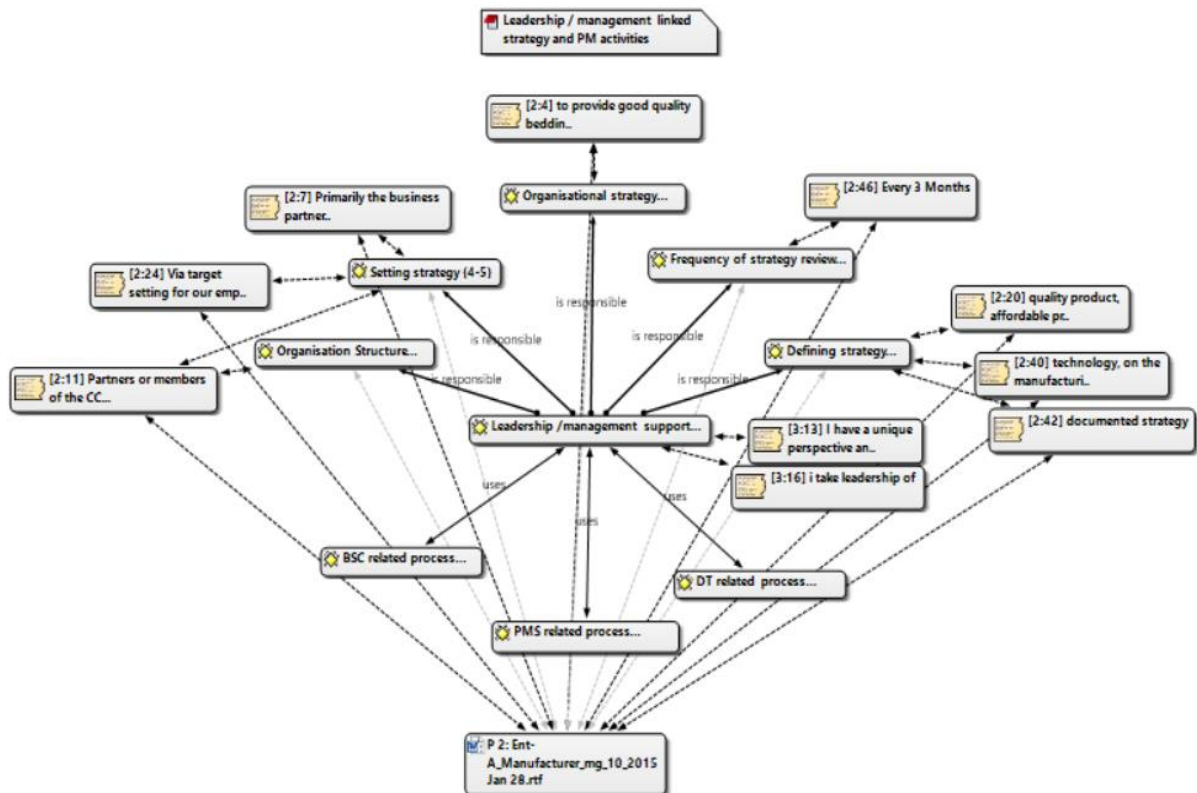


Figure 5.3b: Leadership linked to strategy (categorised factors)

Source: Author's compilation

Theme 10: in Figure 5.3b a pattern of open coded quotes linked with sub-category and some sub-categories' relationships.

Figure 5.3b (IQ1-IQ4) expands the theme, leadership and management support linked to its responsibilities for the categories, organisational structure and frequency of strategy review in addition to the codes identified in Figure 5.3a, and uses PM-related process combining BSC- and DT-related processes or aspects to design and set strategy and PM initiatives.

The two (2) figures represented the traits of activities mentioned by Ent-A and used to realise the set objectives, growth and competitiveness as suggested in the following comment:

...there are specific things and certain strategies in terms of growth, contained in the document we would wish not to be shared with other people in our industry (Appendix (F), paragraph 2, IQ1).

The factors formed part of the categories and themes contributing to developing theory and deemed instrumental to processes of Ent-A's strategy and PM. The following sections present the processes of strategy and PM design and deployment.

5.3.1.5 Analysis and conclusion on strategy and PM overview

The strategy in Ent-A was defined to indicate the purpose of the enterprise and the assurance to sustain itself. The enterprise's strategy was characterised and represented by typical factors concerning BSC-related aspects, classified as key performance indicators (KPIs). These factors were price (economic factor), quality (reputational factor), customer and employees (people factor), community empowerment and creating jobs (surrounding environment factor), primarily to benefit internal and external people. The strategy in Ent-A was growth-oriented with the focus on local and global markets (Appendix F, H, I and J).

5.3.1.6 The process to design and deploy strategy and PM

The next question was about processes and activities used to organise and coordinate the design and deployment of strategy and PM to address the RSQs, as presented in Table 5.4.

Table 5.4: Interview questions concerning designing and deploying strategy and PM

<p>IQ5: Can you describe what processes and activities your business took to decide on what will be required to ensure the business strategy success?</p> <p>IQ6: How are strategies adapted, generated and communicated to managers and employees?</p> <p>IQ7: How and what technology do you incorporate in your business to ensure the achievement of strategic objectives?</p>

Source: Author's compilation

Figure 5.4 contains summarised statements, words or phrases which Ent-A expressed in various tools, methods, activities and process strategies that involved distinct processes or phases in ensuring achievement of business strategy success.

Ent A Coding to guide Code list - Excel

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do...

B2 ENT-A: Transcripts & Document analysis (Raw data gerund coded text)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		ENT-A: Transcripts & Document analysis (Raw data gerund coded text)	Main Themes and Elements	BSC-related perspective / principle (49 codes)	DT-related phases / principle (9 codes)	PM-related processes involved (65 codes)	PM-related activity (54 codes)	PM-related methods and tool used (37 codes)						
2														
42	INTERVIEW QUESTION 5: Can you describe some details of what are the processes and activities that your business took to decide on what will be required to ensure the business strategy success?	Not using outside consultants to adapt strategy				42	Implementation	38	Adapting strategy					
43		Using outside resources for 'implementation'	Resources			43	Implementation			21	Resource allocation			
44		Setting up strategy - internal process		37	Internal process	44	Formulation	39	Setting up strategy					
45		Not employing sales people		38	Financial	45	Implementation	41	Executing strategy	22	Outsourcing sales			
46		Using only agents (on commission)		39	Financial	46	Implementation	42	Executing strategy	23	Outsourcing sales			
47		Using Independent agents to carry a range of our product		40	Financial	47	Implementation	43	Executing strategy	24	Outsourcing sales			
48	INTERVIEW QUESTION 6: How are the strategies adapted, generated and communicated to managers and employees?	Not using outside consultants to adapt strategy	Internal (strategy adapt)			48	Review	44	Adapting strategy					
49		Using outside resources for 'implementation'	Resources			49	Implementation			25	Resource allocation			
50		Setting up strategy - internal process		41	Internal process	50	Formulation	45	Setting up strategy					
51		Measuring operational:	Operations	42	Internal process	51	Implementation	46	Executing strategy					
52		Everyday	Freq			52	Implementation			26	Daily			
53		Internal basis	Internal			53	Implementation							
54		Daily monitoring,	Freq			54	Implementation			27	Daily			
55		External basis	External			55	Implementation							
56		Fortnightly or monthly,	Freq			56	Implementation			29	Monthly Bi-monthly Communication Monthly			
57		Communicating - not meeting our target then actions stems - 'monthly'	Method			57	Review	47	Executing strategy	31				
58		Finding 'what' training is required and 'how' to achieve objective	Freq	43	Internal process	58	Review	48	Executing strategy					
59		Investing in ways to assist	Investing innovation	44	Learning and Innovation	59	Review	49	Executing strategy					
60	INTERVIEW QUESTION 7: How and what technology do you incorporate in your business to ensure achievement of strategic objectives?	Joining network group - benchmarking		45	External Stakeholders	60	Formulation	50	Setting up strategy	32	Networking (benchmarking)			
61		Not using real outside sources for marketing	Internal (strategy adapt)			61	Review	51	Adapting strategy					
62		Using Wegro and Cape Chamber helps - market access		46	External Stakeholders	62	Implementation	52	Executing strategy	33	Networking (market access)			
		Growing sales in Africa and Europe 'piggy bagging' on 'Wegro initiatives' to connect		47	External Stakeholders	63	Implementation	53	Executing strategy	34	Piggy bagging (Networking industry leaders)			

... Coding Example Ent-A IQ1-IQ7

Figure 5.4: Summary example of Ent-A's PM processes, activities and tools (IQ5 to IQ7) - within analysis

Source: Author's compilation

The coding and classification of Ent-A's responses to IQ5 to IQ7 (full details in Appendix I) into PM processes added 24 more codes (now represented by 65 codes). An additional 14 codes were added to the methods and tools (now with 37 codes) and activities added 17 more codes (now represented by 55 codes). Additionally, the networking and monitoring frequency with five codes each emerged under PM method or tool along other mentioned codes appearing less, as presented in Table 5.5.

Table 5.5: Frequency appearance of coded items for Ent-A (IQ5 to IQ7) - within-case analysis

PM processes (65 codes)	Frequency (# occur)	PM activity (55 codes)	Frequency (# occur)	M Tool/methods used (40 codes)	Frequency (# occur)
<i>Formulation 1-4</i> <i>Formulation 5-7</i>	15 3	Setting up a strategy	5	Leadership (managers) Financial skills Accounting skills Marketing skills Vision and mission Planning market focus Networking benchmarking	1
		Adapting strategy	4		1
		Alignment	5		1
		Resource allocation	2		1
		Setting targets	2		1
		Knowledge-gathering	1		1
		Setting goals	1		1
		Planning	1		1
		Sharing values	1		1
		Setting up a structure	1		1
<i>Implementation (1-4)</i> <i>Implementation (5-7)</i>	24 16	Executing strategy	28	Ethical world leader team Integrity Core values Quick response Honesty	1
		Translating strategy	2		1

PM processes (65 codes)	Frequency (# occur)	PM activity (55 codes)	Frequency (# occur)	M Tool/methods used (40 codes)	Frequency (# occur)
		Accessing market	1	Accountability Resource allocation Networking Marketing A process called 'Filter it down' and 'Break it down' into bits Outsourcing sales Daily monitoring Bi-monthly monitoring Monthly monitoring Networking (market access) Networking (industry leaders) Networking (potential agents and clients) Networking (industry retired experts) Blogs emails Website	1 1 1 3 1 1 3 2 1 2 1 1 1 1 1 1 1 1 1 1
<i>Review (IQ1-4)</i> <i>Review (IQ5-7)</i>	2 5	Review	1	Reviewing frequency Monthly reviewing Communication	1 1 1

Source: Author's compilation

Table 5.5 shows that the implementation phase (40 out of 65 codes) and executing strategy (28 out of 55 codes) still emerged as crucial to the PM processes used by Ent-A. In terms of PM methods or tools used, networking and timed-monitoring frequency were mentioned five times each emerging as the main and preferred manner to formulate, implement and review the strategy of Ent-A.

Theme 11: Strategy formulation or design processes of Ent-A involve stakeholders with varied skills at enterprise, strategic and operational levels, as noted in comments from the interviewee:

...primarily the business partners involved in the planning process but implementation process is shared throughout the enterprise; ... and certain values shared within the enterprise partners or members of the CC (Appendix F, paragraphs 3).

Theme 12: At an operational level, the leadership (managers) role would change to a follower role due to the recognition of the manager's limitations, as expressed in the following comments:

...I am not an expert on their field; ... It starts with involving the individuals. My expertise is not sewing, my expertise is fabric, and my expertise is systems; ...but I cannot sew; ... I cannot design that process unless if the person doing it is the expert. (Appendix F, paragraphs 29 and 58)

The findings extracted from ATLAS.ti™ networks for Ent-A strategy design and formulation processes provided a connection of categories such as strategy setting or development with BSC (PM framework) and DT processes by communication tools or methods as depicted in Figure 5.5.

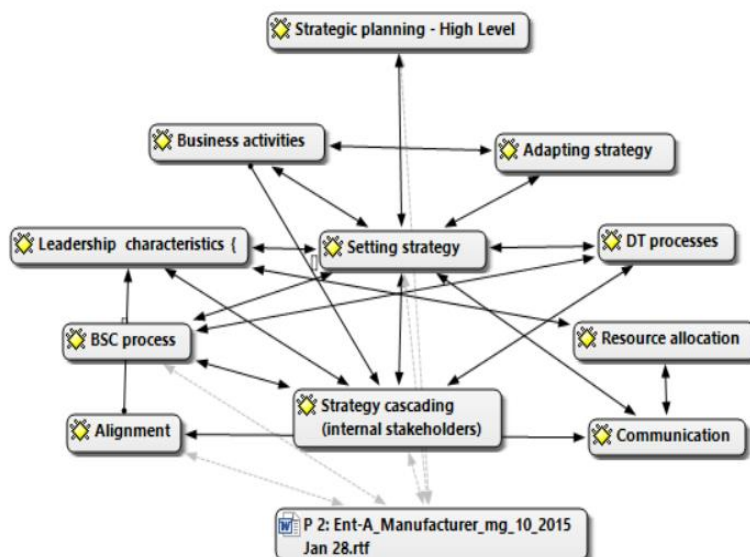


Figure 5.5: Linkage of strategy-setting with BSC and DT processes

Source: Author's compilation

In Figure 5.3, strategy-setting or formulation is interconnected with eight (8) other relevant aspects and tools of the PM processes. The leadership characteristics are shown to have a role in terms of business activities, resource allocation, alignment and communication as tools or techniques used to design and develop strategy, with the adoption of some other BSC-related principles or incorporating DT-related strategies.

Theme 13: Business strategies are adapted, generated and communicated internally by translating the vision and strategy across the enterprise and operational levels, frequently and in an innovatively. The process is guided by the principle known in Ent-A as:

...filter it down and break it down into bits... (Appendix F, paragraph 9)

The process started with leadership (owner-manager) involving crucial area owners (KAO) or stakeholders in business activities, as contained in Ent-A statements:

... the person operating on the cutting table will have target as does the people on the operating machine so that it translated into meaningful target. Obviously, it goes deeper into other activities of the enterprise. (Appendix F, paragraph 9)

...these are the agents' targets that we'd agreed upon, we are in a process now of setting budgets for the financial year, so... independent agent and I will agree on targets on a month-to-month basis. (Appendix F, paragraph 30).

The process was interactive and based on the opinions from the KAOs who were directly involved in daily activities to allow for a shared strategy and clarified roles envisioned for the strategy, as Ent-A explained:

... it is just sitting down with the individuals that are responsible for that area, and saying right this are sort of areas that we think that are important what do you think 'Yes' or 'No' 'Add to that list' 'Take off that list' and then 'what is the easiest way of recording and monitoring', because there is no point in setting up a system that is going to take somebody three hours a day to input the information... (Appendix F, paragraph 41).

Theme 14: The importance of stakeholder involvement to Ent-A was primarily for ensuring inclusivity as part of the PM process, ownership and measurement of own area by KAO. All eight (8) aspects of linkages in Figure 5.3 were, therefore, in play, and noted the DT-related methods (that is, asking questions first) utilised by leadership (owner-manager) to engage, gain consensus and empower the KAO.

Theme 15: The technology at Ent-A incorporate formats both in electronic or technical devices or platforms and knowledge to ensure achieving set strategic objectives, as depicted in Figure 5.6.

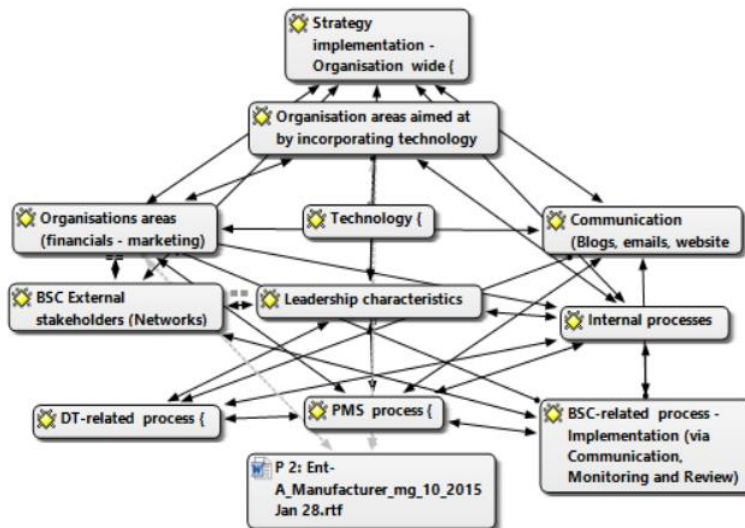


Figure 5.6: Technology linkages with strategy design and deployment process

Source: Author's compilation

Theme 16: In Figure 5.6, technology such as blogs, emails, and websites were the preferred technical tools used for strategy success. Networks such as membership of sector-specific support clusters, government-related institution structures and support, specific network groups and obtaining mentorship were used to acquire knowledge for achieving the strategy.

Theme 17: Ent-A noted the evolving nature of the processes for strategy design or formulation, particularly before implementation due to it evolving by monitoring, reviewing and refining, as encapsulated in the following statement:

...so one need to see it from the concept that no business is going to be the same tomorrow as it is today – it's got to evolve. And in order to evolve is got to be through the design process, be it products, process, systems, people, packaging everything, absolutely everything. (Appendix F, paragraph 83).

5.3.1.7 Analysis and conclusions on the processes to design and develop a strategy

The previous sections identified leadership as being responsible for strategy design, development and setting, therefore, linking the owner-manager to initiation of the processes. The findings showed that some sources for enterprise strategy, performance data, information, processes and areas of PM were documented and

some were not. In this light, the process may begin with leadership looking at data or information analysis in preparation and before beginning with setting and translating the organisational strategy. In the previous sections, the processes followed to design and develop strategy revealed a connection with various PM, BSC- and DT- related aspects including KPAs, therefore, setting a platform for achieving set strategic objectives contingent to business processes and operations.

5.3.1.8 Processes of PM implementation in organisational and operational activities

The next questions asked about the process followed in the implementation of PM using BSC and DT related principles, strategies, processes or techniques in the daily activities of the enterprise and presented in Table 5.6.

Table 5.6: Interview questions concerning the implementation of strategy and PM activities

- IQ8:** How do you monitor customer satisfaction or complaints besides the technology above?
- IQ9:** Can you tell me about the newer frameworks or techniques for business performance measurement (PM) and improvement that your business adopted or invested in recently?
- IQ10:** What do you consider the most important things that were done correctly during the process of implementing the PM framework?
- IQ11:** What are the types and characteristics of the PM systems used in your organisation? Your opinion.
- IQ12:** What are the typical challenges that you are experiencing as and when you are monitoring performance?
- IQ13:** How would you best describe the implementation of the PM framework at your business? Draw a map of the implementation process (enclose an attachment).
- IQ14:** Can you describe the typical operational business processes in your organisation?
- IQ15:** How are the problems identified and solved?

Source: Author's compilation

The responses from Ent-A to the questions in Table 5.6 are presented in the following section on PM processes implementation in enterprises and manufacturing process.

- **Monitoring customer satisfaction or complaints (IQ8)**

Theme 18: In Ent-A, there is no formal system for feedback, so customer satisfaction is monitored informally. Compliments and informal feedback from customers are received via agents or staff, social media and network support groups to access

international clients. It was noted that there is an intention to implement a formal system in the future (Appendix F, paragraph 18).

- **Newer frameworks or techniques for PM and improvement adopted (IQ9)**

Theme 19: Ent-A adapted its home-grown PM system around frameworks such as the scorecard, among others (Table 5.6), acknowledged the adoption of BSC-related principles for monitoring the enterprise, and pointed out:

...it is the principle that we apply; ...so we take the manufacturing section and break it down into that, so Balanced Scorecard is really what you are referring to. It's nobody's formal BSC system it is an internally homegrown system; it is how we monitor our business. (Appendix F, paragraph 20)

- **The most important thing done correctly when implementing the PM process (IQ10)**

Theme 20: At an operational level, employee involvement and expertise lead the design of processes in their main area of performance (KPA), and DT methods such as the 'funnel' were used to overcome limitations and constraints. Ent-A commented:

...I am not an expert on their field; ...Doing lots of design thinking at the cutting phase of the process by employees; ...not having enough capacity means we do more overtime at the cutting than we do at machining; ...anticipating that it might require a capital expenditure, and if it does; ... using a very nice system that [Network government support] has in place, which is about funding companies to facilitate that process. (Appendix F, paragraph 58 to 61).

Types and characteristics of the PM systems used (IQ11)

The PM systems used in Ent-A returned varying findings of manual and automated systems, techniques or tools, as listed in Table 5.7.

Table 5.7: PM systems/techniques/tools used by SME

Type of systems	Tools used
Accounting system	Pastel (external system), Sage
Principles used from established frameworks	Principles of the BSC and DT functions on the ISO9000 system, Deloitte offered system (for continuous improvement programme)
Other systems	Re-Active (sales) and Pro-Active (quotes) systems, CRM systems, Microsoft® Excel (for internal document), Microsoft® Word, server, email, forms (for staff management process)
Social media and web-based	Google, the Internet, websites, social media – LinkedIn, Facebook, Twitter, blogs
Manual	Re-Active (sales), pro-active (quotes) system – not automated and done manually.

Source: Author's compilation

Theme 21: In Table 5.7, the primary PM system for Ent-A was developed in-house (home-grown) adapted from BSC-related principles primarily done on Microsoft® Excel. The system was also complemented by a range of other PM represented by multiple systems adapting various functions and principles from established frameworks, used together as a unit to form their PM systems.

- **The motivation for using PM within Ent-A**

Theme 22: Instead of using more sophisticated and expensive systems as in larger enterprises, Ent-A expressed the benefits for the use of their types of PM systems:

...a 'logical signal' to have a structured-organised way in how the enterprise is monitored; ... it's natural. In other words, having a business that is not monitored in this way it does not make sense; ... is very costly to implement...When I say implement... it is costly not to work in that way it is costly to implement the formalities (Appendix F, paragraph 35, 34 and 54).

- **Structure of the PM systems in Ent-A**

The structure of PM systems used in Ent-A returned varying findings of characteristics and activities involved in its implementation with the enterprise and business processes, as listed in Table 5.8.

Table 5.8: Structure of the PM systems in Ent-A

Characteristics	Activities, tools and methods
Report generated	<ul style="list-style-type: none"> • Income statements, balance sheet • Summary of weekly report
Methods	<ul style="list-style-type: none"> • Involving everybody in the design of this kind of framework • Breaking it down into that, so Balanced Scorecard • Ministering actions that come out to areas monitored • Ensuring achieving is a 'joint situation' on how we are going to • Achieving target is celebrated 'thank you very much we don't need to discuss that anymore.' • Celebrating exceeded targets • Reporting by each agent done monthly via a report - achievement, actual vs target • Comparing per agent, by month, • Its impact on financial year budgets setting processes by month setting processes • Filling in information by a key person daily • Area responsible person fills in the information daily on the server • Comparing two agents to see movements whether positive or negative • Reporting to other business partners to see activity levels
Triggers for actions	<ul style="list-style-type: none"> • Not achieving targets triggers 'what are we doing' and 'what are we going to do.' • Improvements to exceed the target • Continuous improvement programme 'Deloitte offer.'
Business processes using the PM system (IQ14)	<p>External: Marketing, sales Internal: Financial aspects, manufacturing, order processing, quote preparation, training</p>
KPA	<ul style="list-style-type: none"> • Manufacturing section, • Measuring the quote section • Knowing that sales will be low as a low number of quotes • Monitoring all agents' agreed on targets compared to the actual sales figure achieved • Its impact on financial year budget setting processes • Monitoring orders weekly via social media and website, • Monitoring retail • Monitoring hands-on local agent • Agreeing on targets monthly • Monitoring showroom and totals • Monitoring a process to 'take action to improve findings' is: <ul style="list-style-type: none"> ○ Managing exceptions ○ Doing stock takes monthly ○ Reconciling each item bi-monthly ○ Telling us the way external activities are managed to refer to external sales ○ Managing a proactive area for quote preparation ○ Comparing two agents to see movements whether positive or negative
Frequency	Daily, weekly, monthly, bi-monthly and annually

Characteristics	Activities, tools and methods
KPI	No of units produced, value of invoicing, lost time on various processes, reworks rates and absenteeism, number of quotes prepared, the origin of where the lead came from, converting quotes into real sales quickly, monitoring orders, number of orders, the value of the orders, dispatch, returns of own manufactured products due to administrative issues, monitoring out of stock products, material management, administration section, monitoring our social media, number of hits on our website, number of user and sessions, monitoring keyword ranking on Google - monitoring whether we are on page two with the word linen or on page one with the word towelling and these others, reporting system agents' quotations, seeing the number of agent quotes prepared daily, from new clients and amendments made, accepting the value of the quotes, evaluate success rate, comparing year to date basis, or monthly/annual basis

Source: Author's compilation

Theme 23: Table 5.8 shows a blend of characteristics, activities and outcomes resulting from the structure of PM systems, comprising types of reports, KPAs, KPIs, frequency of PM methods, triggers for actions and business processes where the system was implemented.

Theme 24: Problems with implementing the PM system (IQ12)

Ent-A experienced problems using the PM system:

- Designing the system meant investing intensive time
- Keeping up information and input done by individual daily
- Automating as much as we can for calculations on the spreadsheet
- Not being an expert on their field means asking them (stakeholders) to think
- Documentation that goes into that (ISO9000) is very big
- Not documenting and formalising
- Implementing it is very costly
- Implementing, meaning it is costly not to work in that way 'it is costly to implement the formalities'
- Managing all of our stock using Pastel - a little bit complicated.

Theme 25: Difficulties with implementation - manufacturing process operations (IQ12)

Ent-A had problems using the PM system:

- Balancing [the two (2) phases is crucial], because one can spend an incredible amount of money to fix that
- Facilitating the process done by the owner and manager

- Encouraging the individuals to look at that process and to understand where... what we require as an organisation from that process
- Finding better ways to improve finance related issues
- Needing additional cutting blade... so we had to purchase a different kind of cutting system to speed up that process and to facilitate that process.

Theme 26: Benefits of the PM systems in Ent-A (IQ12)

Ent-A commented on the benefits of using the PM system structure:

- Monitoring to ensure ‘fabric stock theoretical’ compared to ‘actual balances’ and ‘finished product theoretical’ compared to ‘actual balances’
- Needing quite tight controls over every single product that has a rating
- Converting fabric bought into different finished products
- Being present is straightforward and aids with the management of the business, also when not physically here.

5.3.1.9 Strategy and PM implementation in business processes: PM, BSC and DT double funnel integration (IQ13, IQ14, IQ15)

The responses from Ent-A on the processes followed at implementation, the findings of data analysis extracted from the ATLAS.ti™ network of maps in Figure 5.5 consolidates the various aspects discussed in the previous sections and provides a summarised display of a holistic-implementation-linkage to include the business processes (activities) and organisational areas.

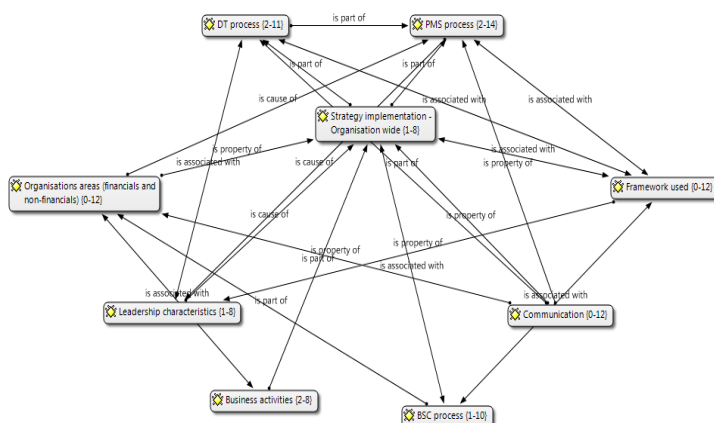


Figure 5.7: Linkages of Strategy implementation processes

Source: Author's compilation

In Figure 5.7, leadership is still shown as part of the enterprise-wide strategy implementation. It is instrumental in ensuring its effectiveness and success, for example, facilitating the activities for all interconnected aspects, areas, activities, systems, processes of PM, BSC-related principles and DT strategies. An elaborate practical demonstration of the implementation process (BSC and DT related aspects) in Ent-A's business process activities is discussed in detail in the sections to follow.

The findings revealed that the processes in Ent-A's operational section were based on close collaboration with knowledgeable personnel who understood the processes. In light of this, a shared communication process effort was made by the participant to try and explain to employees what the enterprise wanted to have particular situations during monitoring operations. The owner-manager explained that the process was 'managed by exception' in terms of "...if we are achieving the target - thank you very much we don't need to discuss that anymore" (Appendix F, paragraphs 33). However, whenever targets were not met, the DT process was initiated with questions such as: "...what are we doing and what are we going to do" (Appendix F, paragraphs 33).

...a person responsible for a certain area then the process involves communicating to find out how can they achieve the objective, what training they required, or connection with client. And we're investing in ways... in how we can assist them to meet those objectives... (Appendix F, paragraphs 12).

Figure 5.8 illustrates PM implementation in Ent-A. The business processes are relevant, together with the linkages and discussions in the previous sections, to expand on the PM implementation processes with PM data and information findings integrating double funnel, to help identify bottlenecks and enable decision-making and improvement in a manufacturing operation.

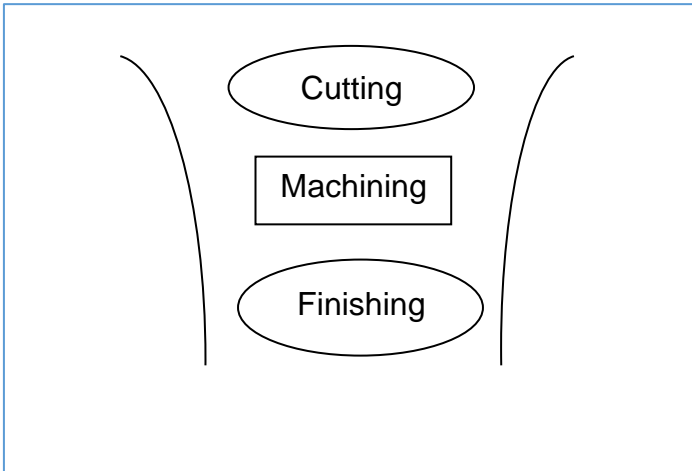


Figure 5.8: Illustration of an ideal situation wanted within the manufacturing operations

Source: Adapted from a drawing by Ent-A during the interview and from the transcript

Theme 27: Based on Figure 5.8, Ent-A explained that DT was very much part of PM at all points of the manufacturing operations (that is cutting, machining, and finishing) using the ‘funnel’ approach. Reliance was placed on KAOs or operators for monitoring of errors or deviations during implementation to ensure correct processing. At this stage, a parallel application of BSC-related and DT strategies were used at specific break-points in the process or activity to test three (3) aspects:

- does the system produce the data expected in terms of error identification;
- what the KAOs may do on error identification; and
- efficiency in improvements.

The findings evaluation, for example, the cutting, machining and finishing KPAs, set objectives compared to actual findings to allow the owner-manager and KAOs to identify problem areas, strengths and weaknesses (variances). The problems or opportunities were addressed first by ‘asking questions’, ‘generating ideas’ and ‘creating solutions’ from which ‘decisions’ are taken and selected, and ‘solutions’ are tested on the identified areas (DT techniques).

In the opinion of Ent-A, the processes allowed easy tracking of performance measurement from KAs to reporting. They helped to determine the ideal situation the enterprise wanted in their operations since their current situation had constraints as presented in Figure 5.9.

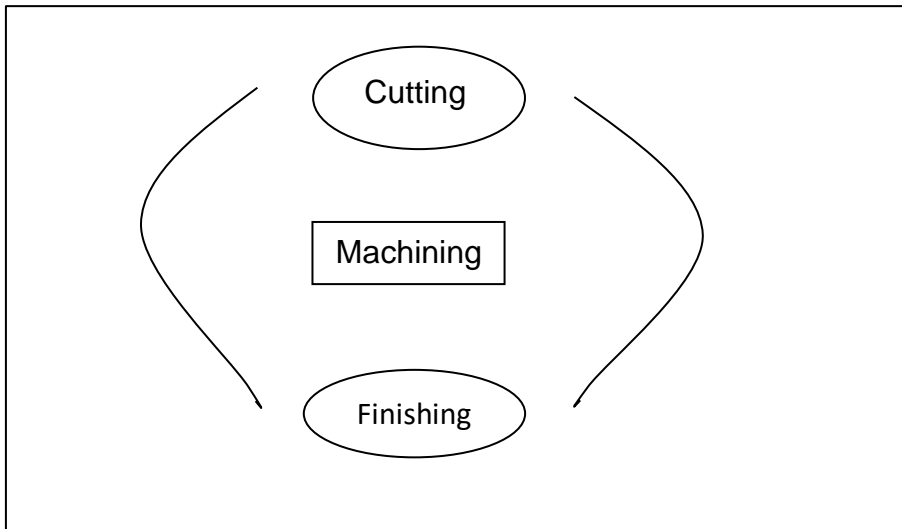


Figure 5.9: Illustration of current manufacturing operations with constraints at cutting and finishing stages

Source: Adapted from Ent-A's drawing during the interview and from the transcript

From Figure 5.9, Ent-A explained that the double funnel identified current constraints at the cutting process, more capacity at machining and, again, constraints at the finishing stage. The feedback from PM data and information triggered the decision-making and improvements processes to achieve the ideal situation, as shown in Figure 5.9. Ent-A commented:

Effectively we measure our business very closely, at an operational level every day. On an internal basis, daily monitoring, external basis fortnightly or monthly. If we are not meeting our target, then actions stem from that, for example on a monthly basis. It is a process of communication. If a person responsible for certain areas then the process involves communicating to find out how can they achieve the objective, what training they required...; ...And we investing in ways in how we can assist them to meet those objectives just using this analogue on how we apply that in those areas (Appendix (Ma), paragraphs 11 and 12, IQ6).

5.3.1.10 Processes of PM implementation – integration of BSC and DT principles

The next questions asked participants about their opinions of PM experiences of processes in the enterprise and its operational activities relative to the integration of the principles of BSC and DT strategies. Results are shown in Table 5.9.

Table 5.9: Interview questions concerning integration of BSC and DT principles in PM implementation

SECTION B

IQ1: How are the processes as described in the topics above used in each business activity to integrate design skills? *To what extent is the organisation aware of the design concept called DT.*

IQ2: To what extent are principles related to the BSC and DT integrated into your business?

IQ3: In your opinion, how does the integration process influence your business environment and performance?

IQ4: In your opinion, how do the BSC- and DT-related characteristics and integration or cooperation influence the performance of SMEs?

IQ5: In your opinion, if you were to integrate design skills into your PM framework, how would you suggest the process should follow in sequence?

IQ6: Any other comment on the topic of this interview guide.

Source: Author's compilation

Table 5.9 sought Ent-A's opinions on integration processes and characteristics of PM and its influences on various areas of the enterprise; the responses are listed in the following section.

Theme 28: Use of processes in business activities and BSC and DT integration (IQ1)

Ent-A viewed the important use of PM processes integrating BSC and DT principles in terms of the following stated business activities and processes:

- Designing product or process.
- Designing process – entails meeting strategic objectives; talking of designing processes and products holistically.
- Definition of DT - defining design an integral part of our thinking and on a day-to-day basis, both of processes and product.
- DT to system - proactivity and effectiveness of 'systems'; it is about being proactive and ensuring that systems ensure that things do not go wrong.
- PM, BSC and DT (engrained in staff) - should help with the monitoring and correcting of result when design is engrained in everyone in the organisation.
- Belief - staff understand designing and believe that everyone in the organisation understands the need for designing.
- Perceive: people differ in adoption: perceiving that some people will adopt it more easily than others.

Theme 29: Principles of the BSC and DT integrated into business (IQ2)

Ent-A believes that the following enterprise areas and activities listed in Table 5.10 are affected by the integration of PM using the BSC-related and DT-related principles.

Table 5.10: Business areas and activities affected by BSC and DT principles

BSC-related principles	DT-related principles
<ul style="list-style-type: none"> • Customer-driven (new design products) • Customer engagement (in process) • Operations-driven (process design) • Staff-driven (innovation) • Organisation driven (Innovation) • Access to market 	<ul style="list-style-type: none"> • Product-related: designing new products • Staff-related creative knowledge merged with the production process • Innovation

Source: Author's compilation

In Table 5.10, the BSC- and DT-related principles were traceable by customer, operations, staff, market-access, products and innovation-related business activities.

Theme 30: Opinions on the influence of PM integration processes to the business environment (IQ3)

Ent-A believed that the integration of PM using the BSC- and DT-related principles influenced the business environment in the following areas of activities:

- Asking questions
- Early awareness of product mismatch with market
- Collaborative process
- Customer and stakeholder involvement
- Designing new products
- Formalisation
- Formal meetings and testing markets
- Clarity of processes
- Having active and vibrant programmes for new products (but process undocumented)
- Creativity of staff
- Sketching idea
- Evaluate, testing the performance of products.

Theme 31: Opinions on BSC- and DT-related characteristics and integration influence on performance in the enterprise (IQ4):

Ent-A believed that the BSC- and DT-related characteristics influenced performance in the enterprise in the following areas:

- Stakeholder suggestions encouraged (involvement)

- Leadership encourage positive mind-set (however people do not like change)
- DT and 'design change' happens from within and in all levels of operations
- Staff motivated and feeling unthreatened and incentivised
- Staff incentivised (not financially) but KPA improvement.

Theme 32: Opinions on integrating PM framework sequence of the process (IQ5)

The views of Ent-A on the sequence of a process for integrated PM framework includes the following:

- Start with PM, BSC and DT related principle core part of business
- PM and integration of BSC and DT related principles allows the business to evolve
- The misperception that Design relates to Product... 'it is not a product.'
- DT is everything in business
- PM by integrating the principles of BSC and DT requires a view that 'no business will be the same tomorrow – it has got to evolve.'
- PM by integrating principles of BSC and DT requires a view that businesses evolve by design process on products, process, systems, people and packaging, among others.
- PM and integration of BSC and DT involved the business holistically
- PM and DT involves everything working together and avoiding silos
- PM depends on its implementation
- Implementing PM, the business has to evolve around it - Revolve, Involve, Evolve
- Implementing the PM and management system as a negative would be a problem since it would mean policing
- Implementing PM and management systems as a way of improvement - yes
- Perceiving that a lot of people would disagree with this opinion but that is not the way it should run

5.3.1.11 Analysis and conclusions on the implementation of a PM framework

The findings and data analysis from Ent-A indicate that implementing PM to measure the KAs of the manufacturing process was undertaken to allow for the real-time identification of bottleneck areas, deviations and inefficiencies and to avoid losing

information during capturing recording and processing. The process was the trigger for collaborative efforts to seek divergent views and merge them to obtain consensus on a better solution for testing. If the idea or solution were deemed effective and efficient, it would then be adopted in the integrated PM system activities. Subsequently, the implementation processes, in this case, may appear to be qualitative-data-driven.

Ent-A demonstrated experience with PM and the integration of DT- and BSC-related principles or strategies to measure performance, and the process flow was briefly explained to consist of various stages. Using their system and adopted principles of BSC and DT techniques, implementation occurred when PM data and information from specific activities were recorded by KAOs (manually). Alternatively, implementation took place in KPAs using the sub-systems in place, then centralising for computerised processing using the in-house developed main PM system monitored by the leadership (owner-manager). In instances where PM was monitored, and there were noticeable improvements, the solution was adopted as a trigger to re-design a process, product or strategy.

The outcome was then to trace the improvement back to the initial stage of the process, highlighting a typical integration of PM system (BSC/DT principles use) and a top-down-bottom-up approach (TD/BU approach). Conclusions may be drawn that Ent-A adopted a non-prescriptive approach, and it was noteworthy that the processes followed the designing, cascading and implementing strategy and PM 'with' all relevant stakeholders. These findings contributed to the finalisation of the coding exercise, indicating the majority of activities of Ent-A's PM and related flow of processes followed. The frequency of the occurrence of the coded item at the implementation stage yielded 185 out of 232 codes, followed closely by the formulation stage, which yielded 31 codes and the review which yielded 16 codes. The full list of coded items for Ent-A (Appendix I) was completed during the data analysis for the remaining four) (case participants and is presented in the sections to follow.

A similar set of the general (GQs) and interview questions (IQs) as shown in Tables 5.1, 5.4, 5.6 and 5.9 and the 32 themes developed from the data analysis of Ent-A in section 5.3 and related sub-sections, were applied to conduct within-case analysis for the remaining four case participants. The table number and IQ will be used for ease of reference without repeating the summary questions.

5.3.2 Findings: Within case analysis - ENT-B

The findings and responses the general (GQs) and interview questions (IQs) for ENT-B as shown in Tables 5.1, 5.4, 5.6 and 5.9 are presented in the next sections.

5.3.2.1 Demographic information

An analysis of the data from GQ1 revealed that Ent-B is an enterprise that operates in a training and consulting sector, focusing specifically on public courses and social media training as its core business. It has been in existence for more than 17 years, employs fewer than 50 staff with the owner and spouse as business partners (as leadership and top management) and other personnel. The owner as a Chief Executive Officer (CEO) held a higher-level degree qualification and a senior position previously in a larger corporate business. The staff complement expertise ranged from areas of finance, strategy and creativity (owner-manager) to business (partner and manager), operations, marketing and sales (other personnel).

5.3.2.2 Perceptions of SME characteristics

The response from Ent-B to GQ2, indicated that being responsive, adaptive, looking for opportunities that larger enterprises do not take, having close relationships with clients and a specialised and expert reputation form part of the characteristic of the business (Appendix F).

Theme 1: close customer-relationships, reputational expertise, specialised knowledge and being responsive, adaptive and looking for market opportunities (non-financial and strategic-related) are characteristics expected to be associated with an SME.

5.3.2.3 Strategy and PM activities overview – Ent-B

In response to IQ1 to IQ3 in Table 5.1, the strategy overview in Ent-B was explained concerning the various business activities and operations undertaken by the enterprise. Figure 5.10 shows the sample coding of quotes, statements, words or phrases mentioned by the interviewee and which appeared in the documentary analysis (Appendix F and I for full transcripts).

SECTION A						
INTERVIEW QUESTION 1 (IQ1): Please take me through an overview of the strategy of your business?						
Initial coding IQ1 (interviews only) = 25 codes						
Initial coding IQ1 (document analysis) = 6 codes (added)						
TOTAL CODES (IQ1) = 31 CODES						
Ent B	Initial coding (Gerund codes) Interviews	25	Open code (Interviews)	Initial coding (Doc Analysis)	6	Document source
	1 2) Knowing most business come from referrals	1	1. Acces	1. Infor	1	- Vision and Mission (NOT STATED) but use of words informative and entertaining 'world class sales training to 'grow customers base' and 'increasing bottom line', and give teams 'performance improvement' skills and 'motivation' for application. - Diverse Products as part of digital product-marketing focused strategy
	1 6) Marketing self to speaking and training	1	2. Access	2. Entertai	1	
	1 6) Writing using social media, blogs	1	3. Access	3. Lead (globally)	1	
	1 3) Communicating to make social media real	1	4. Com: Communication	4. Team	1	
	1 2) Speaking to target audience	1	5. Cus	5. Infor	1	
	1 5) Being in front of audience	1	6. Cus	6. Mark:	1	
	1 3) Running public-speaking oriented product and training people in-house or conferences	1	7. Cus			
	1 7) Training in social media	1	8. Cus			
	1 7) Earning money	1	9. Fin			
	1 7) Involving profession organisations and producing books	1	10. Netw			
	1 7) Joining Training bodies	1	11. Netw			
	1 4) Building Expert reputation for organisation and personal	1	12. Reput			
	1 5) Developing reputation and producing products	1	13. Reput			
	1 3) Doing the hard work for viability	1	14. Teach			
	1 7) Having to use social media	1	15. Tool			
	1 2) Having unique perspective	1	16. Unique			
	1 5) Specialising in social medial training and doing physical networking referrals	1	17. Unique / Netw			
	1 4) Giving strategy and gaining confidence in using social media	1	18. Why:			
	1 4) Taking fear away from people who are afraid of social media	1	19. Why: Cust			
	1 7) Telling truth about social media	1	20. Why: Ethic			
	1 5) Having had a failed business before	1	21. Why: Experie			
	1 4) Building reputation and professional relationships	1	22. Why: Rep			
	1 6) Having reputation of true story about social media and uniqueness	1	23. Why: Rep			
	1 2) Making blog popular strategy (not just set it	1	24. Why: Tool			

Figure 5.10: Strategy overview factors of tools, methods, people and processes

Source: Author's compilation

Theme 2: In Figure 5.10, Strategy is split into long- and short-term perspectives, represented by economic factors (earning money, marketing), product factors (skills specialist, innovation), reputational factors at the enterprise, technical factors (using social media, blogs), relationship factors (joining training bodies, professional organisations, speaking to target audiences) and the personal level of the owner (having had a failed business, telling the truth 'ethics') and people factor (taking the

fear away from people who are afraid of social media); however, the strategy and vision or mission statement was not clearly stated in either the interview or document analysis

WHY: to benefit customers and staff with confidence in using social media.

Theme 3: Formalisation of strategy is not demonstrated by proper documentation, as noted in comments from Ent-B:

...we have in our mind what we want to achieve...we do not have a formal framework; ...I would know how to talk about it...and how to get the example but I would not know how to document it to make it formal. (Appendix F, paragraph 23, 52).

Theme 4: Supporting strategy defining and related processes involves the owner and spouse as business partners, leadership and management (with strategy, creative, marketing and operational skills), and other personnel (with administrative, marketing, operational and creative skills).

WHY - BENEFIT: Personnel to focus on daily operations and management to focus on strategies and thinking aspects of the enterprise (Appendix F, paragraph 5).

Theme 5: Defining strategy involves the planning, implementation and strategy review processes inclusive of all stakeholders (leadership, management, sales and administrative personnel) in the enterprise. The strategy is reviewed quarterly by creative themes using Posters for focus and target-setting, Ent-B commented:

The sales targets are easy...and the office...; [Partner] and I have an office over there... [Personnel] and sales team has an office over there and we run training room over there...all three other places we've got a big 'Poster' about our focus – for our sales strategy to reach that we create a theme for every quarter, and then we play around the themes...so this quarter is 'Mission Impossible'... (Appendix F, paragraph 8 and 9).

Ent-B showed a strong belief in the multiple disciplines of the enterprise strategy, as supported by the quote:

There is a high-level strategy where there's [partner] and I, a daily focus with [administrative personnel] and then there is a regular session with everyone...we focusing on how we going to reach next month's target...and

when we celebrate and everyone else is involved (Appendix F, paragraph 7, **IQ2**).

Theme 6: The strategy of Ent-B is seen to be administrative internal and strategic external perspectives which include financial and non-financial aspects.

Some repeating and emerging new categories and themes were found by coding the quotes, statements, words or phrases mentioned by Ent-B in response to IQ1 – IQ4 and guided by the list of codes in Appendix I to determine the characteristics of preferred tools, methods, processes, people or strategies involved in designing and implementing strategy.

Theme 7: Key factors mentioned to describe the overview of strategy or PM include tools and methods (**IQ1 and IQ4**), namely:

- People involved – high level of management, administrative personnel, sales team and other staff members (BSC-related internal processes aspect/DT-related user aspect);
- Involving profession organisations, training people in-house or conferences – (customers), building expert reputation and producing products (BSC-related external stakeholder aspects/DT-related user aspect);
- Having a unique perspective and using themes with posters (innovation), specialising in social media training and doing physical networking referrals and using informative and entertaining world-class sales training, communication (BSC-related learning and innovation aspect/DT-related innovation aspect);
- Strategies - knowing most business comes from referrals and information (knowledge and information); lead globally; ethics; market-access; KPAs, frequency of strategy review (continuous improvement), although the strategy is undocumented (PM-related aspect).

Each was mentioned once and appeared once in both interviews and various documentary sources, except for customer and market access which were mentioned three (3) times and reputational factors which were mentioned twice with no new codes.

Crucial factors mentioned for people and processes involved in strategy or PM (**IQ2 and IQ4**) were:

- Setting-up strategy and targets (PM-related/BSC-related aspects and process) including the owner and spouse as business partners, leadership, management, and internal personnel (PM-related and BSC-related internal stakeholder aspect). Although, the words, phrases and summary statements of Ent-B may not be the same as other participants, the interpretation of their meaning was associated with the list of codes used to guide the data analysis. There was, therefore, a repetition of codes formulated under the category leadership/management support; operational level; and strategy planning.

Key factors used for strategy adaptation, generation and communication with stakeholders, include processes, methods and tools (**IQ3**), namely:

- Strategy setting and aligning (BSC-related internal processes/PM-related aspect), quarterly frequency reviews of strategy (PM-related aspect/BSC-related aspect);
- Cascading and translating strategy short- and long-term goals in internal operations – setting targets, communicating strategy using posters, themes and notes of summary – monthly (PM-related aspect/BSC-related and DT-related aspect);
- Innovating - finding ways to inform and provide entertaining world-class sales training (BSC-related and DT-related innovation aspect).

Important factors for multi-disciplinary business strategy (**IQ4**), are presented by demonstrated actions, namely:

- Inclusive of all operational area personnel, staff and management - internally (BSC internal process related aspects)
- Involving professional organisations and knowing where most business comes from, referrals facilitate market-access - externally (BSC external stakeholder aspect) and (PM-related aspect).

Most items coded were mentioned or appeared once in transcripts and document data analysis for Ent-B, and some occurred several times (Appendix I). All case participants aggregated codes when determining their classification into the three (3) phases of PM, formulation, implementation and review.

Theme 8: The formulation phase was represented by 15 codes in the PM processes of Ent-B, although, the implementation phase followed closely. Review' appeared once. The category, executing strategy, resulted in 14 codes and alignment with a very low margin. Various other coded items appeared once or twice as the PM method or tool used by Ent-B when formulating and implementing strategy. The code leadership (manager) appeared twice (IQ2 and IQ4) to show its critical role in planning strategy and deployment of PM activities.

5.3.2.4 Patterns of methods, tools, activities and processes

Theme 9: Figure 5.11 shows a pattern of open coded items (IQ1-IQ4) and factors classified and linked with categories of related themes extracted from ATLAS.ti™ conceptual networks under the leadership and management categories. The diagram reflects the supporting role of leadership and management in strategy and PM activities. It links operational levels and enterprise performance areas, strategic planning, setting, cascading, implementation and review of strategy, all of which are linked to PM-related processes or activities combining BSC- and DT-related processes.

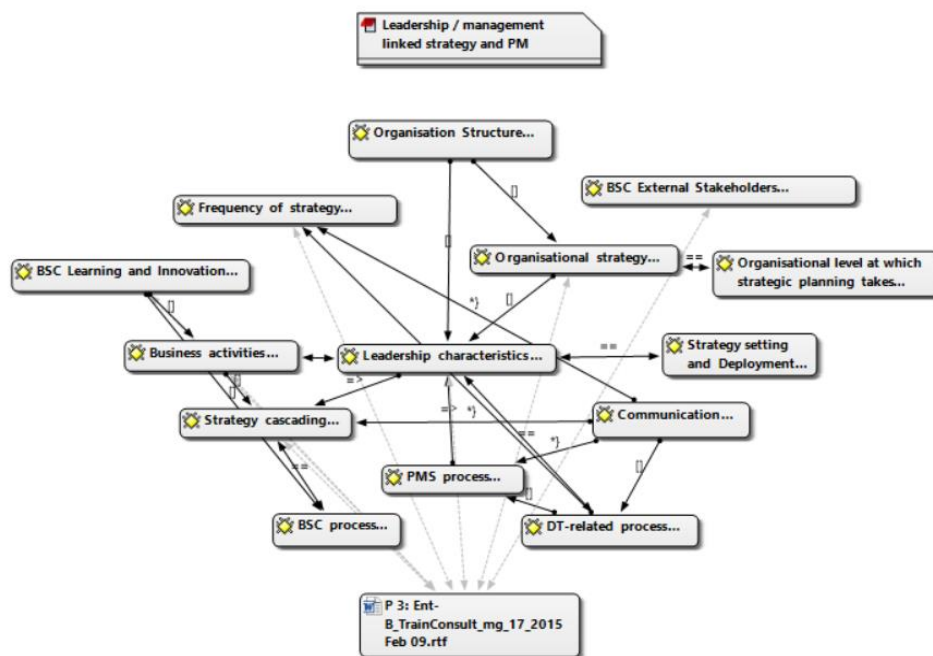


Figure 5.11: Leadership linked to strategy and PM activities (categorised factors)

Source: Author's compilation

Theme 10: in Figure 5.11 a pattern of open coded quotes classified and linked leadership and management support by its responsibility for categories such as the

organisational structure, frequency of strategy review, business activities, communication, strategy cascading. These were identified in PM-related processes combining BSC- and DT-related processes to design and deploy set strategy and PM initiatives.

5.3.2.5 Analysis and conclusion on strategy and PM overview

The strategy in Ent-B was explained concerning the various business activities and operations undertaken by the enterprise. The strategy was split into long- and short-term, represented by economic, product (skills specialist), enterprise and owner and people factors. The strategy in Ent-B was customer-oriented with the focus on empathy with customers and relationships, communication and innovation (Appendix F and I).

5.3.2.6 The process to design and deploy strategy and PM

The responses to IQ5 to IQ7 in Table 5.4, showed that the processes and activities at Ent-B used to organise and coordinate the design and deployment of strategy and PM involved a variety of strategies to ensure achieving business strategy success.

- **Strategy setting – Ent-B**

Strategy-setting and formulating what Ent-B aimed to achieve was initiated by the owner-manager and partner (high-level management) in a break-away and reviewed three (3) times in a year. The design process considered two facets. The long-term strategy setting involved and was limited to high-level management (strategic level) for personal goals. The processes for setting short-term strategy were designed by involvement and regular sessions with other personnel from various functions of the enterprise. The primary focus was on how the enterprise was going to reach the following month's targets, as Ent-B explained:

...the process is more kind of fumbling along, ... as partners, we knew each other...we started talking about goals... what we want to achieve and he does a lot of work when he trains... getting people to visual the future...so you "visual your goal", now "work backward" ...imagine you are at that goal work backwards on what do you need to achieve it. Even if it is huge you just kind of "break it down". So, when we started playing around and our goals are more and more interesting... not extravagant but different...so the future I had imagined seven years ago is totally different to the future I imagine now. (Appendix F, paragraphs 15 and 16).

The coding and classification of Ent-B's responses to IQ5 to IQ7 (Appendix I) repeated codes; however, additional codes such as break-away setup, flipcharts (informal documentation for data collection), summary notes, posters, route-maps each appearing once, emerged and were included in the methods, tools and activities used during the design process of strategy.

- **Translating the vision and strategy in Ent-B**

The short-term strategy was cascaded to operational activities of the enterprise and shared with other personnel and individuals who were responsible for specific areas for their ideas to develop strategy, Ent-B explained:

...we got a structure for driving sales, the sales framework; ... [partner] is aware of the necessity for keeping salespeople focused and motivated; ...every second day we enforce what we trying to achieve...and it makes it easy to communicate; ...we have a model for marketing; ...we know who we are in South Africa; ...and focus on our expertise. (Appendix F, paragraphs 23, 24, 26 and 28).

...that is when we sat down; ...how do we make it work for us to achieve this goal; we can create anything on our own, but we can't make any of it actually make money unless we get someone who is grounded to help us; ...we got two salespeople last year; ... then we got an administrator to come help us, and now we make it more formal...so is less just about us and more about the actual formal structure...we had to work backwards from the big picture... (Appendix F, paragraphs 17 and 18).

...actually we just... very literally we just tell them...this is what we want to achieve; ... we have a formal meeting...we talk about the goal; ...we talk about what we want to achieve...so that they can help us to get to our...so that they benefit with bonuses; ...they contribute ideas; [Administrator] takes notes for the informal meetings. (Appendix F, paragraphs 18 and 19).

Theme 11: The processes in Ent-B were structured formally and used a set of strategy-related information that was readily available. The set strategy to translate the vision was communicated via formal and informal meetings, to seek ideas from other personnel and suggestions on ways to achieve the strategy. The processes worked from divergent to convergent perspectives (a DT concept) asking questions first, to

determine various options to achieve the overall enterprise short-term strategy and vision. The process was guided by the use of themes (as principle) known in the enterprise as ‘Mission Possible’ to gain buy-in to strategy and set objectives, to select the most important objectives iteratively until consensus was achieved.

The strategy formulation or design processes of Ent-B often take place informally and involve stakeholders, valuing their creative skills at an operational level. The interviewee commented:

... they contribute ideas ... the salespeople are still quite new ... [personnel] comes often with new ideas and suggestions of doing things differently ...; ... takes notes for the informal meetings. (Appendix F, paragraphs 19).

Theme 12: At an operational level, the leadership (managers) role changes to a follower role due to the recognition of the manager’s limitations, expressed in the following comments:

... and I am not good at that ...; ... I cannot multitask; ... so [partner] is very good at that and keeps staff going ... (Appendix F, paragraphs 34 and 35).

The findings extracted from ATLAS.ti™ networks for Ent-B strategy design and formulation processes provided a connection of categories such as strategy setting and deployment with BSC (PM framework) and DT processes by communication tools and methods as depicted in Figure 5.12.

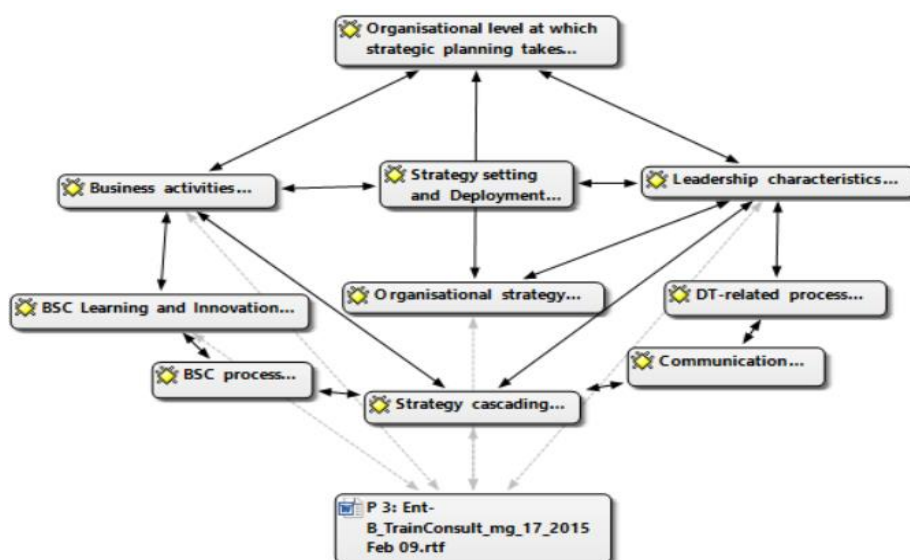


Figure 5.12: Linkage of strategy setting with BSC and DT processes

Source: Author's compilation

In Figure 5.12 strategy setting and deployment is interconnected with leadership and shown to have a role in aspects such as business activities, communication used as

tools or techniques to design and deploy strategy, incorporating BSC- and DT-related principles and processes.

Theme 13 and 14: Business strategies were adapted, generated and communicated internally by strategy setting, development and translation or cascading across the enterprise and operational levels. The stakeholder involvement in Ent-B was primarily to involve all levels of the enterprise and gain consensus. The strategic level was exclusive to management for long term goals and inclusive of other personnel to set short-term goals at an operational level.

Theme 15 and 16: Technology at Ent-B incorporates technical devices or platforms and acquiring knowledge to ensure set strategic objectives are achieved, illustrated in Figure 5.13.

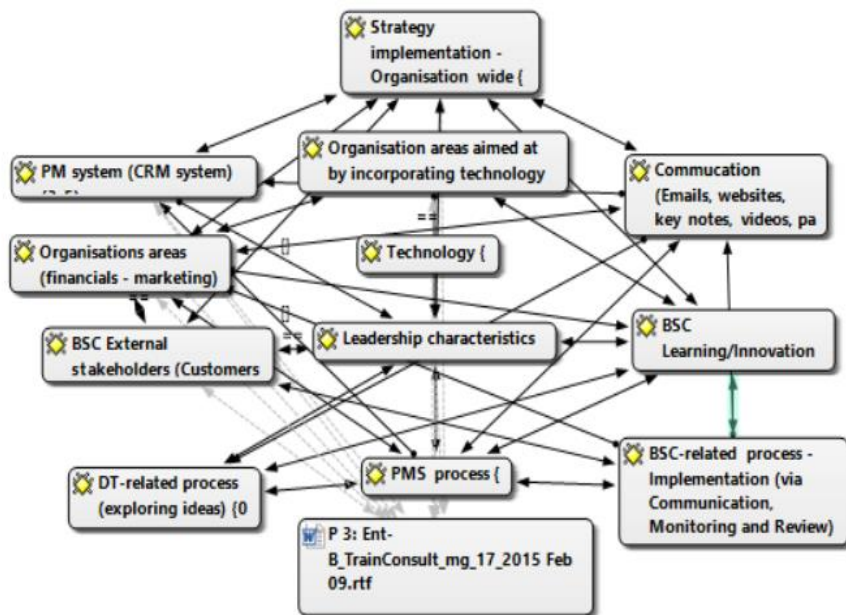


Figure 5.13: Technology linkages with strategy design and deployment

Source: Author's compilation

In Figure 5.13, technology such as emails, websites and blogs were the preferred technical tools used for strategy success. Joining training bodies and networking was used to acquire the knowledge to achieve strategy; Ent-B commented:

...social media works... say to her take this book or this keynote and start market it...listing it on various websites, doing blog posting, social media stuff...doing a video - YouTube...; ...email; ...social media; ...LinkedIn;

referrals from professional colleagues (Appendix F, paragraphs 27, 32 and 22).

Theme 17: Ent-B emphasised the importance to communicate informally and formally, to create a culture of giving staff permission to express different ways of doing things due to the diversity of people, particularly at implementation to encourage innovation and improvisation aligned with achievement of set goals, as encapsulated in the following statement:

... we got to define the culture because we are the business owner and we have to give them permission to be able to work with that and to express the way that is different from us; ...as long as the result is a good product and a satisfied customer, ultimately leads to profit; ...that is what we need to get right. (Appendix F, paragraph 54, 55).

5.3.2.7 Analysis and conclusions on the processes to design and develop a strategy

The findings on strategy setting or development and its cascading for Ent-B showed that a few of the eight (8) aspects of linkages were evident, Figure 5.11:

- Leadership characteristics involve selective inclusion of strategic stakeholders at enterprise and strategic level (owner, spouse and partner) to initiate, identify and communicate strategic issues of the enterprise and restrictive inclusion of other personnel from long-term strategy.
- Processes to strategy success is an all internal and limited to the high-level management team on long-term (at the strategic level), and only short-term strategy was shared with other personnel (at operational level).
- Business activities with a focus on strategic planning.
- The strategy was adapted by a review process conducted every three (3) months (quarterly) for progress to targets on performance measures for the short-term vision.
- Strategy data was the core of the enterprise, built over two decades and readily available.

- Only the short-term strategy was communicated to internal processes that involved and consisted of the owner-manager and a business partner and shared with KAOs.
- Generating ideas for short-term strategy by sitting down with people for their ideas.
- BSC- and DT-related principle processes were evident in Ent-B and displayed integration of the two (2) concepts to some extent. The processes considered asking questions first for ideas (a DT-related aspect), used review, creativity, formulation and communication (DT- and BSC-related aspects) as their tools to go about their strategy setting and translation processes.

The previous sections directly connected leadership as being responsible for strategy design, development and setting and, therefore, linking the owner-manager to initiating the strategy processes. The findings showed the sources for documented and undocumented enterprise strategy and performance data/information, processes and areas of PM. The process may begin with leadership engaging with data/information analysis in preparation for setting and translating the organisational strategy. In the previous sections, the processes followed to design and develop strategy revealed a connection with various PM, BSC- and DT-related aspects, including the KPAs and, therefore, setting a platform for achieving set strategic objectives contingent to business processes and operations.

The findings revealed that the processes followed in Ent-B, particularly the shared short-term strategies, were to inform and occasionally seek ideas to or from other personnel, to raise awareness of strategy and to achieve and gain approval on the most important objectives. Subsequently, with minimal input from other personnel, the importance and awareness of the enterprise's strategy are re-enforced, and there is some form of enterprise learning.

5.3.2.8 Processes of PM implementation in organisational and operational activities

The results of the responses for IQ8 to IQ15 in Table 5.6, showed processes and activities used for the implementation of strategy and PM in Ent-B and are listed in the following section.

- **Monitoring customer satisfaction or complaints (IQ8)**

Theme 18: In Ent-B, the CRM system is used for enquiries and as a communication and information gathering tool. Evaluation forms are distributed for feedback to enable follow-up by salespeople. Connecting with people via social media enables informal recommendations or referrals (Appendix F paragraph 22).

- **Newer frameworks or techniques for PM and improvements adopted (IQ9)**

Theme 19: The PM framework in Ent-B was not described clearly; the response showed that the sales and marketing framework as a structure for sales and communication. Ent-B used themes which were perceived as fun and easy methods to help minimise persistent enquiries about the number of sales made and celebrates small successes.

- **The most important thing done correctly during implementing the PM process (IQ10)**

Theme 20: At the enterprise level, Ent-B relied on having important staff members included the process and used customer involvement, colleagues and social media to launch new products. Learning by trial and error and focusing on own expertise during the process were methods used to overcome limitations and challenges.

- **Types and characteristics of the PM systems used (IQ11)**

The PM systems used in Ent-B returned varying findings of manual and automated systems, techniques or tools, as listed in Table 5.11.

Table 5.11: PM systems/techniques/tools used by SME

Type of systems	Tools used
Accounting system	CRM systems (very comprehensive)
Principles used from established frameworks	Model for marketing, sales framework
Other systems	CRM systems, Microsoft® Word, email, evaluation forms, posters, route-maps
Social media and web-based	Internet, websites, social media – LinkedIn, blogs, Mac 10
Manual	Financial notes, a summary of keynotes, pages for notes on long term goals

Source: Author's compilation

Theme 21: The findings in Table 5.11 returned no clear evidence of a formal PM framework, however, using customer relationship focused PM systems together with various others consisting of social media, some web-based and some manually processed was the preferred system.

- **The motivation for using PM in Ent-B**

Theme 22: Instead of using more sophisticated and expensive systems as in larger enterprises, Ent-B expressed the favourable areas of benefit for the use of their types of PM systems with responses as follows:

...to manage staff information, invoicing, documentation, email ...; ... we use that when we share ideas or explore ideas ... (Appendix F, paragraph 20).

- **Structure of the PM systems in Ent-B**

The structure of PM systems used in Ent-B returned varying findings of characteristics and activities involved in its implementation with the enterprise and business processes, as listed in Table 5.12.

Table 5.12: Structure of the PM systems in Ent-B

Characteristics	Activities, tools and methods
Report generated	Not clearly stated
Methods	Themes for sales strategy
Triggers for actions	Identification of challenges in KPA (trigger decision required)
Business processes using the PM system (IQ14)	External: Marketing, sales Internal: Financial aspects, production, order processing, quote preparation, training
KPA	Sales, production, dispatch, training, customer relationships
Frequency	Daily, weekly, monthly and annually
KPI	Number of units produced, invoicing, number of quotes prepared, origin the lead, converting quotes into real sales quickly, monitoring orders, dispatch, returns of manufactured products due to administrative issues, material management, administration section, monitoring our social media, from new client and amendments made, accept the value of the quotes

Source: Author's compilation

Theme 23: Table 5.12 shows a blend of characteristics, activities and outcomes resulting from the structure of PM systems, comprising types of reports, KPAs, KPIs, frequency of PM, methods, triggers for actions and business processes where the system was implemented.

Theme 24 and 25: Challenges in implementing the PM system (IQ12)

Ent-B experienced some difficulties when using the PM system in process operational areas:

- Monitoring closely (consistently) due to other needs
- Not being able to multi-task
- Not wanting people to feel they are being watched or monitored.

Theme 26: Benefits of the PM systems in Ent-B (IQ12)

Ent-B experienced the benefits of using the PM system structure in processes and areas:

- Monitoring per salesperson tracked daily
- Picking problem area activities
- Checking up on problems and providing support
- Keeping staff going and communicating reassurance

Strategy and PM implementation in business processes: PM, BSC and DT integration in a circular approach (IQ13, IQ14, IQ15)

The data analysis extracted from ATLAS.ti™ network of maps for Ent-B implementation in Figure 5.14 consolidates the various aspects discussed previously to provide a summarised display of a holistic-implementation-linkage to include the business processes (activities) and organisational areas.

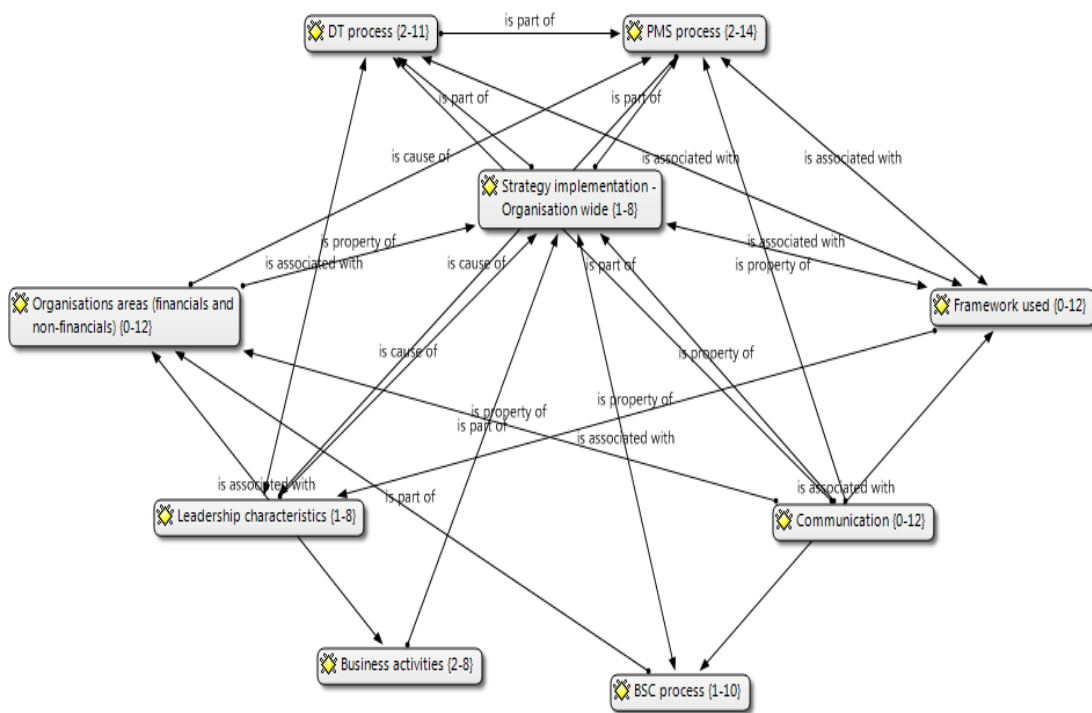


Figure 5.14: Linkages of strategy implementation processes

Source: Author's compilation

Figure 5.14 shows leadership as part of the enterprise-wide strategy implementation and instrumental in ensuring effectiveness and success, for example, facilitating the activities for all interconnected aspects, areas, activities, systems, processes of PM, BSC-related principles and DT strategies. A practical description of strategy or PM implementation process (BSC and DT related aspects) in business process activities was explained with a graphical illustration by participant Ent-B (Figure 5.15).

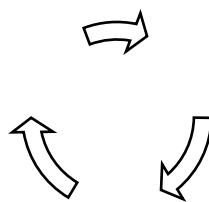


Figure 5.15: BID- circular approach implemented in Ent-B

Source: Adapted from drawing by Ent-B during the interview and from the transcript

The process in Figure 5.15 is called the BID process, a circular process used for various activities. First, to facilitate quick decision-making in the identification of problematic KAs, finding better ways, solutions or improvements on products, services and activities, described by Ent-B:

...even if it is huge you just kind of break it down...; ...what I would like to do is to...; it could be creating like a presentation that kind of models the best way that you want to do things and give people the space that they can do that, but to create a culture rather than a tradition; ...tradition says this is the narrow way you have to behave AND the culture say we are not saying you got to do X Y and Z but this is the result we want; ...we want people to believe, be happy, be satisfied; ...when you create that culture and you communicate a culture; ...we got to give permission to the staff to; ... we got to define the culture because we are the business owner and we have to give them permission to be able to work with that and to express the way that is different from us; ...[partner] is older school, so they are going to express in a certain way... they do not have to do it the same cause they are different people; ...as long as the result is a good product and a satisfied customer... ultimately leads to profit...that is what we need to get right.

Secondly, the reported processes in Ent-B occurred in the customer relations management (CRM) system:

...we use a CRM system which is very comprehensive, and it manages staff information, invoicing, documentation, email and the whole works; ...so we used that, and it works for us; ...we use that when we share ideas or explore ideas; ... with CRM system when someone enquires, they go out to CRM as a lead, then we talk to them we send them information brochures, or we phone them, engage with them; ...if there is a seminar then we talk by email, we send them a proposal, all of that is recorded in the CRM system; ...when they sign up and get an invoice, and then they are client; ...at the end of training there is an evaluation forms; ...and you kind of have, I do not like evaluation forms because...; ...but you do get some information back...then the sales people will follow up; ... If someone is happy, we will respond to that; ...and if someone is unhappy with training, we 100% guarantee a refund, ...we have always had that.

Thirdly, the processes also influenced how leadership made rational financial decisions, which might affect the long-term goals of the enterprise:

The long-term goals... long notes of pages and then summarise the keynote, we print it out and laminate them. I still have two notes from years ago and that are laminated in my purse...and those are my financial notes... whenever I open up my purse, and I want to spend my credit card...you have those little notes that I have in there longer than the credit card is the decision that am about to make now does it match with this goals that I really want...so I keep those together... those kind of things they are small, but they got to be somewhere where you got to encounter like on your computer or wallet. (Appendix F, paragraph 14).

Theme 27: Based on Figure 5.15 and Ent-B's explained implementation of PM, the principles of DT goes into the numbers, KPIs, staff involvement and internal processes (aspects of BSC-related perspectives) It is primarily focused on managing customer relations and how they were designed and implemented to help leadership with decision-making and management to ensure strategically aligned measures and objectives and understand or monitor PM across the enterprise.

5.3.2.9 Processes of PM implementation – integration of BSC and DT principles

The next sections list the findings from Ent-B's response to Table 5.9 questions, IQ1 to IQ5, on opinions of the integration processes and characteristics of PM and its influences on various areas of the enterprise.

Theme 28: Processes in business activities and BSC and DT integration (IQ1)

Ent-B viewed the important use of PM processes integrating BSC and DT principles in terms of the following business activities and processes:

- DT unknown but aware of the concept
- Using design thoughts regularly in the enterprise
- DT is not linear – involved not answering questions but providing experiences.

Theme 29: Principles of the BSC and DT integrated into business (IQ2)

Ent-B believes that the following enterprise areas and activities in Table 5.13 are affected by the integration of PM using the BSC-related and DT-related principles.

Table 5.13: Business areas and activities affected by BSC and DT principles

BSC-related principles	DT-related principles
<ul style="list-style-type: none"> • Stakeholder involvement • Customer experience • Customer engagement • Bringing different styles, communicate and salespeople providing follow-up. Bringing different styles, communicate and salespeople providing follow-up. • Making sure the product fits and providing training to satisfy a specific need or identified customer requirement 	<ul style="list-style-type: none"> • DT involves visuals, hearing sound (communicating more than words) • Giving customers post-it notes to put things into their books and playing with a stress ball. Using our whole body while learning. • Asking stakeholders for input on specifications when developing the tools used

Source: Author's compilation

In Table 5.13, the BSC- and DT-related principles were traceable by customer involvement and experience, tools such as visuals and sounds and products and innovation related internal processes and business activities.

Theme 30: Opinions on the influence of PM integration process on the business environment (IQ3)

Ent-B believed that the integration of PM using BSC- and DT-related principles influenced the business environment in the following areas:

- Giving staff authority for creativity and flexibility concerning customers
- Creating a culture, not a tradition.

Theme 31: Opinions on BSC- and DT-related characteristics and integration influence on performance in the enterprise (IQ4)

Ent-B believed that the BSC- and DT-related characteristics influenced performance in the following areas:

- Creating and communicating a culture to give staff permission not to think formal legalistic way of doing things;
- Defining culture to enable expression of differing new views and workings
- People experiencing processes
- Encouraging innovation
- Communicating lessons and experiences from past success (or not) and encouraging a different approach to use looking forward without restrictive formalities

- Communicating formally but working closely to encourage informality and understanding.

Theme 32: Opinions on integrating the PM framework sequence of the process (IQ5)

Ent-B's views on the sequence of a process for integrated PM framework, include the following:

It involves an improvisation process

...I do not know how to put it in process or to document it...but if I can put it in an anecdote...; ...I would know how to talk about it...and how to get the example but I would not know how to document it to make it formal.

(Appendix F, paragraph 52).

5.3.2.10 Analysis and conclusions on the implementation of the PM framework

Although no formal PM framework was evident in Ent-B, the alternative PM implementation took place in KPAs using a variety of sub-systems consisting of marketing, sales framework and CRM systems. The leadership (owner-manager) and partner monitored KPAs regularly, weekly and monthly. Using the circular approach, the enterprise could narrow down areas and strategies (that is, networking) that were not getting customers and focus on marketing strategies to draw in new clients, listening to what customers say for retention.

The process involved other people and asking and listening to what customers were saying as they had a critical part to play in the process. In the enterprise, DT in the market was expected to always result in some kind of PM. The enterprise atmosphere was that of encouraging awareness of the different pace at which different people pick up understanding. The culture showed tolerance by repeated training efforts and various ways that ensured all stakeholders' understood when the systems were used. Misunderstandings were resolved by practice and meetings, communication and allowing people flexibility to consult with leadership (open-door policy). Although the process was reported to be tricky, Ent-B believed in looking at accounting systems, measuring profit and cash flow to ensure the survival of the enterprise, stock, attendance, performance and having indicators that balance with each other. The processes in this enterprise appeared to be predominantly quantitative-data-driven

with some qualitative aspects. The conclusion may be drawn that Ent-B adopted a non-prescriptive approach; however, the processes followed the design, cascade and implementation strategy and PM '*partially with*' other relevant stakeholders.

5.3.3 Findings: Within case analysis Ent-C

The findings and response to the general questions (GQs) and interview questions (IQs) by Ent-C in Tables 5.1, 5.4, 5.6 and 5.9 are presented in the next sections.

5.3.3.1 Demographic information

An analysis of the data from GQ1 revealed that Ent-C is an enterprise that operates in the business consulting sector, focusing specifically on consulting, training and coaching. It has been in existence for more than five years and employed fewer than 50 staff with business partners (as part of leadership and top management), middle management and other operational personnel. The owner as a Director held a higher-level degree qualification and a senior position previously in larger corporate business. The staff complement expertise ranged across accounting, strategy and coaching (owner-manager), training, sales, strategy and business (partners and managers) operations (other personnel).

5.3.3.2 Perceptions of SME characteristics

The response of Ent-C to GQ2 showed a perception that an SME needs to have dynamic leadership, expertise in sales and customers, be numbers or matrix knowledgeable and, importantly, have payment schedules and multi-skilled employees. (Appendix F).

Theme 1: Dynamic leadership and multi-skilled employees (non-financial, operational and strategic), expertise in sales and customers, knowledgeable in numbers or matrix and payment schedules (financial-related) were characteristics expected from an SME.

5.3.3.3 Strategy and PM activities overview – Ent-C

In response to IQ1 to IQ3 in Table 5.1, the strategy overview in Ent-C was explained concerning the various business activities and operations undertaken by the enterprise. These results are illustrated in Figure 5.16 which shows the sample coding of quotes, statements, words or phrases mentioned by the interviewee and which appeared in their documentary analysis (Appendix I).

SECTION A						
INTERVIEW QUESTION 1 (IQ1): Please take me through an overview of the strategy of your business?						
Initial coding IQ1 (interviews only) = 26 codes						
Initial coding IQ1 (document analysis) = 6 codes (added)						
TOTAL CODES (IQ1) = 32 CODES						
	Initial coding (gerund codes) interviews	26	Open code (Interviews)	Initial coding (Doc Analysis)	6	Document source
Ent C	1 4) Getting bigger clients.	1	1. Cus	1. Teams	1	- Vision (NOT CLEARLY STATED but on website use of words 'helps organizations increase sales' 'improve profitability' 'build championship teams' 'the prerequisite of success'; and Mission use of words 'improve the quality', 'transformation of the marketplace' and 'powerful and effective personal and business development services' - Diverse Products as part of digital product marketing focused strategy includes 'individual mentoring', 'outsourced sales force management', and 'high impact sales and team training services' and work for free until results achieved.
	1 5) Working with clients in the long term	1	2. Cus	2. Spac	1	
	1 4,2) Marketing is key to income not workshops	1	3. Cus	3. Mark	1	
	1 3) Working with client weekly as 'consultant' 'coach' 'sales trainer'	1	4. Cus	4. Dev	1	
	1 converted to customers	1	5. Cus	5. Cus/Spa	1	
	1 4) Working with clients - short term basis	1	6. Cus			
	1 7) Targeting big retailers as customers	1	7. Cus			
	1 3) Doing more training - SMEs	1	8. Cus			
	1 4) Targeting bigger company - Marketing strategy workshops	1	9. Cus			
	1 5) Targeting corporates, call centres, SMEs, Medium sized manufacturing and service companies	1	10. Cus			
	1 7) Existing strategy is on two aspect of business 'sales training' and 'sales staff'	1	11. Fin			
	1 6) Measuring through number of people in workshop	1	12. Fin			
	1 7) Measuring in Rands	1	13. Fin			
	1 2) Running workshops	1	14. Prod			
	1 4) Running workshops - building long-term working relationship	1	15. Prod			
	1 5) Running workshop - once off clients	1	16. Prod			
	1 3) Building a good business	1	17. Rep			
	1 7) Taking on interns as staff	1	18. Spac			
	1 2) Measuring their growth outside the organisation	1	19. Spac			
	1 5) Using people for knowledge production	1	20. Spac			
	1 6) Appraising staff through performance evaluation	1	21. Spac			

Figure 5.16: Strategy overview factors of tools, methods, people and processes

Source: Author's compilation

Theme 2: In Figure 5.16, the strategy is explained by two key aspects of the enterprise (sales training and staff). It is primarily focused on the growth of other enterprises (as clients and customers) by the specialised skills training and complementary products offered. Their strategy was long- and short-term, represented by economic (that is, generating income), product (skills specialist, unique selling point), people (partnerships-building and people-development 'interns as staff') and reputational factors. The other part of their strategy was not income-focused; however, it included working force personal development and growth. The strategy and vision or mission statement were not clearly stated in either the interview or document analysis (Appendix F for full transcripts).

Theme 3: Formalisation of strategy is not demonstrated by proper documentation of strategy, as noted by Ent-C:

...strategy is basically in numbers...that then become the goal... then review the number on a regular basis; ...it should be practical to us; ...it

takes so much time using a formal framework and is not worth it. (Appendix F, paragraph 8, 9).

Theme 4: Supporting strategy defining and related processes involves owner (also friends and family) and partners, leadership and management (with strategy, accounting, coaching, sales, business and training skills) and cascaded to telesales staff (personnel).

Theme 5: Activities in defining strategy involves strategic planning and strategy review processes inclusive of owners, leadership, management and other personnel in the enterprise. Strategic planning and reviews are done annually or quarterly by break-away (method) and flipcharts but no BSC (tools) for ideas. Crucial areas include setting strategy and targets, deployment, prices, quality, customers, staff training, metrics and demonstrating a strong belief in the multiple disciplines of the enterprise strategy. Ent-C:

It starts with [Partner] and I, and we will go away from work to somewhere else, and with a flipchart, we'll start by giving out ideas. We do that at least annually, but try to do it quarterly; ... it is important to keep thinking about it and how you going about to do it; ... once we got our basic ideas down we would then involve other staff and get their input; ... so we do involve the staff, it is important; ... lastly, I would also involve external people; ... for example, colleagues who have knowledge and expertise to make suggestions; ... and then I have an associate who has had his own businesses, ... he likes what we do, and he would come up with ideas; ... I used to talk to my father (who is late now), and he would come up with ideas; ... so various different people; ... I would go along different workshops (Appendix F, paragraph 6, 7 IQ2, IQ3 and IQ4).

Theme 6: The strategy of Ent-C is seen using strategic external and internal perspectives which include financial and non-financial aspects.

The responses of Ent-C to IQ1 to IQ4 guided by the list of codes (Appendix I) for preferred tools, methods, process, people or strategies involved in the designing and implementing of strategy, resulted in the repetition of listed categories and additions of emergent new categories of themes.

Theme 7: Crucial factors mentioned to describe the overview of strategy or PM (IQ1) for process, activities, tools and people (IQ2 to IQ3) involved and multi-disciplinary business strategy (IQ4), are presented:

- Involving people – top management, telesales team, other staff members, colleagues and family (BSC-related internal processes aspect/DT-related user aspect); customers (BSC-related external stakeholder aspect), measuring in Rands (BSC-related financial aspect)
- Involving business associates, staff training (in-house), attending workshops for ideas (BSC-related external stakeholder aspects/DT-related user aspect)
- Using innovation and networking, communication (BSC-related learning and innovation aspect/DT-related innovation aspect)
- Strategies - outsourcing sales activities (BSC-related financial aspect); products (BSC-internal related aspects); frequency of strategy review (continuous improvement) although the strategy is undocumented (PM-related aspect)
- Setting-up strategy, targets or goals and deployment (PM-related/BSC-related aspects and process) include the owner, partners, colleagues, family, top management, other staff and customers or clients (PM- and BSC-related internal and external stakeholder aspect).

The words, phrases and summary statements and interpretation were associated with the list of codes giving a repetition of codes formulated under the category leadership/management support, operational level and strategy planning.

Customer-related aspects were mentioned ten times, staff-related aspects six (6) times, financial related twice, and others once in the interview with Ent-C. Those related to teams, success, marketing, development and outsourcing appeared once in documentary sources but added no additional new codes.

Theme 8: The formulation phase was represented by 13 codes. The implementation phase and review appeared once. The category of Strategy Setting Related Aspects produced 12 codes (formulation phase), one code each for strategy planning (formulation phase), deployment and review and various other codes, including the critical role player, leadership or top management emerged as PM people, methods or tools used by Ent-C when formulating and implementing strategy.

5.3.3.4 Patterns of methods, tools, activities and processes

Theme 9: Figure 5.17 shows a pattern of open coded items (IQ1-IQ4) and factors classified and linked with categories of related themes extracted from ATLAS.ti™ conceptual networks under the leadership and management category. The diagram reflects the supporting role of leadership and management in strategy and PM activities linking organisational areas of performance, strategic planning, setting, cascading, implementation (deployment) and review of strategy, all linked to PM-related activities combining BSC- and DT-related processes.

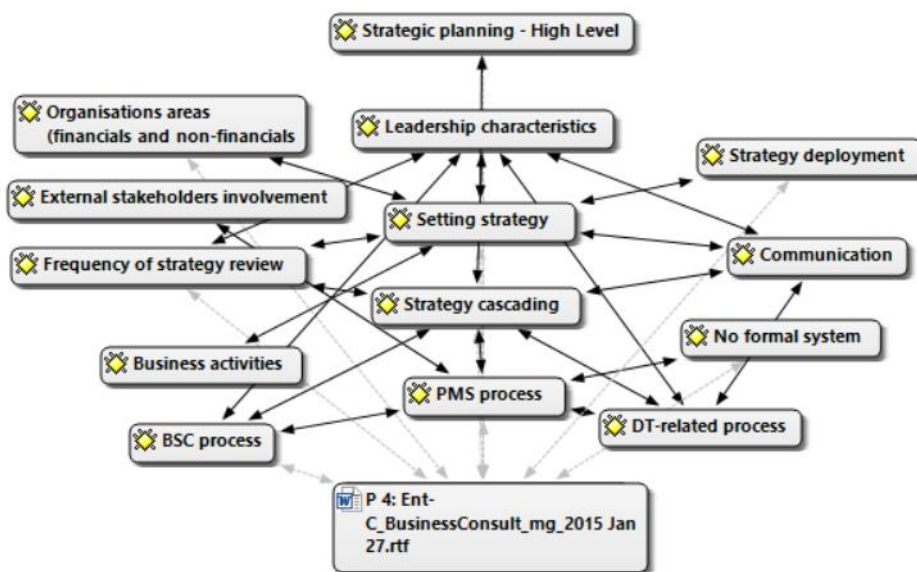


Figure 5.17: Leadership linked to strategy and PM activities (categorised factors)

Source: Author's compilation

Theme 10: in Figure 5.17, a pattern of open coded quotes classified linked to leadership and management support by responsibilities to other categories such as leadership, frequency of strategy review, business activities, communication, and strategy-cascading identified in PM-related process combining BSC- and DT-related processes to design and deploy set strategy and PM initiatives, despite lacking a formal system for PM.

5.3.3.5 Analysis and conclusion on strategy and PM overview

The strategy in Ent-C was explained by two key aspects of the enterprise (sales training and sales staff). It focused primarily on the growth of other enterprises (as clients and customers) by specialised skills training and the complementary products offered. The enterprise strategy was long-term, represented by economic (generating

income), people (partnerships-building and people-development), product (skills specialist, unique selling point) and reputational factors. The strategy in Ent-C was self-marketing-oriented with the focus on building long-term customers and relationships. The other part of their strategy included the personal development and growth of the workforce (including intern training) (Appendix F).

5.3.3.6 The process to design and deploy strategy and PM

The responses to IQ5 to IQ7 in Table 5.4, showed that the processes and activities used to organise and coordinate the design and deployment of strategy and PM in Ent-C involved a variety of strategies to ensure business strategy success.

- **Strategy setting**

Setting strategy in Ent-C considered the vision and mission of the enterprise and how many enterprises (as clients and customers) could be attracted annually by the training offered and the time spent working with the clients. The design process for setting strategy began with the management team (at the strategic level) consisting of the owner-manager and business partner in a break-away (outside the enterprise) to think about strategy importance and how to go about achieving it. In the break-away sessions, flipcharts (informal documentation for data collection) were used to explore strategic details and generate ideas (identification and assessment), a process attempted quarterly but held at least annually, as explained by Ent-C:

...it all start with strategy; actually, it is circular; ...I look at the accounts, at the numbers, and I say what did we make the most profit on; ...I learn that we made a profit on call centres, workshops, consulting; ... we do not make a lot of profit on selling products, it is also irrelevant; ... we had a challenge with collaboration in terms of workshops was costly, was not bringing money. We then use the information to adapt strategy looking forward; ... I also look at my consulting client through attending or being a speaker conference; ... networking never got us a client; therefore, I stopped it; ... so overtime we have narrowed down what we are doing to be sure that we have increase; ... the other process is the sugar CRM process that I used, to be sure that my customers and the past customers are on there, I am talking about customer retention (Appendix F, paragraphs 10 and 16).

The coding and classification of Ent-C's responses to IQ5 to IQ7 (Appendix I) on PM processes resulted in a repetition of listed codes. However, additional codes such as break-away setup, diverse systems to learning, quick access to information (data collection), sugar CRM process, website, a repository of learning and information emerged and were included in the processes, methods, tools and activities used during the strategy design.

- **Translating the vision and strategy in Ent-C**

The short-term strategy was shared with the partner and top management, but there was no clear evidence of the operational activities or functions of the enterprise. The focus was on addressing financially-related aspects and other important areas of strategy, as Ent-C explained:

... for instance, with the sales workshops we agreed that we going to have one a year for each workshop this is how many people we want, we going to increase the price, so then the implementation we set the goal [Partner] has that goal that then become the figure we test and measure; ... so we do not use the metrics of Rands and cents because some company may want to send less [people] than the targeted number; ... and we do that for all the different sections and workshops; ... reason is that workshops are bit complicated; ... so, strategy is basically in numbers; ... that then become the goal, then review the number on a regular basis. (Appendix F, paragraph 8).

... I know the key things we need to look at, market you are aiming at, customers where they are going to come from, staff what they are going to do and where we going to get them, profit, location, planning – you have to have a plan; ... and sales and marketing – what strategy are we going to use ... (Appendix F, paragraph 8).

Theme 11 and 12: The translation of the vision was communicated informally with the owner taking the lead and involving the partners; however, there was no clear description of other personnel involvement.

The findings extracted from ATLAS.ti™ networks for Ent-C strategy or PM design and formulation processes provided a connection of categories such as strategy setting

and deployment with BSC- and DT-related processes by communication tools and methods as depicted in Figure 5.18.

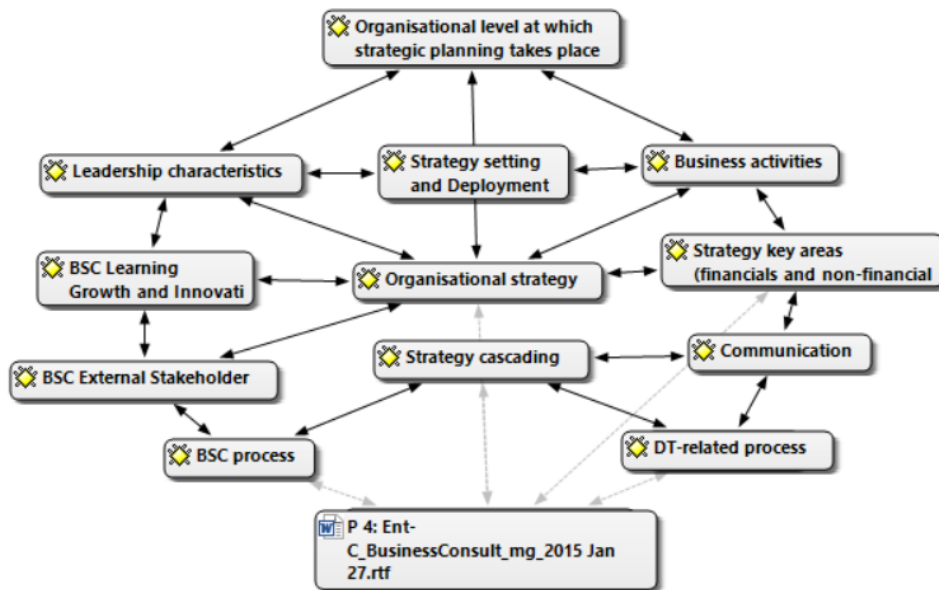


Figure 5.18: Leadership linked to strategy and PM activities (categorised processes).

Source: Author's compilation

In Figure 5.18 strategy setting and deployment is interconnected with leadership characteristics shown to have a role in aspects such as business activities, communication used for techniques or methods to design and deploy strategy incorporating BSC- and DT-related principles and processes.

Theme 13 and 14: Business strategies were adapted, generated and communicated internally by strategy-setting or development and translation or cascading across the enterprise and operational levels. Stakeholder involvement with Ent-C was primarily to engage and gain consensus across all levels of the enterprise at a strategic level. It was exclusive to management for long term goals and included other personnel for setting short-term goals at an operational level.

Theme 15 and 16: Ent-C's technology aspects incorporate technical devices or platforms and acquiring knowledge to ensure that set strategic objectives are achieved, as depicted in Figure 5.19.

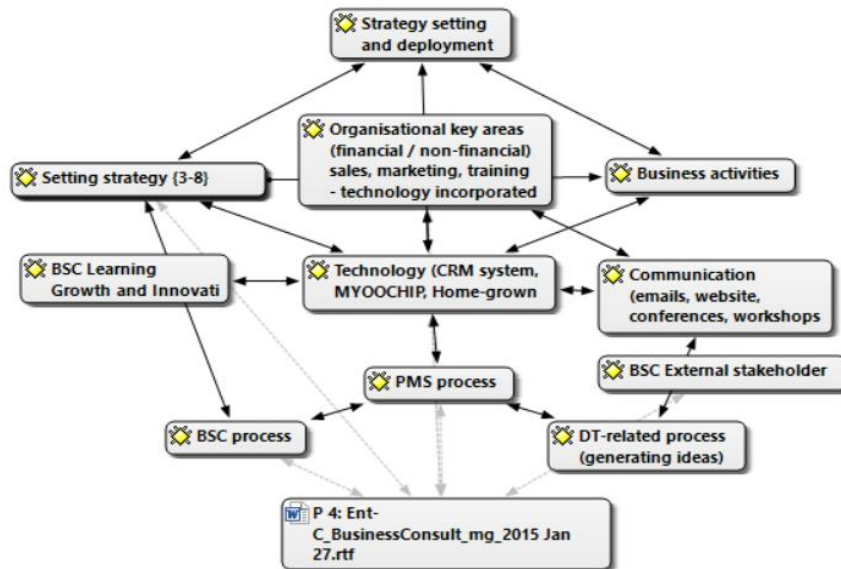


Figure 5.19: Technology linkages with strategy design and deployment processes.

Source: Author's compilation

In Figure 5.19, technology such as websites, emails, CRM systems, other accounting systems and a home-grown PM system was the preferred technical tools used for strategy success. Networking such as attending conferences and workshops was also used to acquire knowledge to achieve the strategy. Ent-C commented:

... there is the accounting system ...; ... sugar CRM keeps contacts with the customers and the leads, ... for email marketing system, websites, Microsoft® Word and other home-grown developed systems that we sell, as a way of learning; ... it is really about having a system that can provide me quickly and easily with access to information; ... a repository of learning and information (Appendix F, paragraphs 14).

Theme 17: Ent-C noted the relationship of the processes for the design or formulation and monitoring, reviewing and refining of, particularly at implementing the marketing strategy, as expressed in the following statement:

... DT in marketing should always results in some kind of performance measurement; ...and if it does not then you do not know what you are thinking about; ...very simple, you need the numbers to know what your thinking is correct before your designing is correct... (Appendix F, paragraph 26).

5.3.3.7 Analysis and conclusion of the processes to design and develop a strategy

The findings on strategy setting or development and its cascading for Ent-C reflected that most of the eight (8) aspects of linkages were evident in terms of Figure 5.18:

- Leadership characteristics involve restrictive inclusion of strategic stakeholders at enterprise and strategic level (owner and partners) to initiate, identify and communicate strategic issues of the enterprise and minimal involvement and inclusion of other personnel at operational activities.
- Processes to strategy success include most of the internal processes shared with high-level management (at a strategic level) with no clear evidence of operational level involvement.
- Business activities with a focus on strategic planning.
- The strategy was adapted by a review process conducted quarterly or annually where necessary.
- Strategy data and information was accessible via a repository from various diverse systems.
- Generating ideas for strategy development, deployment and achievement involved mostly owner and partners.

BSC- and DT-related principle processes were evident in Ent-C and showed the integration of the two (2) concepts to some extent. The processes considered generating ideas (a DT-related aspect), used review, creativity, formulation and communication (DT- and BSC-related aspects) as their tools and techniques to set strategy and translation processes.

The previous sections directly connected leadership or top management (owner and partners) as being responsible for strategy design, development and setting, therefore linking the owner-manager to initiating the strategy processes. The findings returned no evidence of a formally documented enterprise strategy. It appears that the process begins with leadership (owner and partners) engaging with data and information analysis in preparation and before beginning setting and translating the organisational strategy. In the previous sections, the processes followed to design and develop strategy revealed to some extent a connection with various PM, BSC- and DT-related aspects, including the KPAs, and setting a platform for achieving set strategic objectives contingent to business processes and operations.

The findings revealed that the processes followed in Ent-C, particularly initiation and shared strategy, were to seek ideas from partners and management to gain support and approval for the most important objectives, with minimal input from other personnel.

5.3.3.8 Processes of PM implementation in organisational and operational activities

The findings for responses to IQ8 to IQ15 in Table 5.6, and Ent-C's processes and activities used for the implementation of strategy and PM are listed in the following section.

- **Monitoring customer satisfaction or complaints (IQ8)**

Theme 18: In Ent-C, the CRM system is used for customer retention, leads, contact with customers, communication (marketing and sales) and gathering information. Evaluation forms are used for feedback, to monitor staff absenteeism and follow-up by salespeople. Connecting with people using CRM allows monitoring and follow-up on customer enquiries to convert queries to sales (attracting and retaining new customers) (Appendix F paragraph 20).

- **Newer frameworks or techniques adopted for PM and improvement (IQ9)**

Theme 19: The PM framework in Ent-C was not described clearly. The response showed that the CRM system helps with sales and marketing and as a means to report on and document performance. A home-grown PM system, Pastel or Sage online system for accounting, profitability and cash flow is a good method to look at key indicators, know where customers come from and monitor staff responsibilities and for other resource allocations (Appendix F, paragraph 14 to 16).

- **The most important thing done correctly during implementing the PM process (IQ10)**

Theme 20: At the enterprise level, Ent-C relied on having important staff members in the process, using an open door policy and intensified motivation training, allowing staff to learn by trial and error as practice, acknowledging employees' genuine concerns and celebrating small successes (Appendix F, paragraph 17 to 19).

- **Types and characteristics of the PM systems used (IQ11)**

The PM systems used in Ent-C returned varying findings of manual and automated systems, techniques or tools, as listed in Table 5.14.

Table 5.14: PM systems/techniques/tools used by SME

Type of systems	Tools used
Accounting system	Home-grown PM system used (No formal frameworks - takes too much time) Pastel online, Sage online (for profitability), Sugar CRM systems (for marketing and sales)
Principles used from established frameworks	No formal BSC framework (<i>only principles of BSC are used</i>)
Other systems	Microsoft® Word, MYOOCHIP-email, flowcharts, PowerPoint
Social media and web-based	Websites, emails, Facebook
Manual	Simple graphs, evaluation forms (staff management and absenteeism)

Source: Author's compilation

Theme 21: The findings in Table 5.16 showed no clear evidence of a formal PM framework. The preferred system was to use a customer relationship focused PM systems, such as the CRM, together with Pastel and Sage online systems (accounting system) and various other means such as social media, some web-based and some manually processed.

- **The motivation for using a PM system in Ent-C**

Theme 22: Instead of using more sophisticated and expensive systems as larger enterprises do, Ent-C expressed the favourable areas of benefit for the use of their types of PM systems as follows:

... I do not use a scorecard, because we are not big enough going about the scorecard. I am pretty good at numbers on my own; then I would develop my own in-house PM system... it should be practical to us...it takes so much time using a formal framework and is not worth it ... (Appendix F, paragraph 9).

... I look at the accounts, at the numbers and I say what did we make the most profit on; ... from there, learn that we made a profit on call centres, workshops, consulting ... we do not make a lot of profit on selling products;

... We then use the information to adapt strategy looking forward (Appendix F, paragraph 10).

- **Structure of the PM systems in Ent-C**

The structure of PM systems used in Ent-C returned varying findings of characteristics and activities involved in an implementation with the enterprise and business processes, as listed in Table 5.15.

Table 5.15: Structure of the PM systems in Ent-C

Characteristics	Activities, tools and methods
Report generated	Reports for accounting process (looking at numbers) Reports for sales and marketing process Reports for staff management process (look at absenteeism) Variance reports (errors and wrong allocations)
Methods	Ask questions approach
Triggers for actions	Identification of under-performance or challenges in KPA (trigger decision and further training required)
Business processes using the PM system (IQ14)	External: Marketing, sales Internal: Financial aspects, training
KPA	Sales, marketing, training, customer relationships, staff management, Call centres, workshops, consulting
Frequency	Monthly, weekly, quarterly and annually
KPI	Profit, cash flows, stock, attendance, errors, allocations, emails, leads, links, variances, absenteeism, customer feedback, marketing, number of sales workshops, number of people per workshop, price increases, customer retention, client feedback, new clients' performance

Source: Author's compilation

Theme 23: Table 5.15 shows a blend of characteristics, activities and outcomes resulting from the structure of PM systems, comprising types of reports, KPAs, KPIs, frequency of PM, methods, triggers for actions and business processes where the system was implemented.

Theme 24 and 25: Challenges in implementing the PM system (IQ12)

Ent-C experienced some problems when using the PM system in process operational areas and commented:

- Staff lack an understanding of the PM system
- Finding out that there is this lack of understanding at implementation.

Theme 26: Benefits of the PM systems in Ent-C (IQ12)

Ent-C experienced benefits from using the PM system structure in processes and areas and commented:

- Resolving problems by practice, meeting and communication
- Open door policy gives people access to management about PM matters.

5.3.3.9 Strategy and PM implementation in business processes: PM, BSC and DT integration in a circular approach (IQ13, IQ14, IQ15)

The data analysis extracted from the ATLAS.ti™ network of maps on Ent-C's responses about the processes followed at implementation are shown in Figure 5.20. The various aspects discussed in the previous sections are consolidated to provide a summarised display of a holistic implementation linkage to include the business processes (activities) and organisational areas.

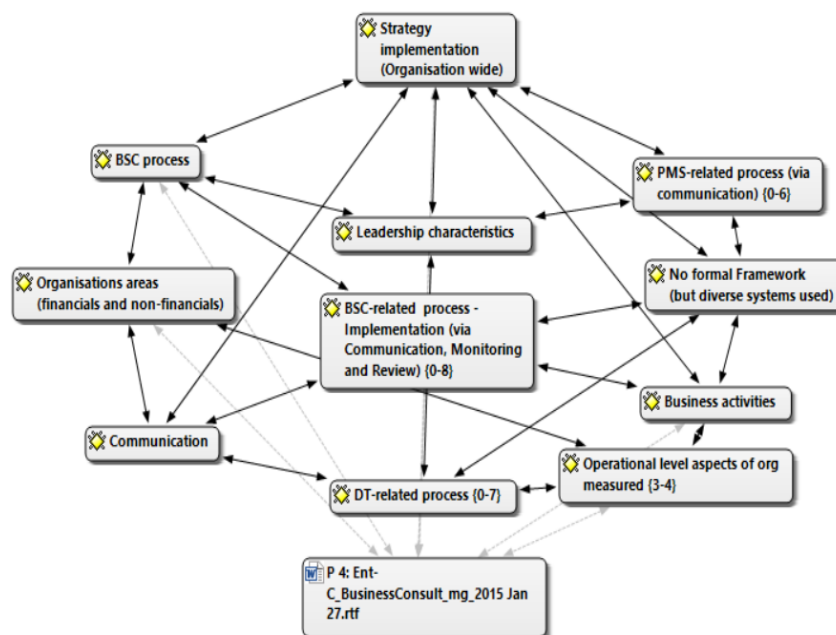


Figure 5.20: Linkages of strategy implementation processes

Source: Author's compilation

In Figure 5.20, leadership is still shown as part of the enterprise-wide strategy implementation. It is instrumental in ensuring its effectiveness and success, for example, facilitating the activities for all interconnected aspects, areas, activities, systems, processes of PM, BSC-related principles and DT strategies. An elaborate practical description of the implementation process (BSC and DT related aspects) in

business process activities is demonstrated in Figure 5.21 to illustrate a process equated to a 'circular' approach according to participant Ent-C.



Figure 5.21: Circular approach implemented in Ent-C

Source: Adapted from a drawing by Ent-C during the interview and from the transcript

Using the circular approach in Figure 5.21, the case enterprise could narrow down areas and strategies (that is, networking) that were not attracting customers and, therefore, focus on marketing strategies to draw in new clients and to retain customers by listening to what customer they say. Ent-C explained the use of DT in the sales and marketing process, starting with the question:

...what is content, what people need, what is marketing strategy, once I got the question that I need answers, research what people need, their emotions and put in place various aspect marketing and also simultaneously workshop together.

Ent-C explained the process applied in sales and marketing:

... we have a sales process and marketing process linked; ... so, that process again it is circular; ... assume that it starts with sending out an email and the other will go into the sugar CRM systems and find link/lead we want as customers; ... from there we monitor what is going on in terms of who opened the emails, who opened them and clicked on them and we talk to them. In terms of CRM, we choose the people we want to connect with; ... we may talk to them or send an email and on the phone is about convincing them to be customer. If yes, perfect; ... if no, we put them back onto the marketing pot. So, it is circular. (Appendix F, paragraph 20).

The process involving accounting included the owner and partners and was perceived as very simple. Ent-C:

The accounting process is driven by Sage, most of it is electronic; ... I simply click, there is not much there; ... the real accounting process is when I run

reports at the end of the month and [Partner] and I sit down and look at the numbers. It is a very simple system, run a report - have a look; ... if it looks okay, fine; ... if it does not then look in detail; ... when it looks like we spend too much on something, looking at variance – are they errors, wrong allocation or a real issue. It is very simple ... (Appendix F, paragraph 21).

The implementation of PM in Ent-C from a staff management perspective involves looking at absenteeism. Only when a staff record looks bad does individual discussion with management take place. From a performance perspective, a set of performance indicators for each employee are measured weekly via a meeting, and underperformance involves sitting down with the individual and taking action, including training for improvement. Design thinking (DT) is used in sales and marketing and often starts with questions such as 'what is content', 'what people need' and 'what is marketing strategy' followed by research involving employees to find solutions-based on feedback received.

The process involved other people, asking and listening to what customers were saying as they had a critical part to play in the process. In the case enterprise, DT in the market was perceived to always result in some kind of PM. The owner-manager explained that DT goes into the numbers, KPIs, staff involvement, internal processes and how they were designed. The approach helped the leadership to ensure that people understood what their key metrics and performance indicators were. The enterprise's atmosphere was that of encouraging awareness of different paces at which different people pick up understanding. The culture demonstrated tolerance by repeated training efforts and various ways that ensured all stakeholders understanding when the systems were used.

Theme 27: Based on Figure 5.21 and Ent-C's explained implementation of PM, the principles of DT goes into the numbers, KPIs, staff involvement, internal processes (aspects of BSC-related perspectives) and how they were designed and implemented to help leadership and management ensure understanding and monitoring of PM across the enterprise.

5.3.3.10 Processes of PM implementation – integration of BSC and DT principles

The next sections list the returned findings from the response to Table 5.9 questions IQ1 to IQ5 by Ent-C on opinions of integration processes and characteristics of PM and its influences on various areas of the enterprise.

Theme 28, 30 and 31: Use of processes in business activities and BSC and DT integration (IQ1)

Ent-C viewed the important use of PM processes integrating BSC and DT principles with the following stated business activities and processes:

- *I think they should, and I do it as much as I can (integration), it is absolutely essential.*
- *DT in marketing should always findings in some kind of PM.*
- *If it does not (result in some PM) then you do not know what you are thinking about, very simple; you need the numbers to know what your thinking is correct before your designing is correct.*

Theme 29: Principles of the BSC and DT integrated into business (IQ2)

Ent-C believes that the following enterprise areas and activities in Table 5.16 were affected by the integration of PM using BSC- and DT-related principles.

Table 5.16: Business areas and activities affected by BSC and DT principles

BSC-related principles	DT-related principles
<ul style="list-style-type: none"> • Customer needs and feedback • Numbers and KPI involvement • Sales and marketing research • Marketing and PM • Internal processes involvement • Learning and innovation 	<ul style="list-style-type: none"> • DT involves asking questions • Research for answers • Research what are people's needs and emotions • Involve other people in the process • Involves internal processes and how they are designed

Source: Author's compilation

In Table 5.16, the BSC-related and DT-related principles were traceable by customer involvement and experience, methods such as asking questions and searching for various solutions to arrive at a suitable answer, the involvement of people and internal processes and financial aspects.

Theme 32: Opinions on integrating the PM framework sequence of the process (IQ5)

Ent-C's views on the sequence of a process for integrated PM framework, include the following:

- Using flow charts and PowerPoint
- Putting down steps (Steps approach)
- Having the current format in the picture (Appendix F, paragraph 27).

5.3.3.11 Analysis and conclusion on implementation of the PM framework

No formal PM framework was evident in Ent-C, PM implementation took place in KPAs using a variety of sub-systems consisting of marketing, sales framework and CRM systems. The leadership (owner-manager) and partner monitored KPAs weekly and monthly. The enterprise was able to focus on areas and strategies (that is, networking) that were not attracting customers using the circular approach and concentrate on marketing strategies to draw in new clients and listen to what customer say for retention.

The process involved other people, asking and listening to what customers were saying as they had a critical part to play in the process. In the case enterprise, DT in the market was perceived to always result in some kind of PM. The enterprise's atmosphere was that of encouraging the awareness of the different speeds at which people understand things. The culture showed tolerance by repeated training efforts and various ways to ensure all stakeholders understood when the PM systems were used. When the PM system was used, misunderstandings were resolved by practice and meetings, communication and allowing people flexibility to consult with leadership (open-door policy). Although the process was reported to be tricky, Ent-C believed in looking at accounting systems, measuring profit and cash flow to ensure the survival of the enterprise, stock, attendance, performance and having indicators that balance each other. The processes in this enterprise appeared to be predominantly quantitative-data-driven with some qualitative aspects. Conclusions may be drawn that Ent-C adopted a non-prescriptive approach; however, the processes followed the designing, cascading and implementing strategy and PM '*partially with*' other relevant stakeholders.

5.3.4 Findings: Within case analysis - ENT- D

Findings and responses to the general questions (GQs) and interview questions (IQs) by Ent-D are provided in Tables 5.1, 5.4, 5.6 and 5.9 and presented in the next sections.

5.3.4.1 Demographic information

An analysis of the data from GQ1 revealed that Ent-D is an enterprise that operates in the wholesale, retail and end-user sector, focusing specifically on cleaning equipment and parts as its core business. It has been in existence for more than 15 years and employs fewer than 50 staff with external business partners (as part of top management), middle management and other personnel. The owner took over the family business as a manager, held a higher-level qualification and previously worked in larger corporate entities and the family business. The range of expertise in the staff included business, strategy and sales (owner-manager), academics in the USA (partners and managers), marketing, sales and audits (other external parties), administration and operations (other personnel) and independent agents (for outsourced sales activities).

5.3.4.2 Perceptions of SME characteristics

Ent D's response to GQ2 returned a perception that an SME needs to be entrepreneurial, react quickly to external forces and offer better services and pricing (Appendix F).

Theme 1: Being entrepreneurial, quickly reactive to external changes and offer better pricing and services (financial and non-financial, operational and strategic features) are were perceived characteristics expected from an SME.

5.3.4.3 Strategy and PM activities overview – Ent-D

Responding to IQ1 to IQ3 in Table 5.1, the strategy overview in Ent-D was explained concerning the various business activities and operations undertaken by the enterprise. Figure 5.22 shows the sample coding of quotes, statements, words or phrases mentioned by the interviewee and which appeared in their documentary analysis (Appendix F for full transcripts).

SECTION A						
INTERVIEW QUESTION 1 (IQ1): Please take me through an overview of the strategy of your business?						
Initial coding IQ1 (interviews only) = 39 codes						
Initial coding IQ1 (document analysis) = 9 codes (added)						
TOTAL CODES (IQ1) = 48 CODES						
Ent D	Initial coding (gerund codes) interviews	39	Open code (Interviews)	Initial coding (Doc Analysis)	9	Document source
	1 2) Having represented (Europe based companies)	f	1. Access	1. Train:	f	- Vision and Mission (NOT CLEARLY STATED but on website use of words 'offer range of innovative products' 'strive for service excellence' 'products are serviced and supported with spares and training' 'import international brands' 'national distribution networks' - NB: Environmental consciousness through new natural technologies innovations - Customer relationship (customer experience building, support and product-education/knowledge development; open communication/transparency and quality product guarantee) -1) External stakeholder aspects (statutory requirements in terms of organisation-partners' relationship) 2) Internal stakeholder aspects (organisation-personnel relationship in terms staff well-being or satisfaction needs and training or development needs) 3) Financial information aspects (source documents and recording of activities) 4) External stakeholders aspects (tax and labour-related compliance requirements) 5) Internal processes (marketing strategies & product information, website visibility) - Stakeholder engagement and networking as part of marketing focused strategy - Diverse products offered as part product focused strategy
	1 3) Doing most of business with Italy Access to diverse markets	f	2. Access	2. Knowl:	f	
	1 4) Having access to wide variety dealing with all major foreign owned international organisations located in South Africa	f	3. Access	3. Capabilities	f	
	3) Gaining access to supply big corporate is problem – Impact of competitors credibility	f	4. Access	4. Transp:	f	
	3) Stopping the strategy due to costs and quality issues resulting from these companies relocating to China	f	5. Why: Challenge	5. Legulat:	f	
	1) Being based in Cape Town has own problems (due to working with distributors):	f	6. Why: Challenge	6. Staff:	f	
	1 2) Holding stock by distributors is not preferred	f	7. Why: Challenge	7. Form:	f	
	1 3) Focusing on your product only is not their priority – no matter much training provided	f	8. Why: Challenge	8. Informa:	f	
	1 4) Giving people training – they come and go not being aware of it	f	9. Why: Challenge	9. Visible: web	f	
	1 1) Having dedicated dealer investing in using a number of our products as core part of the business and training provided	f	10. Why: Challenge			
	2) Not having money for sum is difficult	f	11. Why: Challenge			
	1 3) Selling capital product not on everyday basis	f	12. Why: Challenge			
	1 5) Supplying same product cheaper	f	13. CUS			
	1 3) people coming back to buy though more expensive and reliable.	f	14. CUS			
1 1) Innovating with 'technical products' unknown to other	f	15. Informa				

Figure 5.22: Strategy overview factors of tools, methods, people and processes

Source: Author's compilation

Theme 2: In Figure 5.22, a strategy is explained in terms of internal processes in the enterprise with a focus on market access, turnover and income growth (economic factor) by internal personnel, independent agents, customers and other external parties (people factor), ethical workmanship (reputation factor), diverse, innovative products (product factors), statutory and compliance requirements (regulatory factor). However, the vision or mission statement was not stated clearly in either the interview or the document analysis.

Theme 3: Formalisation of strategy is not demonstrated by proper documenting.

Theme 4: Defining strategy and related processes primarily involves the owner as leadership (with strategy, sales and business skills), inputs from partners (US-based academics), family members and middle management, external parties (marketing, sales, audits) and other personnel (with operations and administration skills).

Theme 5: Activities to define strategy involve planning, implementation and strategy review processes with the owner as leadership and some inclusion of other family, partners, other personnel and audits. Targets are set weekly or monthly for independent agents and internal personnel (Appendix F, paragraph 24). Strategy planning and review is done annually following the audits of management reports as described by Ent-D:

...a management report in a template of an Microsoft® Excel spreadsheet is generated by the administration personnel [...] all the data is filled in at the end of December and is given to the auditors (to check if nothing is going out of line), the reason is during audits at end of the year they highlight abnormal items; ... to see if we are making profit or a loss on a monthly basis and also in comparison to previous year and to check if we are in a right path from a financial point of view (Appendix F, paragraph 23, IQ2).

Ent D showed a strong belief in the multiple disciplines of the enterprise strategy:

...everyone is aware that the organisation does measure performance [Done by Personnel] to ensure that everyone contribute... (Appendix F, paragraph 26, IQ2).

Theme 6: The strategy of Ent-D is seen from strategic external and internal perspectives which include financial and non-financial aspects.

Ent-D's responses to IQ1 to IQ4 guided by the list of codes (Appendix I) for preferred tools, methods, processes, people or strategies involved in the designing and implementing of strategy, resulted in repetition of listed categories and the addition of new categories of themes.

Theme 7: Key factors mentioned to describe the overview of strategy or PM (IQ1) for process, activities, tools and people (IQ2 to IQ3) involved and multi-disciplinary business strategy (IQ4), are:

- Involving people – management, family, partners and other staff members (BSC-related internal processes aspect/DT-related user aspect); customers, independent agents, regulatory institutions (BSC-related external stakeholder aspect), measuring of profitability (BSC-related financial aspect)
- Involving attendance of exhibitions for product-testing and customer feedback (BSC-related external stakeholder aspects/DT-related user aspect),
- Innovating with technical products, networking and communication (BSC-related learning and innovation aspect/DT-related innovation aspect)
- Strategies - outsourcing sales activities (BSC-related financial aspect); innovative products (BSC-internal related aspects); frequency of strategy review (continuous improvement) although the strategy is undocumented (PM-related aspect)
- Setting-up strategy, targets, goals and deployment (PM-related/BSC-related aspects and process) include the owner, partners, family, management, other personnel and customers (PM-related, and BSC-related internal and external stakeholder aspect).

Ent-D's words, phrases, summary statements and interpretation of meanings were associated with the list of codes, and there was, therefore, a repetition of codes formulated under categories leadership and management support, operational and administrative level and strategy planning, setting, executing and reviewing.

Product-related aspects were mentioned 14 times, followed by market access related aspects mentioned seven times. Marketing and innovation-related aspects were mentioned four times, financial and customer-related aspects twice and others once. Those related to transparency, legislation/compliance, visibility on website and others appeared once in documentary sources, but there were no new codes.

Theme 8: The implementation phase was represented by 12 codes crucial to the PM processes in Ent-D. The review phase followed appearing three (3) times and formulation twice. The category Strategy and Target Setting emerged with two codes (formulation phase), one code each for strategy planning (formulation phase), deployment and review, and various other codes including leadership or management which emerged as the PM people, method or tool used by Ent-D when implementing strategy.

5.3.4.4 Patterns of methods, tools, activities and processes

Theme 9: Figure 5.23 shows a pattern of open coded items (IQ1-IQ4) and factors linked with categories and relational themes extracted from the ATLAS.ti™ conceptual networks under the leadership and management category. The diagram reflects the supporting role of leadership and management in strategy and PM activities linked to organisational areas of performance, strategic planning, the setting of targets, cascading and implementation (deployment) and review of strategy, all linked to PM-related process or activities combining BSC- and DT-related processes.

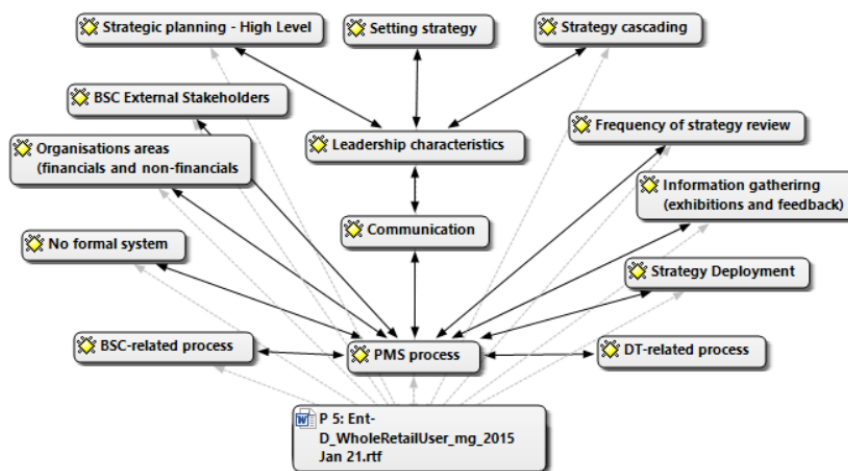


Figure 5.23: Leadership linked to strategy and PM activities (factors categorised)

Source: Author's compilation

Theme 10: in Figure 5.23, a pattern of open coded quotes linked leadership and management support, by its responsibilities to categories such as the leadership, frequency of strategy review, business activities, communication, strategy setting and cascading identified in PM-related process combining BSC- and DT-related processes to design and deploy set strategy and PM initiatives, despite lacking a formal system.

5.3.4.5 Analysis and conclusion on strategy and PM overview – Ent-D

Internal processes explained the strategy in Ent-D with a focus on market access, turnover and income growth (economic factor) by diverse, innovative products (product factors), ethical workmanship (reputation factor), statutory and compliance requirements (regulatory factor) utilising internal personnel, independent agents, and other external parties (people factor). The strategy in Ent-D was diverse products oriented with the focus on market access and relationships with local and global customers (Appendix F).

5.3.4.6 The process to design and deploy strategy and PM

The results for the responses to IQ5 to IQ7 in Table 5.4, showed that the processes and activities used to organise and coordinate the design and deployment of strategy and PM in Ent-D involved a variety of strategies to ensure business strategy success.

- **Strategy setting**

Setting strategy and the design process from an enterprise perspective, began with an annual analysis of data generated in a management report, involving management and administration personnel. The report is sent to auditors for reviews on abnormal items and why variances occur. Profit or loss was determined monthly and compared to the previous year and whether financial targets were met. From the perspective of internal processes, setting a strategy meant varying the targets set with incentives for different personnel and considering KPIs such as turnover, salary, commission and ethical workmanship. For independent agents and other external parties, reviews were done weekly or monthly using contracts for a third-stream income-generating activity (Appendix F, paragraphs 23 to 24). Ent-D explained:

... I would like to react as soon as something happens 'in real-time'; ... motivation for the decision to use this method was as a result of mistakes that impacted compliance with the law issues (such as tax clearance certificates). The company has an accounting system from which data is extracted in real-time, particularly PAYE data done by auditors to ensure it is done on a monthly basis. So, we have been using that system for almost two years now (Appendix F, paragraphs 23, 24 and 25).

The coding and classification of Ent-D's responses to IQ5 to IQ7 (Appendix I) resulted in the repetition of listed codes. However, additional codes such as access to diverse, innovative products and reviews by auditors emerged and were included in the processes, methods, tools and activities used during the design process of strategy.

- **Translating the vision and strategy in Ent-D**

Translating the strategy was shared with other middle management and important operational areas or activities of an enterprise focused on ethical workmanship and other crucial areas of performance, as Ent-D explained:

... from the internal processes – everyone ...; ... representatives ...; ... agents (not directly employed by our organisation and he's got his own

business) in a similar industry but does not get enough business on a monthly or weekly basis; ... technician - on commission as incentives to get more turnover from the workshop, has got two sets of targets to meet; ... ethics (honesty) in business are also important – for example, the senior technicians [Key Personnel] working at the workshop; ... have a contract in place to third stream income-generating activities with other external parties ...; ... from the company performance - spreadsheet is generated by the administration personnel [Key Personnel] data is filled in ...; ... is part of management (front line and front desk); ... she is very capable, competent and watches where items can be sourced ... and very much so part of decision-making ... although structured pricelists exists ... she will often use her discretion (Appendix F, paragraphs 24, 19, 29).

... If short on stock, one staff member will notify or find an alternative to assist that customer, we would offer training based on one of our selling point; ... if client is new, then at no extra charge depending on who you giving training; ... have always told my staff that if they can come up with any way of doing anything better, also if they feel that the system that is in place does not work properly for the following reasons; ... because we small there is a lot of individual decision-making; hopefully, they make a right decision ...” (Appendix F, paragraphs 28, 30).

Theme 11 and 12: The translation of strategy was communicated informally based on data generated from the spreadsheet. The process included the owner taking leadership and involving some middle management and other personnel. Key personnel were empowered in areas of decision-making and to be ethical in daily operational activities.

The findings extracted from ATLAS.ti™ networks for strategy design and formulation processes in Ent-D showed a connection between categories such as strategy setting and deployment with BSC- and DT-related processes using communication tools and methods as depicted in Figure 5.24.

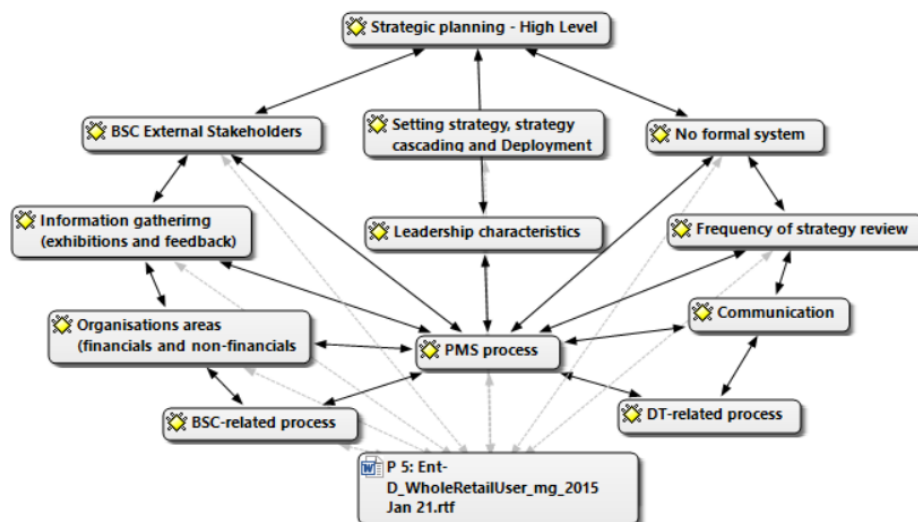


Figure 5.24: Leadership linked to strategy and PM activities (categorised processes)

Source: Author's compilation

In Figure 5.24 strategy setting and deployment is interconnected with leadership characteristics shown to have a role in aspects such as organisational areas and other business activities, communication used as tools or techniques to design and deploy strategy incorporating BSC- and DT-related principles and processes.

Theme 13 and 14: Business strategies were adapted, generated and communicated internally by setting strategy or development, translation or cascading across the enterprise and operational level. The stakeholder involvement in Ent-D was primarily to evaluate alignment with achieving financial targets, detect abnormal items and variances, determine monthly profits or losses and comparisons to the previous year.

Theme 15 and 16: Ent-D's technology incorporates technical devices or platforms and acquiring knowledge to ensure achieving set strategic objectives, as depicted in Figure 5.25.

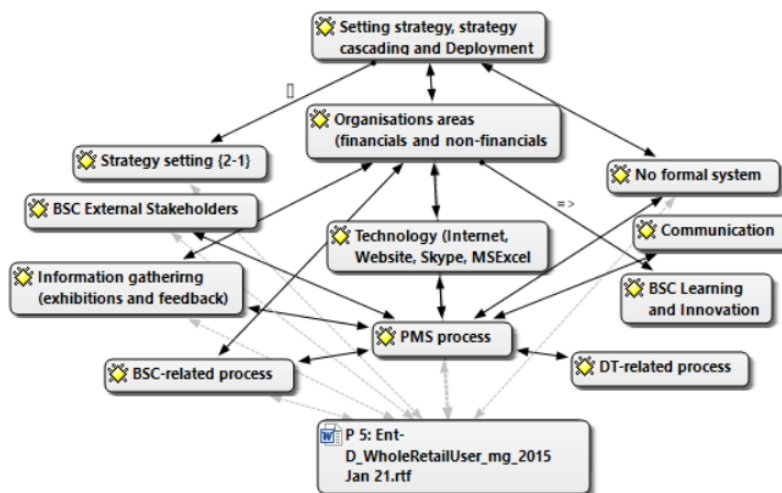


Figure 5.25: Technology linkages with strategy design and deployment aspects

Source: Author's compilation

In Figure 5.25, technology such as the internet, websites, Skype, Microsoft® Excel for home-grown PM and accounting systems, were the preferred technical tools used for a successful strategy. Networking, such as attending exhibitions and workshops, was used to acquire knowledge for achieving strategy, as commented by Ent-D:

... technology incorporate internet, websites, electronic format, Skype; ... I talk to my partner in the US, so sometimes the time zone can be quite tricky due to time delay; ... From the company performance – a Management Report in a template of Microsoft® Excel spreadsheet is generated by the administration personnel [Key Personnel] all the data is filled in; ... The company has an accounting system from which data is extracted in real-time, particularly PAYE data done by auditors to ensure it is done on a monthly basis. So, we have been using that system for almost two years now ... (Appendix F, paragraphs 20, 23, 25).

Theme 17: Ent-D noted the need to adapt to external risks and its influence to the enterprise's performance, as encapsulated in the following statement:

...with performance you do not want mistakes, is super important...; a lot of it...is actually out of my control...; ...considering the external risks out of your control; ...so, there is very little time where you can actually control a performance (Appendix F, paragraph 35).

5.3.4.7 *Analysis and conclusion of the processes to design and develop a strategy*

The findings on strategy setting or development and cascading for Ent-D reflected that most of the eight (8) linkages were evident, Figure 5.24:

- Leadership involves the inclusion of strategic stakeholders at enterprise and strategic level (owner, partners and management) to identify, evaluate and communicate strategic issues of the enterprise and inclusion of other personnel in administration or operational activities.
- Processes to strategy success included management and partners (at a strategic level) and most of the key operational areas or activities.
- An annual review adapted strategy.
- Strategy data and information was accessible via a database from accounting systems and various data sources.
- Generating ideas for strategy development, deployment, and achievement mostly involved the owner, family members, partners and other personnel.
- BSC and DT-related principle processes were evident in Ent-D and displayed integration of the two (2) concepts to some extent. The processes considered generating ideas (a DT-related aspect), used review, creativity, formulation and communication (DT and BSC-related aspects) as their tools and techniques to go about strategy setting and translation.

The previous sections directly connected leadership (owner as a part of management) as being responsible for strategy design, development and setting and, therefore, linking the owner-manager to initiating the strategy processes. The findings returned no evidence of a formally documented enterprise strategy. It appears that the process begins with leadership (owner and partners) engaging administrative personnel for data/information analysis in preparation and before starting with setting and translating the organisational strategy. In the previous sections, the processes followed to design and develop strategy revealed, to some extent, a connection with various PM, BSC- and DT- related aspects, including the KPAs and KPIs, setting a platform for achieving set strategic objectives contingent to business processes, administration and operations.

The findings revealed that the processes followed in Ent-D, particularly initiation and shared strategy, were to seek ideas from partners and management and, to gain

support and approval on the most important objectives. There was with some input from, and involvement with, other personnel.

5.3.4.8 Processes of PM implementation in organisational and operational

The findings for responses to IQ8 to IQ15 in Table 5.6 are listed in the following section.

- **Monitoring customer satisfaction or complaints (IQ8)**

Theme 18: In Ent-D, a spreadsheet and accounting system is implemented to monitor abnormalities and customer satisfaction. Exhibitions are used to test product functionality, gather feedback and to get referrals and leads from customer enquiries, communication and connection (Appendix F, paragraphs 11, 15, 23, 25, 26, 34).

- **Newer frameworks or techniques for PM and improvement adopted (IQ9)**

Theme 19: The PM framework for Ent-D was not clearly described. The response given was that Microsoft® Excel used for the PM system helps with management reports containing data for profitability and related financial performance of the enterprise. An accounting system includes Pay-As-You-Earn (PAYE) data and provides ways to look at KPIs, know where sales come from, types of products purchased and other resource allocations (Appendix F, paragraphs 23, 25, 26).

- **The most important thing done correctly during implementing the PM process (IQ10)**

Theme 20: At the enterprise level, Ent-D relied on having key personnel and staff members in the process, using ethical workmanship and training for technicians, independent agents and new customers. Staff are encouraged to use discretionary decision-making and to learn by trial and error, and acknowledge the genuine concerns of employees and improve input (Appendix F, paragraphs 3, 4, 28, 34).

- **Types and characteristics of the PM systems used (IQ11)**

The PM systems used in Ent-D returned varying findings of manual and automated systems, techniques or tools, listed in Table 5.17.

Table 5.17: PM systems/techniques/tools used by SME

Type of systems	Tools used
Accounting system	Home-grown PM system used (No formal frameworks) Microsoft® Excel and accounting system (includes profitability or PAYE)
Principles used from established frameworks	No formal BSC framework (only principles of BSC are used)
Other systems	Visible charts, Microsoft® Word
Social media and web-based	Websites, Skype, Internet
Manual	-

Source: Author's compilation

Theme 21: The findings in Table 5.17 returned no clear evidence of a formal PM framework; however, home-grown PM systems in Microsoft® Excel, together with other accounting systems and various others consisting of social media, some web-based was a preferred system.

- **The motivation for using the PM system in Ent-D**

Theme 22: Instead of using more sophisticated and expensive systems such as those in larger enterprises, Ent-D expressed the benefits of using their type of PM systems:

...motivation for the decision to use this method of PM was as a result of mistakes that impacted compliance with the law issues (such as Tax clearance certificates). The company has an accounting system from which data is extracted in real-time, particularly PAYE data done by auditors to ensure it is done on a monthly basis. So, we have been using that system for almost two years now... (Appendix F, paragraph 25).

- **Structure of the PM systems in Ent-D**

The structure of the PM systems used in Ent-D returned varying findings of characteristics and activities involved in its implementation with the enterprise and business processes, listed in Table 5.18.

Table 5.18: Structure of the PM systems in Ent-D

Characteristics	Activities, tools and methods
Report generated	Management report for accounting process (looking at profitability and variances)
Methods	Ask questions approach
Triggers for actions	Identification of under-performance or challenges in KPA (trigger decision and thinking outside the box at all time)
Business processes using the PM system (IQ14)	External: Marketing, sales (independent agents: dealers and distributors) Internal: Financial aspects, training, maintenance
KPA	Ordering, dispatch, storage, maintenance, workshops, training, customer relationships, staff management
Frequency	Weekly, monthly, annually and real-time
KPI	Profit, turnover or sales, abnormal items, stock availability, errors, allocations, leads, referrals, variances, customer feedback, product functionality or quality, the performance of new clients, salary, commission, services, staff relations, PAYE, maintenance and repairs, training, ethical workmanship.

Source: Author's compilation

Theme 23: Table 5.18 shows a blend of characteristics, activities and outcomes resulting from the structure of PM systems, comprising types of reports, KPAs, KPIs, frequency of PM, methods, triggers for action and business processes where the system was implemented.

Theme 24 and 25: Problems with implementing the PM system (IQ12)

Ent-D experienced problems when using the PM system in process operational areas:

- Measuring performance for specific middle management staff is difficult
- Challenges to PM if the staff is doing everything and performing daily
- Difficulty controlling cross-border sales activities due to lack of presence (cost vs sales issue).
- Inability to react in real-time.

Theme 26: Benefits of the PM systems in Ent-D (IQ12)

Ent-D experienced the benefit of using the PM system structure in processes and areas:

- Everyone is aware that the organisation does measure performance
- Looking at performance per customer, where sales are coming from and what they are purchasing monthly

5.3.4.9 Strategy and PM implementation in business processes: PM, BSC and DT integration (IQ13, IQ14, IQ15)

The data analysis extracted from the ATLAS.ti™ network of maps of Ent-D's responses about implementation processes consolidates the various aspects discussed in the previous sections to provide a summarised display of a holistic implementation-linkage to include the business processes (activities) and organisational areas. See Figure 5.26.

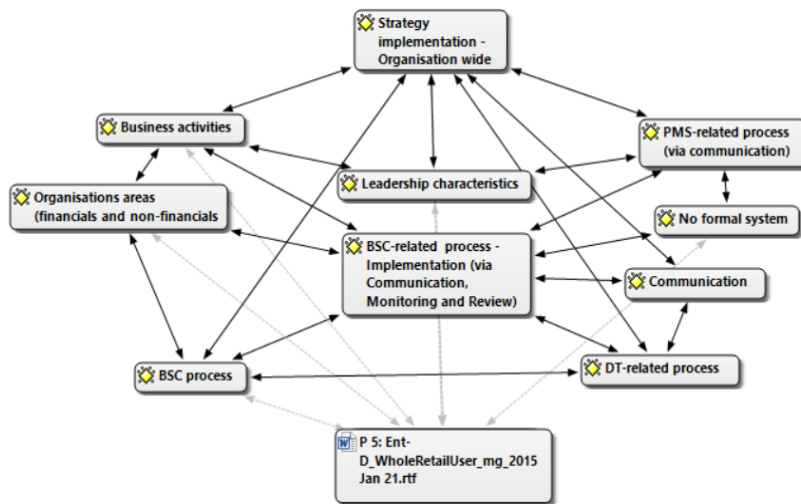


Figure 5.26: Linkages of strategy implementation processes

Source: Author's compilation

In Figure 5.26, leadership is still shown as part of the enterprise-wide strategy implementation and is instrumental in ensuring its effectiveness and success. For example, facilitating the activities for all interconnected aspects, areas, activities, systems, processes of PM, BSC-related principles and DT strategies. A practical description of strategy or the PM implementation process (BSC and DT related aspects) in business process activities was explained without a graphical illustration by participant Ent-D:

...we use the spreadsheet, everyone is aware that the organisation does measure performance [Key Personnel] to ensure that everyone contribute to monitoring any abnormalities; ... highlighting what the normal is...; ...end of the month we look at the performance: per customer, where sales are coming from or what they purchasing. Checking for shifts or changes, example: ...dissatisfaction with products quality, ... changes in the market place, ... driven by customer satisfaction, by quality, service, stock

availability...; ...on a daily basis, items that are imported are held here in stock, we get orders on a national basis, current customer, dealers, distributors; ...you noticed there are a lot of walk-in customers; ...whatever is either given over the counter or packed and sent off, the packaging side we deliver; ...[Key Personnel] drives that, otherwise we react to orders that are coming in. (Appendix F, paragraphs 26, 27).

The process involving the DT-related principles in the PM implementation was described with some caution by Ent-D:

...in our company, we buy finished product we're not manufacturing; ...pretty much what you get is what you get; ...as I said earlier, if there is a design thing that did need change then the reactive thing, then the staff will be actively involved, and it is critical that they are involved. Performance, I mean how do you measure [Key Personnel's] performance; ...if she is doing everything she has to do on daily basis then she is performing; ... I do not want to be a police (Appendix F, paragraphs 36).

Instances, where DT-related principles or process applied in the PM implementation triggered innovation in the enterprise, was explained by Ent-D:

...with the food packaging, we are design a product for apple export; ... design to meet a specific requirement because no one size fits all products; ...pass it on the US supplier to tweak it; ...from that point of view it makes it interesting because you got to think outside of the box all the time... (Appendix F, paragraph 32).

Instances where DT-related principles or process applied with limitation in the PM implementation was encapsulated in Ent-D's explanation:

...there are certain instances, in the past where we got a product ready-made in Europe... and it comes here then we determine a problem area and decide why don't we make it like this or change that due to reoccurring problems; ...it is mainly applicable to the technician [Key Personnel], where he is identifying the problems and give suggestions on how we can help this customer; ...our business cannot design but can suggest improvements to designs...; ...I think, overall with the company it should assist with competitiveness from a point a view, in theory, maybe you will have less

mistakes, provide a better service, guide somebody with [Key Personnel's] experience...because you have seen so many of particular range...
(Appendix F, paragraph 36).

Theme 27: Based on the explanation of the implementation of PM by Ent-D, the principles of DT goes to KPIs, staff involvement, internal processes (aspects of BSC-related perspectives) and how products were designed or enhanced to meet customer's (BSC-External stakeholder) specific requirements, help with competitiveness and leadership or management ensure inclusive monitoring of PM across the enterprise.

5.3.4.10 Processes of PM implementation - integration of BSC and DT principles

The next section lists the returned findings from Ent-D in response to Table 5.9 questions IQ1 to IQ5 on opinions of the integration processes and characteristics of PM and its influence on various areas of the enterprise.

Theme 28, 30 and 31: Use of PM processes in business activities and BSC and DT integration (IQ1)

Ent-D viewed the important use of PM processes integrating BSC and DT principles in terms of the following stated business activities and processes:

- we buy finished product we're not manufacturing if there is a design thing that did need change then the reactive thing.
- Staff will be actively involved, and it is critical that they are involved.
- How do you measure [key personnel's] performance, if [key personnel] is doing everything she has to do on daily basis and performing? I do not want to be a police.

Theme 29: Principles to the BSC and DT integrated into business (IQ2)

Ent-D believes that the following enterprise areas and activities in Table 5.19 are affected by the integration of PM using the BSC-related and DT-related principles.

Table 5.19: Business areas and activities affected by BSC and DT principles

BSC-related principles	DT-related principles
<ul style="list-style-type: none"> • Customer needs and feedback • KPI involvement • Sales and internal processes involvement • Learning and innovation 	<ul style="list-style-type: none"> • DT involves asking questions, identifying problems and solutions • Involve other people in the process • Involves internal processes and how they are designed

Source: Author's compilation

In Table 5.19, the BSC- and DT-related principles were traceable by customer involvement and feedback, methods such as asking questions and identifying problems, searching for various solutions, involving people and internal processes, KPI and financial aspects of PM integration.

Theme 32: Opinions on integrating PM framework sequence of the process (IQ5)

Ent-D's views on the sequence of a process for integrated PM framework, include the following:

- Using a visible chart
- No clear sequence of processes

5.3.4.11 Analysis and conclusion on implementation of PM framework

Even though no formal PM framework was evident in Ent-D, alternative PM implementation took place in KPAs by a variety of sub-systems consisting of an accounting system and management report generated from Microsoft® Excel. The leadership (owner-manager) and key administration personnel monitored KPAs regularly, weekly, monthly and annually. The case enterprise was able to trace abnormal items and highlight normal performance on where sales came from and types of products purchases, monitor shifts and changes using the management reports and react in real-time.

The process involved other personnel, identifying problems and suggesting improvements to collaborative stakeholder's product designs as critical in the process. In the case enterprise, DT was perceived as important and expected to meet specific customer requirements. The atmosphere was that of encouraging the use of discretionary decision-making and exploring many ways of doing things better to improve systems and not to view PM as a 'policing' tool. The business culture showed

tolerance by inclusivity, training efforts and various other ways of ensuring that all stakeholders understood the PM-related activities in the enterprise.

Abnormalities were highlighted using PM, problems identified and solutions explored by allowing people the flexibility to make discretionary decisions and put forward ideas for improvements to processes and products, including systems. Even though the process was not formally documented, Ent-D believed in looking at accounting systems, measuring profitability, customer satisfaction, stock, staff and independent agents, salaries and commission including ethical workmanship. The processes in case Ent-D appeared to be predominantly quantitative data-driven with intensified branded-product oriented aspects. The conclusion may be drawn that Ent-D adopted a non-prescriptive approach; however, the processes followed the designing, cascading and implementing strategy and PM '*partially with*' other relevant stakeholders.

5.3.5 Findings: Within case analysis - Ent-E

The findings and response to the general (GQs) and interview questions (IQs) for Ent-E as provided in Tables 5.1, 5.4, 5.6 and 5.9 are in the following sections.

5.3.5.1 Demographic information

An analysis of the data of GQ1 revealed that Ent-E is an enterprise that operates in the service provider sector, focusing specifically on the restoration of wood as its core business. It has been in existence for more than 25 years, employs fewer than 50 staff with the owner as leadership and management, other personnel and external parties. The owner has a higher-level degree qualification and previously held a senior position in a larger corporate entity. The staff expertise ranged from business, strategy, creatives, financial, marketing and sales (owner-manager), accounting, law and tax (external parties) to operations (other personnel).

5.3.5.2 Perceptions of SME characteristics

The response of Ent-E to GQ2 returned perception that an SME needs to have access to niche markets, a specialised and expert reputation, independence, innovation due to vulnerability to economic changes (Appendix F).

Theme 1: Having access to markets, a specialised and expert reputation, being independent, innovative and responsive to economic changes (non-financial strategic-related) are characteristics perceived to be expected from an SME.

5.3.5.3 Strategy and PM activities overview – Ent-E

In response to IQ1 to IQ3 in Table 5.1, the strategy overview in Ent-E concerning the various business activities and operations undertaken by the enterprise was explained. Figure 5.27 shows the sample coding of quotes, statements, words or phrases mentioned by the interviewee and which appeared in their documentary analysis (Appendix F for full transcripts).

SECTION A						
INTERVIEW QUESTION 1 (IQ1): Please take me through an overview of the strategy of your business?						
Initial coding IQ1 (interviews only) = 40 codes						
Initial coding IQ1 (document analysis) = 1 codes (added)						
TOTAL CODES (IQ1) = 41 CODES						
Ent-E	Initial coding (gerund codes)	40	Open code (Interviews)	Initial coding (Doc Analysis)	1	Document source
	1 4) Doing lots of marketing and advertising and word of mouth due to being unique	f	1. Access	1. Environ:	f	Vision (NOT CLEARLY STATED but on website use of words 'eco-friendly', 'green building' focus; and Mission use of words such as using 'unique stripping techniques', 'not to harmful to the environment' and 'recycled products' - Diverse products and services offered as part product-service focused strategy
	1 2) Being able to operate in the market independently and gaining maturity and security.	f	2. Access			
	1 3) Advertising a lot in paper homeowner magazines	f	3. Access			
	4) Getting deep market penetration	f	4. Access			
	1 1) Experiencing a high degree of independence	f	5. Benefit			
	1 2) Having up-to-date books	f	6. Benefit			
	1 3) Getting monthly results within 5 days and knowing where headed financially and how bad.	f	7. Benefit			
	1 4) Spending money on outside skills so to concentrate on what can be done internally.	f	8. Benefit			
	3) Having tried but limitation exist about growth prospects	f	9. Challenge			
	1 1) Remaining vulnerable due to economic changes and not having much work.	f	10. Challenge			
	1 2) Being challenged to handle excess work in better times of the economy.	f	11. Challenge			
	1 3) Recognising that both situations are very dangerous.	f	12. Challenge			
	6) Being fairly alone in the market means getting lots of rejection and other people say [prices] are very fair	f	13. Challenge			
	1) Lacking in-house accounting skills	f	14. Challenge			
	3) Having big clients to help business get back on track on missed turnover	f	15. CMF			
	1 1) Targeting mostly homeowner	f	16. CMF			
	2) Not wanting big corporates as main customers.	f	17. CMF			
1 2) Pricing was a problem –	f	18. Fin				

Figure 5.27: Strategy overview factors of tools, methods, people and processes

Source: Author's compilation

Theme 2: In Figure 5.27, a strategy is explained to indicate a product-service, market-access and environment-sensitive strategy to develop, apply and expanding the available skills in the workforce. The strategy focused on pricing and turnover

(economic factors), customers, skills development and growth (people factors), quality product due to specialist skills as a unique selling point targeted at a specific niche market (reputation and position factor), market-oriented and driven by the customer. However, a strategy and vision or mission statement were not stated clearly in either the interview or document analysis (Appendix F).

Theme 3: Formalisation of strategy is not demonstrated by proper documentation; however, the document analysis revealed the use of words and phrases such as eco-friendly, unique techniques and not harmful to the environment products. Ent E commented:

...strategy was to apply the skills that are available; ...I train people, and I apply their skills; ...and then slowly develop strategy from there; expansion in our position in the market; ...always the highest quality we can attain, my engineering background gives me good idea what is and what is not; ...pricing was a big problem (Appendix f, paragraphs 6, 8).

Theme 4: Supporting strategy defining and related processes is limited to the owner as leader and manager. Strategy, accounting, coaching, sales, business and training skills and various other strategy-related processes are outsourced due to a lack of internal skills such as accounting, labour law, legal and tax-related matters, and no evidence of other personnel involvement.

Theme 5: Defining strategy involves strategic planning, and strategy development restricted to the owner as leader and manager. The owner-manager develops the enterprise strategy due to limited available internal skills, as explained by Ent-E:

...I come up with my own, mainly; ...biggest problem being an SME was having no verbal connection about the business with anybody; ...I was so used to the corporate environment, and I could not call a strategy meeting or a something up, how are we going to handle this problem, how am I going to determine increase to prices and things like that - real management problems; ... I always had to do it myself.; ...I do not think that employees would be at that level; ...in general, if you got the skills available in general, it is much better... if you can talk to people who at least understand what you are saying; ...because you develop a lot of insight, you develop strategies by just talking it out... (Appendix F, paragraphs 12, 15).

The process of strategic planning or strategy choice includes methods such as learning by trial and error, using the principles of customer-specific requirements and having fairly conservative pricing but no benchmarking and tools such as magazines, the internet and websites.

Theme 6: The strategy of Ent-E is perceived from strategic external and internal perspectives which include crucial financial and non-financial areas and other aspects described by Ent-E:

...the economy goes up and down, and there are times when there is just not much work going on, or there are times that there is so much work that you can barely handle it; ...both situations are both very dangerous; ...I had a choice of strategy to deal with the work - that has actually saved me from not existing any longer, referring to being innovative... (Appendix F, paragraphs 3, 4).

Ent-E's responses to IQ1 to IQ4 guided by the list of codes (Appendix I) for preferred tools, methods, process, people or strategies involved in designing and developing strategy, resulted in the repetition of listed categories and an additional new category of themes emerged, 'strategy choice'.

Theme 7: Key factors mentioned to describe the overview of strategy or PM (IQ1) for process, activities, tools and people (IQ2 to IQ3) involved; and multidisciplinary business strategy (IQ4), are:

- Strategic planning and strategy choices involved only the owner. There was no evidence of the participation of other personnel; customers (BSC-related external stakeholder aspect); measuring financials (BSC-related financial aspect)
- Using innovation by the trial and error approach (BSC-related learning and innovation/DT-related innovation)
- Strategies – outsourcing accounting activities (BSC-related financial aspect); unique and innovative products (BSC-internal process related aspects/DT-related innovation aspects); including external parties for labour law and tax issues (BSC-external stakeholder aspect); strategy is undocumented (PM-related aspect)

Ent-E's words, phrases, summary statements and interpretation of meanings were associated with the list of codes. They revealed a repetition of codes formulated under

the categories leadership/management support, operational level and strategy planning.

Market-access related aspects were mentioned eight (8) times, followed by financial, innovation and outsourcing aspects, each mentioned four times. Those mentioned twice included learning, customer, product and staff. Others mentioned once in the interview, and environment-related aspects which appeared once in the documentary sources emerged as a new additional code.

Theme 8: The formulation phase was represented by 17 codes which emerged as vital to the PM processes of Ent-E, followed by the implementation phase and review with three (3) and two (2) codes respectively and appeared once. The new category of strategy choice emerged with seven codes (formulation phase). These codes were deployment, review and various other codes, including the critical role player, the owner, leadership or management, people, method or tool used by Ent-E when formulating and implementing strategy.

5.3.5.4 Patterns of methods, tools, activities and processes

Theme 9: Figure 5.28 shows a pattern of open coded items (**IQ1-IQ4**), factors classified and linked categories of related themes extracted from ATLAS.ti™ conceptual networks under the leadership and management category. The diagram reflects the role of leadership and management in strategy and PM activities, linked categories, organisational areas of performance, strategic planning, strategy choice and setting, implementation (deployment) and review all linked to PM process or activities combining BSC- and DT-related processes.

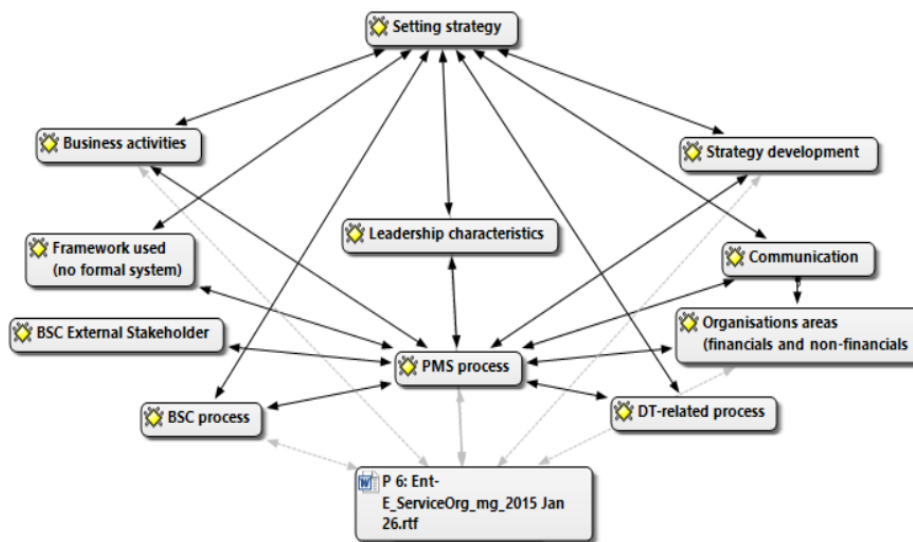


Figure 5.28: Leadership linked to strategy and PM activities (categorised factors)

Source: Author's compilation

Theme 10: In Figure 5.28, a pattern of open coded quotes is classified and linked to leadership (owner as management) support by its responsibilities to categories such as the business activities, organisational areas, communication, strategy setting and development. These were identified in PM-related processes combining BSC- and DT-related processes to design and deploy set strategy and PM initiatives, despite lacking a formal system.

5.3.5.5 Analysis and conclusion on strategy and PM overview

The strategy in Ent-E was explained to indicate the purpose of developing, applying and expanding the available skills in the enterprise's workforce and market. The strategy focused on skills development and growth (people factor) by internal personnel, growth in market-position, a quality product (reputation and position factor) and pricing and turnover (economic factor). It is ultimately market-oriented and driven by customers. The strategy choice in Ent-E was limited to leadership (owner as management) due to minimal or lack of certain skills in the enterprise to contribute to the process. Setting strategy in Ent-E showed that the leadership (owner as management) took on different roles for setting both strategic and operational level goals. At times external stakeholders (customers) would be involved to find solutions (Appendix F).

5.3.5.6 The process to design and deploy strategy and PM

The findings for responses to IQ5 to IQ7 in Table 5.4, returned that Ent-E's processes and activities used to organise and coordinate the design and deployment of strategy and PM involved a variety of strategies to ensure business strategy success.

- **Strategy setting – Ent-E**

The setting of the strategy was primarily limited to leadership (owner as management) due to minimal or lack of certain skills in the enterprise to contribute to the process, explained by Ent-E:

...I come up with my own; ... how are we going to handle this problem, how am I going to determine, increase to prices and things like that, real management problems; ...I do not have benchmark, you have to work on the principle; ...you develop strategies by just talking it out; ...because you develop a lot of insight; ...as a method to my output or to strategy; ...my output we handle in-house, we feel that we got the skills and experience to decide on the output; ...the decision may be that we cannot do it; ...that is a possibility or we can do it but only in a certain way. But apart from the skills that we simply have not got; ...what we can do in-house we can decide in-house; ...that is for my immediate output... (Appendix F, paragraphs 8, 12, 15, 18).

The coding and classification of Ent-E's responses to IQ5 to IQ7 (Appendix I) on processes, methods, tools and activities used resulted in a repetition of listed codes and no new additional codes emerged.

- **Translating the vision and setting strategy – Ent-E**

The owner thought other staff members did not have the level of capability to translate or cascade strategy due to a lack of certain skills in the enterprise. Ent-E explained:

...I do not think that employees would be at that level...; ...I did not have employees that could confirm; ...that there was a lack of input; ...in general, if you got the skills available in general, it is much better... if you can talk to people who at least understand what you are saying; ...for strategy, I can think of two possibilities. One could be a sudden revelation that we can do things different or better or more innovative. And the other one is that you

get market request that we have not had before and you should be careful not to say no, that is not what we do, we have not done that before let us give it time, learn from or improve on; ...so, I have been innovative within the context of my customer asking for things; ...I have not gone heavily, been terribly successful in developing a whole new thing that people slowly maturely get used to and then say...can you make me another one of this; ...it is a tricky one for an SME of my size because it takes a lot of effort, money, dedication and energy that you have not got available... (Appendix F, paragraphs 12, 15, 19).

Theme 11 and 12: The designing and translating of strategy occurred informally involving only the owner as leadership and management due to limited available skills and, in some instance, innovations triggered by customer's request.

The findings extracted from ATLAS.ti™ networks for Ent-E strategy design and formulation processes provided a connection between categories such as strategy choice, setting and deployment with BSC- and DT-related processes by communication tools and methods as depicted in Figure 5.29.

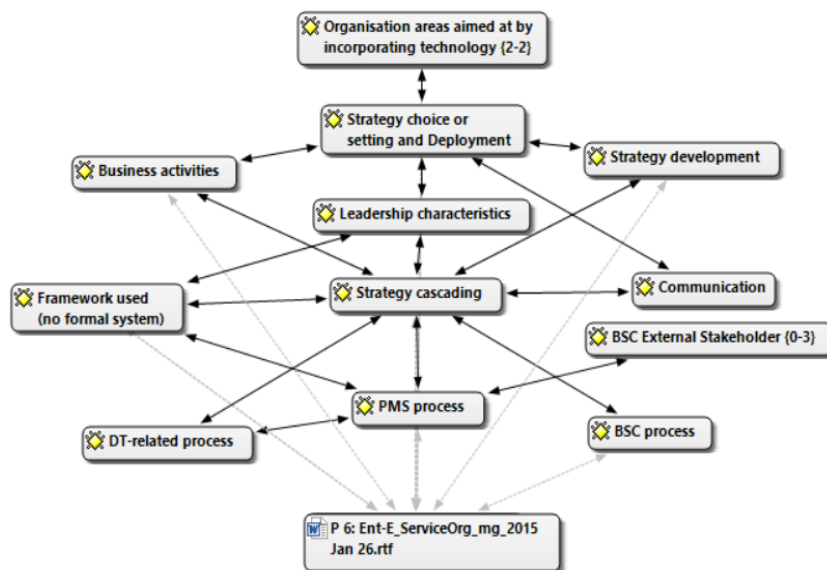


Figure 5.29: Leadership linked to strategy and PM activities (categorised processes)

Source: Author's compilation

In Figure 5.29 strategy choice, setting and deployment are interconnected with leadership characteristics shown to have a role in aspects such as organisational areas

and other business activities, communication used as tools or techniques to design and deploy strategy incorporating BSC- and DT-related principles and processes.

Theme 13 and 14: Business strategies were adapted, generated and communicated internally by the owner using strategy choice, setting and translation by operational activities with minimal involvement of staff. In some instances, strategy adaptation was triggered by a customer's request, resulting in innovation for non-standard items.

Theme 15 and 16: Ent-E's technology incorporates technical devices or platforms and acquiring knowledge to ensure achieving set strategic objectives, as depicted in Figure 5.30.

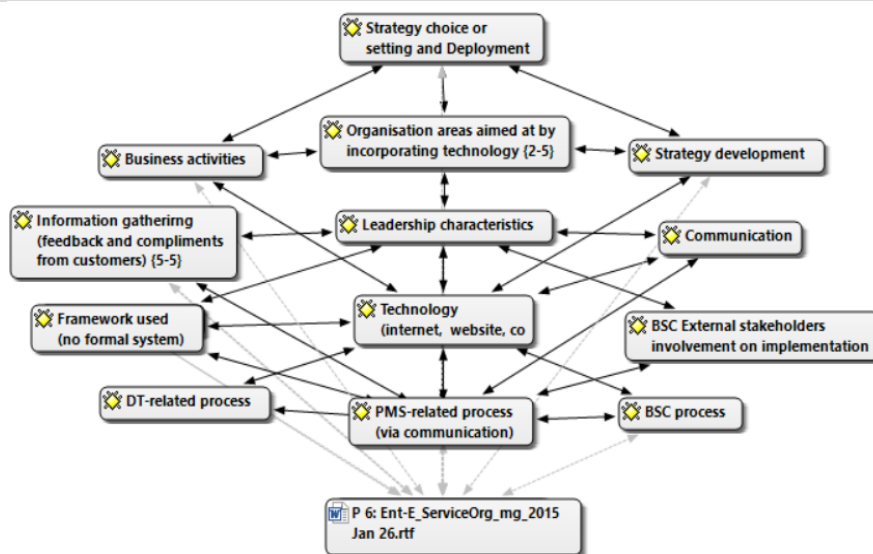


Figure 5.30: Technology linkages with strategy design and deployment aspects

Source: Author's compilation

In Figure 5.30, technology such as the internet, websites and email were preferred technical tools used for strategy success and as a method to acquire knowledge. Computerising was used to some extent, given that the accounting and related activities were outsourced to external parties. Ent-E commented:

...I am advertising on the internet for a lot of things, I am coming first on the internet first one on the list; ...it is now Google advertising or internet advertising, it gives me quite a deep market penetration - I got good success with the website... (Appendix F, paragraph 10).

Theme 17: Ent-E noted the need to adapt to external requirements and ability to innovate its influence to the standard approaches, as expressed in the following statement:

...so in my case I have to look for different design and different approaches and different solutions because they are not coming with a standard problem; ...the problems that surrounded me are always non-standard problem; ...in a bigger picture, that depends again to which extent the requirements...hugely influenced if that is the requirement; ... it is important for most SMME that will cause them to be able to deviate in different directions, cause if they can't think outside the box then they going to get crashed in the box (Appendix F, paragraph 46 and 47).

5.3.5.7 Analysis and conclusion of the processes to design and develop a strategy

The findings on strategy choice, setting or development and cascading for Ent-E, reflected that most of the eight (8) aspects of linkages were evident in terms of Figure 5.29:

- Leadership involves only the owner as management and strategic stakeholders at an enterprise and strategic level to identify, evaluate and review the strategic issues of the enterprise, with very minimal inclusion of other personnel.
- Processes to strategy success included management (at the strategic level) and limited involvement of other stakeholders (at an operational level).
- The strategy was adapted using an annual review process.
- Strategy data and information was accessible via external parties (a firm of accountants) for accounting and various data sources.
- Generating ideas for strategy development, deployment and achievement involved mostly the owner and other personnel (assistant) and external stakeholders (customer).
- BSC and DT-related principle processes were evident in Ent-E and displayed integration of the two concepts to some extent. The processes considered generating ideas and designing as per customer requirement (a DT-related and

BSC related aspect) as their techniques to go about their strategy choice, setting and translation processes.

The previous sections directly connected leadership (owner as management) as being responsible for strategy choice, design, development and setting, therefore, linking the owner-manager to initiating the strategy processes. The findings returned no evidence of a formally documented enterprise strategy. It appears that the process is restricted primarily to leadership (owner-manager) engaging with data or information analysis in preparation for choosing, setting and translating the organisational strategy.

In the previous sections, the processes followed to design and develop strategy revealed to some extent a connection with various PM, BSC- and DT-related aspects, including the KPAs and (KPIs), setting a platform for achieving set strategic objectives contingent to business processes and operations. The findings revealed that the processes followed in Ent-E, particularly the initiation and shared strategy, were for generating management ideas to support achieving the set objectives, with minimal input from other personnel.

5.3.5.8 Processes of PM implementation in organisational and operational activities

The findings for responses to IQ8 to IQ15 in Table 5.6 are listed in the following section.

- **Monitoring customer satisfaction or complaints (IQ8)**

Theme 18: In Ent-E, customer satisfaction or complaint were monitored informally:

...I do not measure customer complaints, satisfaction; ...there is no formal measurement. We delighted when customers give compliments...; customer compliment is mostly verbal or comes in an email; ...sometimes for the sake of the website I have invited such remarks, which is not easy to do; ...compliments are communicated verbally directly...; ...because we get our customers involved with the process, the discussion that takes place often involves the employees... (Appendix F, paragraphs 23, 24).

- **Newer frameworks or techniques for PM and improvement adopted (IQ9)**

Theme 19: The PM framework in Ent-E was not clearly described. Financial reports were received monthly from external parties (firm of accountants) which helped to extract simple indicators such as financial liquidity. The financial report is used to

measure value, for early warning signs of deviation, to track the number of hours worked, staff performance, invoices, raw materials used for comparison of quantities used previously and water and electricity for an early indication of productivity (Appendix F, paragraphs 21, 22).

- **The most important thing done correctly during implementing the PM process (IQ10)**

Theme 20: At an enterprise level, Ent-E discussed the annual performance with employees using notes and working closely with staff. Management uses regular enquiries to monitor employee satisfaction and acknowledge employees' genuine concerns using an open-door policy (Appendix F, paragraphs 28, 29).

- **Types and characteristics of the PM systems used (IQ11)**

The PM systems used in Ent-E returned varying findings of manual and automated systems, techniques or tools, listed in Table 5.20.

Table 5.20: PM systems/techniques/tools used by SME

Type of systems	Tools used
Accounting system	External parties (a firm of accountants) accounting systems used for financial reporting (no formal framework internally)
Principles used from established frameworks	No formal BSC framework "...I do not have benchmark; ... you have to work on the principle..." (Appendix F paragraph 8)
Other systems	email
Social media and Web-based	Websites, internet, emails
Manual	Notes, magazines

Source: Author's compilation

Theme 21: The findings in Table 5.20 gave no clear evidence of a formal internal PM framework. However, Ent-E used financial reports produced monthly by a firm of accountants and various other systems consisting of social media, some web-based and some manually processed as a preferred PM system.

- **The motivation for using the PM system in Ent-E**

Theme 22: Instead of developing a home-grown PM system or using more sophisticated and expensive systems as larger enterprises do, Ent-E decided to outsource the accounting, labour and law aspects of the enterprise. Ent-E explained the justification for this:

...I have not got in-house accounting skills, bookkeeping perhaps; ...my books are up-to-date, and I get my monthly results in five days; ...and I know what I am doing; ...I know financially where I am going how bad it is; ...I spend money on outside skills, so we can concentrate on what we can do inside; ...my administration is done ultimately done by a firm of accountants (Appendix F, paragraphs 11, 10).

- **Structure of the PM systems in Ent-E**

The structure of PM systems used in Ent-E returned varying findings of characteristics and activities involved in its implementation in the enterprise and business processes, as listed in Table 5.21.

Table 5.21: Structure of the PM systems in Ent-E

Characteristics	Activities, tools and methods
Report generated	Financial report for accounting process (looking at financial liquidity and deviations or variances)
Methods	Ask questions approach
Triggers for actions	Customer requests or specific requirements, under-performing areas or challenges in KPA (trigger decision and innovation)
Business processes using the PM system (IQ14)	Workshop and production, procurement, financial aspects, sales, designing, carpentry, resource allocation
KPA	Sales, marketing, finance, customer relationships, workshop
Frequency	Monthly, weekly and annually
KPI	Financial liquidity, stock and raw material, attendance, number of hours worked, number of hours invoiced, comparisons of quantities used annually, water and electricity, productivity, prices, emails, income, customer relations, innovations, marketing and advertising, emails, links, variances, ranking on the internet, staff performance

Source: Author's compilation

Theme 23: Table 5.21 indicates a blend of characteristics, activities and outcomes resulting from the structure of PM systems, comprising types of reports, KPAs, KPIs, frequency of PM, methods, triggers for action and business processes involved in the PM implementation in Ent-E.

Theme 24 and 25: Problems with implementing the PM system (IQ12)

- Ent-E experienced problems when using the PM system in process operational areas and commented:
- Understanding the compatibility of my background with my workers (formalisation)
- Linking employee culture with culture to achieve in the enterprise (staff motivation)
- Difficulty in dealing with circumstances, individuals and consequences (feedback)

Theme 26: Benefits of the PM systems within Ent-E (IQ12)

Ent-E experienced the benefit of using the PM system structure in processes and areas and commented:

- Getting feedback helps with recollection (to remember the process for the next new product or job)
- Having up-to-date books
- Spending money on outside skills to concentrate on what can be done internally
- Experiencing a high degree of independence
- Learning and thinking outside the box
- Having early warning signs if things are not running as planned
- Having an indicative system that helps despite not being an accurate system.

5.3.5.9 Strategy and PM implementation in business processes: PM, BSC and DT integration (IQ13, IQ14, IQ15)

Although some activities of PM were outsourced in Ent-E, the findings extracted from ATLAS.ti™ network of maps in Figure 5.31 consolidates the various aspects discussed in the previous sections to provide a summarised display of a holistic implementation-linkage to include the business processes (activities) and organisational areas.

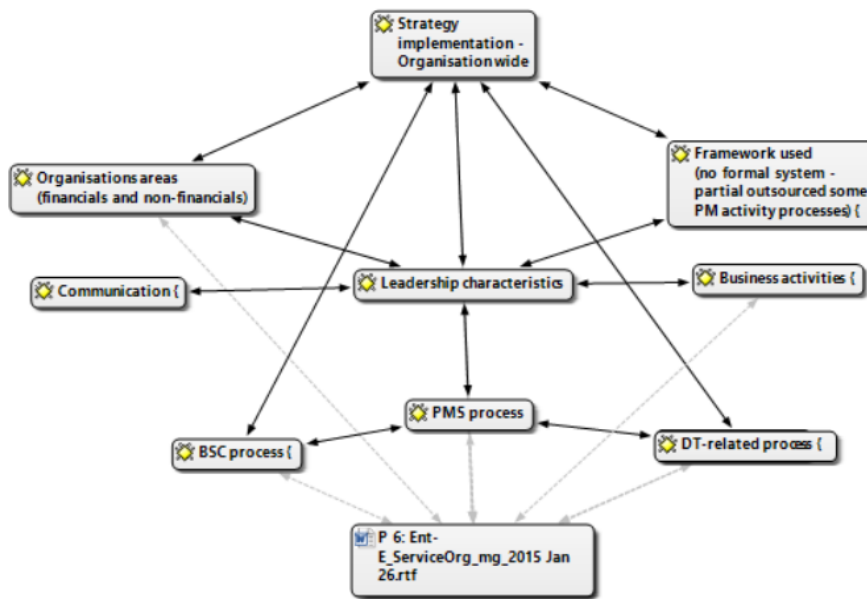


Figure 5.31: Linkages of strategy implementation within other aspects

Source: Author's compilation

In Figure 5.31, leadership is shown to be central to enterprise-wide strategy and PM implementation and instrumental in ensuring its effectiveness and success. For example, the owner-manager facilitates the activities for all interconnected aspects, areas, activities, systems, processes of PM (including outsourced activities), BSC-related principles and DT strategies. An elaborate practical description of the PM implementation process (BSC and DT related aspects) in business process activities is shown in Figure 5.32 to illustrate a process equated to a 'sequential top-down' approach according to Ent-E (Appendix F, paragraphs 31 to 35).

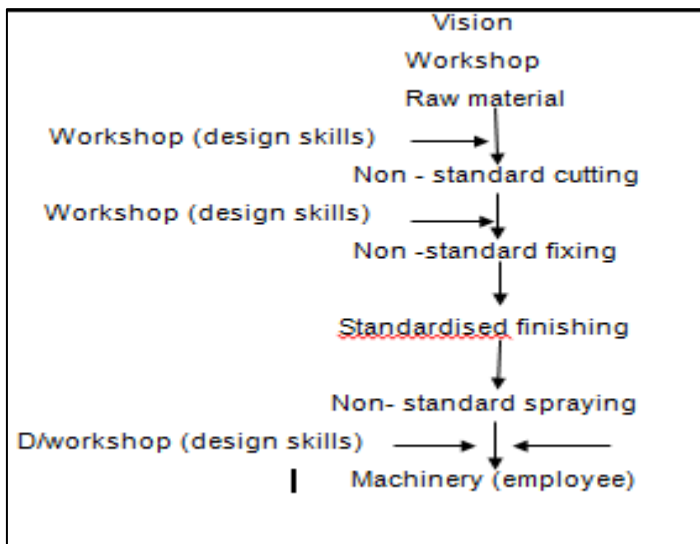


Figure 5.32: Sequenced approach implemented in Ent-E

Source: Adapted from a drawing by Ent-E during the interview and from the transcript

In Figure 5.32, Ent-E applied a sequential top-down approach in workshop activities, and implementation began with a vision. The Ent-E owner worked with the belief that a vision developed with the customer helped to understand the expectation of how the client expects the product to look. The initial activity enabled the next step of putting the idea into practice in the workshop setting, where the raw materials of the required product are considered (decision-making).

In this case, flexibility in the implementation process was critical and primarily influenced by the specifications and non-standard cutting of raw material to special customer product requirements. The process was followed by having the machine setup in preparation followed by a non-standard fixing step, standardised finishing, and ending with non-standard spraying. The DT processes were reported to be activated in the non-standard activities (PM key performance area).

Theme 27: Based on Figure 5.32 and Ent-E's explained implementation of PM, the principles of DT were reported to be activated by non-standard activities (PM key performance area), various subsequent requirements and considered input from leadership and other BSC-related internal and external stakeholders. Ent-E commented:

... I can write it in my head...; ... my carpenter would come with an input as well because he knows things; ...my daughter will also come in, and we discuss it on that level and that level (Appendix F, paragraph 34).

Although the processes were not documented, Ent-E believed that the process contributed to staff learning and thinking outside the box.

5.3.5.10 Processes of PM implementation – integration of BSC and DT principles

The next sections list Ent-E's returned findings in response to Table 5.9 questions IQ1 to IQ5 on opinions of integration processes and characteristics of PM and its influences on various areas of the enterprise.

Theme 28 to 31: Use of processes in business activities and BSC and DT integration (IQ1)

Ent-E viewed the important use of PM processes integrating BSC and DT related principles in terms of the following stated business activities and processes:

- I cannot quite think of how to exclude the one from the other (PM, BSC and DT principles), because everything is part of an on-going management supervision.
- Every part of it (PM) is subject to being judged in part and in its whole, the performance is always measured against the highest possible standard, and it may look different from job to job.
- DT is self-perpetuating and critical on thinking things through because once you start doing it, you know that you can find different solutions for a number of things.
- Discussing with customers (BSC stakeholder) variations of previous solutions to apply and differently.
- For most SMME that will cause them to be able to deviate in different directions, because if they can't think outside the box, then they going to get crashed in the box.

Theme 29: Principles of the BSC and DT integrated into business (IQ2)

Ent-E believes that the following enterprise areas and activities in Table 5.22 are affected by the integration of PM using BSC- and DT-related principles.

Table 5.22: Business areas and activities affected by BSC and DT principles

BSC-related principles	DT-related principles
<ul style="list-style-type: none"> • Customer requests • Internal processes (non-standard line of work) • Learning and innovation • Involving external stakeholders (for benchmarking) 	<ul style="list-style-type: none"> • Using different design approaches • DT involves asking questions • No standard problems • Looking for different solutions

Source: Author's compilation

In Table 5.22, BSC- and DT-related principles were traceable by customer requests and involvement; methods such as asking questions, searching for various solutions, people (customers and other external stakeholders), involving internal processes, learning and innovation and financial aspects.

Theme 32: Opinions on integrating a PM framework sequence of the process (IQ5)

Ent-E viewed the sequence of processes for integrated PM as follows:

- I would not know how to document it, and I would find that very difficult to apply that without becoming bogged down with paperwork.
- As an SMME I did not want processes like that, because if you have to formalise processes like that you going to get stuck with them.
- I keep notes on previous jobs, notes on what we have done, but then it was an impromptu innovation in design and not documented (Appendix F, paragraph 48 to 49).

5.3.5.11 Analysis and conclusion on the implementation of the PM framework

Although no formal PM framework was evident in Ent-E, alternate PM implementation took place in select KPAs using a variety of sub-systems consisting of the financial report for accounting (looking at financial liquidity and deviations or variances). The leadership (owner-manager), with the help of external stakeholders (firm of accountants), monitored financial-focused KPAs regularly, weekly and monthly. By the involvement of external stakeholders and a questioning approach, the case enterprise was able to identify areas and strategies for market access and attracting customers. They, therefore, focused on marketing strategies to draw in new clients and listened to what customers said to retain them. The process involved other people and asking and listening to what customers were saying as they had a critical part to play in the process

and the design of specific products. DT was part of everything; access to market, products and process were always perceived to be part of PM. Although the enterprise's atmosphere was restrictive in PM effort, other personnel were encouraged to provide input on a limited basis (that is, the design and production of the final product). Misunderstandings were resolved by practice and meetings, communication and allowing people flexibility to consult with leadership (open-door policy). Although the process was reported to be restrictive, Ent-E believed in looking at accounting systems, measuring profit and cash flow to ensure the survival of the enterprise, stock, attendance, performance and having indicators that balance each other. The processes in this enterprise appeared to be predominantly quantitative data-driven with some qualitative aspects. A conclusion may be drawn that Ent-E adopted non-prescriptive approach. However, the processes followed a designing, cascading and implementing strategy and PM were developed for other relevant stakeholders.

In sum, the previous sections showed each of the five case participants' within-case analysis using an inductive approach to make sense of the data and the way it was organised and sorted. The coding tables, ATLAS.ti™ network of maps and summary of statements or phrases were used to establish significant activities, methods and tools for PM processes which led to the emergence of thematic categories. Ultimately, the data-driven inductive approach led to the emergence of 32 thematic categories. Each one was clustered into nine (9) themes, then collapsed into four main themes that represented the major headings in this chapter, as shown in Table 5.23 (also Appendix I), full list of coded items and thematic categories).

Table 5.23: An overview of 32 thematic category clustering from which four main themes emerged as major headings in the findings of this study

Coded data-driven thematic categories	Category
Instrumental features and factors perceived and used concerning their strategy and PM processes within daily operations (RSQ 1, 2, 3 and 4)	
<u>Main Theme 1: Important and instrumental elements: Understanding SMEs, Strategy and PM (features) (RSQ1, 2, 3 and 4)</u>	
Theme 1: Financial and non-financial features perceived important for SME characteristics	Factors - perceived important SME traits or characteristics
Theme 2: Financial and non-financial factors used to define strategy and mission statement	Factors for defining strategy - Strategy
Theme 3: Formalisation is demonstrated by documenting strategy	Factors for defining strategy - Formalisation
Theme 4: Supporting strategy-defining and related processed	Factors for defining strategy - Leadership
Theme 5: Activities involved in defining strategy	Factors for defining strategy - Business activities
Theme 6: Perceptions of multi-disciplinarity of business strategy (operational areas involved)	Factors for defining strategy - Perceptions (SME and PM)
Theme 7: Tools and methods used for defining and deploying strategy; Processes used and people involved for defining and deploying strategy; Strategy adaptation, generation and communication; and perceptions on multi-disciplinarity of business strategy (BSC-, DT- and PM-related aspects)	Factors for defining strategy - Strategy
Theme 8: PM processes, activities and tools and methods; processes used and people involved for defining and deploying the strategy	Factors for defining strategy – Strategy
Theme 9: Pattern of open coded quotes linked with sub-categories and some related themes	Factors for defining strategy – Strategy
Theme 10: Pattern of open coded quotes linked with sub-category and some sub-categories' relationships categories	Factors for defining strategy – Strategy
Processes followed to develop strategy and PM – factors (RSQ 2 and 3)	
<u>Main Theme 2: Processes to Design, Develop and Deploy Strategy and PM (RSQ 2 and 3)</u>	
Theme 11: Strategy formulation or design processes	PM process - design and deployment of Strategy (BSC and DT design or formulation) – skills factors

Coded data-driven thematic categories	Category
Theme 12: Leadership (managers) role at the operational level	PM process - design and deployment of Strategy (BSC and DT design or formulation) – leadership factor
Theme 13: Adaption, generation and communication of business strategies	PM process - design and deployment of Strategy (BSC and DT design or formulation) – adaptability factor
Theme 14: Importance of stakeholder involvement	PM process - design and deployment of Strategy (BSC and DT design or formulation) – stakeholder factor
Theme 15: Technology type to ensure achievement of set strategic objectives	PM process - design and deployment of Strategy (BSC and DT design or formulation) – technology factor
Theme 16: Technology used for achieving the strategy.	PM process - design and deployment of Strategy (BSC and DT design or formulation) – technology type factor
Theme 17: Evolving nature of processes for designing or formulating strategy and implementation	PM process - design and deployment of Strategy (BSC and DT design or formulation) – perceived influence to enterprise performance
Processes followed to implement strategy and PM in organisational and operational activities and review (RSQ 2, 3 and 4)	
Main Theme 3: Processes to implementation strategy and PM in organisational and operational activities and review (RSQ 2, 3 and 4)	
Theme 18: Customer satisfaction monitoring - implementation	PM process (BSC and DT implementation)
Theme 19: PM framework or system adopted	PM process (BSC and DT implementation) – PM framework adopted
Theme 20: Most important things done correctly during the implementation of the PM process	PM process (BSC and DT implementation) - important things done correctly
Theme 21: PM systems used during implementation - types and characteristics	PM process (BSC and DT implementation) - PM system types
Theme 22: Motivation for using PM system in the enterprise	PM process (BSC and DT implementation) - motivation for PM system usage
Theme 23: Characteristics, activities and outcomes resulting from the structure of PM systems	PM process (BSC and DT implementation) – Structure of PM system used
Theme 24: Problems with implementing the PM system	PM process (BSC and DT implementation) – Challenges
Theme 25: Problems with implementation at an operational level	PM process (BSC and DT implementation) – Challenges at an operational level

Coded data-driven thematic categories	Category
Theme 26: Benefits of the PM systems in the enterprise	PM process (BSC and DT implementation) – Benefits
Theme 27: DT part of PM at operational sections	PM process (BSC and DT implementation) – Role of DT at an operational level
Experiences and perceptions of PM integrating BSC- and DT-related principles (RSQ 2, 3 and 4)	
Main Theme 4: Processes and Experiences with PM / BSC / DT / integrating BSC & DT principles (RSQ 2, 3 and 4)	
Theme 28: Use of processes in business activities and BSC and DT integration	PM process (BSC and DT links)
Theme 29: Opinions of areas and activities affected by principles of the BSC and DT integrated into business principles and activities	PM process (BSC and DT links) – perceived affected business areas and activities
Theme 30: Opinions on the influence of PM integration process on the business environment	PM process (BSC and DT links) – the perceived influence of PM integration process on the business environment
Theme 31: Opinions on BSC- and DT-related characteristics and integration influence on performance in the enterprise	PM process (BSC and DT links) – the perceived influence of characteristics and integration on enterprise performance
Theme 32: Opinions on integrating PM framework sequence of process	PM process (Integrated PM framework) – the perceived sequence of process

Source: Author's compilation

In Table 5.23, the case interviews and document analysis data and the emerged themes were clustered according to the descriptions and meanings assigned to each thematic category for the final four main themes to emerge. The processes further facilitated the cross-case analysis as elaborated in the following sections.

5.4 CROSS-CASE ANALYSIS FINDINGS

This section presents the cross-case analysis of the findings for comparison and to uncover patterns or sets of emerging new insights into strategy and PM activities and processes across the five case participants to develop theory. Based on the coding tables, thematic categories, ATLAS.ti™ network of maps, summary of statements or phrases and relevant Appendices, the research questions are now addressed, beginning with the demographics.

5.4.1 Demographic issues

Organisational profile cross-case analysis was performed following the comparison of content analysis derived in Appendix F. Table 5.24 presents an example of important demographics mentioned by case participants.

Table 5.24: Example of demographic cross-case analysis

Category	Ent-A	Ent-B	Ent-C	Ent-D	Ent-E
Position in the firm	Owner and CEO	Owner and CEO	Owner and Director	Owner and Manager	Owner and Manager
Owner & CEO's background information	Degree (chemistry/ physics) Worked in large manufacturing corporate (held senior position)	Degree (BSc, Hons) Worked in Financial Service Providers	Degree Worked for an accountant (held senior position)	National Diploma (food technology) Worked in a large corporate and family business	Degree (engineering design) Worked in a large corporate
Staff complement (area of expertise)	Owner-manager (business and strategy) Partners/managers (creatives, financials, strategy, business) Other personnel (operations) Independent agents (marketing, sales)	Owner-manager (Finance and strategy, creatives) Partner/managers (business) Other personnel (operations, marketing, sales)	Owner-manager (Accounting, coaching and strategy) Partner/managers (Training and sales, strategy, business) Other personnel (operations)	Owner-manager (business, strategy, sales) Partners/managers (academics in the USA) Other personnel (operations and administration) External parties (marketing and sales, audits)	Owner-manager (business and strategy, creatives, financials, business, marketing, sales) Other personnel (operations) External parties (accounting, law and tax)

Source: Author's compilation

The analysis in Table 5.24 showed common features (highlighted in turquoise and italics) across the cases. Similarities emerged in that all case participants were owned and led by CEOs who held a higher-level education qualification, possessed common expertise in the strategy area and employed staff with common operational skills. A further cross-case analysis of content in Appendix F revealed areas where differences were uncovered as summarised in Table 5.25.

Table 5.25: Summary of data analysis for organisational profile

Description of features	Participants' characteristics
Number of employees	Under 50
Sector operations	Different sectors
Core business	Different businesses
Years in business	Average 10+
Staff complement (area of expertise)	Diverse expertise

Source: Author's compilation

Table 5.25 show that the case participants all had fewer than 50 employees, operated for more than ten years on average but differed in their sector of operation, core business and diverse expertise among the staff. As a result, new insights emerged indicating that across the case participants, resources and skills with expertise were readily available and adequate information would have been accumulated to enable undertaking PM activities and processes.

A cross-case analysis was guided by the 32 thematic categories and the four main themes (Table 5.23 in the earlier sections) relative to the research sub-questions (RSQs revisited in earlier section 5.2.2) to gain a fuller understanding of the PM activities and processes. Where the thematic categories overlapped, they were categorised by their main theme to present the summarised key findings across the five participants.

5.4.2 Main Theme 1: Important and instrumental elements - Understanding SME, Strategy and PM features

Main Theme 1 is related to all four research sub-questions (RSQ1 – 4), to map and uncover patterns from thematic, categorised key elements perceived as important SME traits, and used to describe the strategy or PM activities and processed across case participants.

5.4.2.1 Factors related to PM activities and processes - perceived SME characteristics (theme category 1)

The case participants identified the characteristics seen to be important for an SME relative to thematic category one (1) on aspects of financial (F), non-financial (N), operational (O) and strategic (S) related features, Figure 5.33.

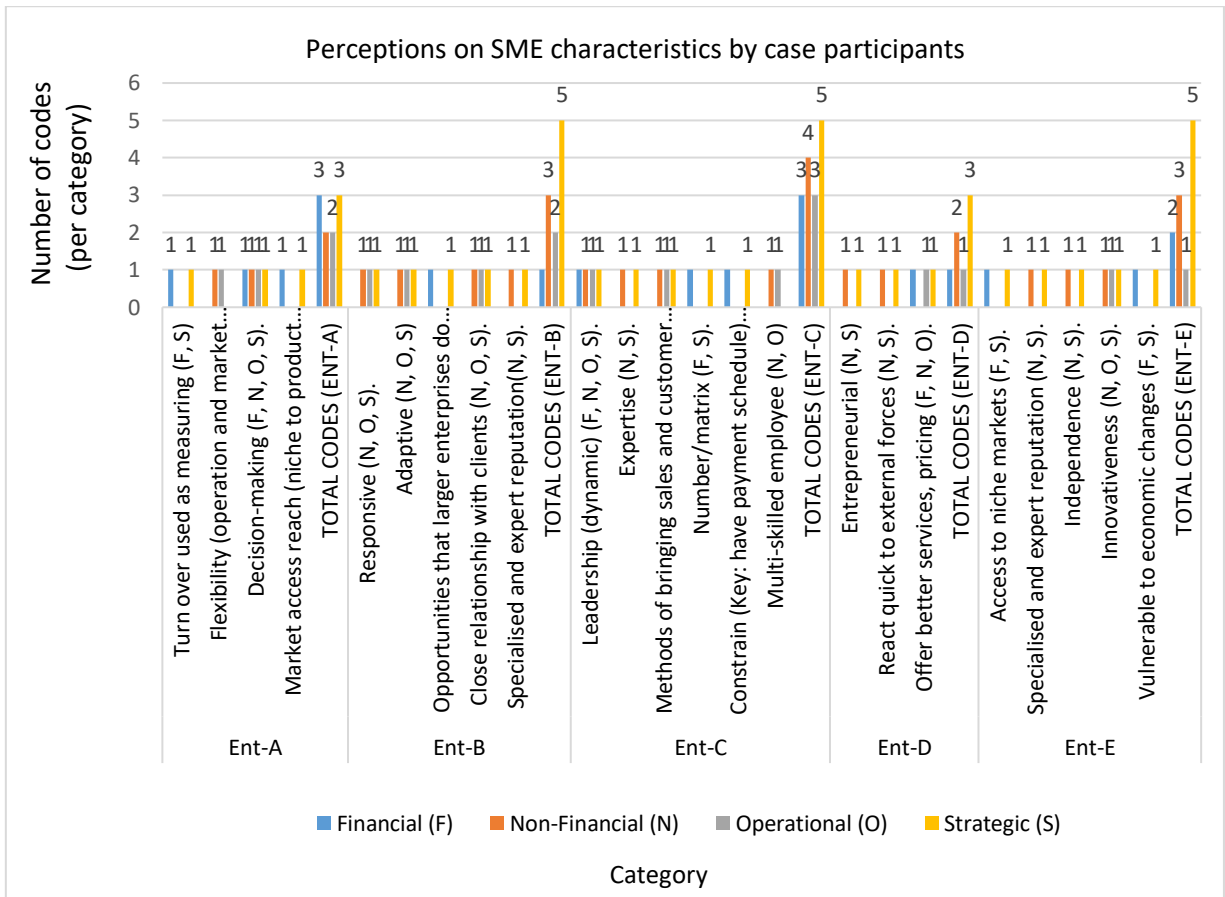


Figure 5.33: Perceived SME characteristics by case participant

Source: Author's compilation

In Figure 5.33, the cross-case analysis showed no commonality on perceived SME traits or characteristics; however, related strategic traits emerged as key elements perceived important to characterise an SME. The analysis further indicated that the case participants were fairly conversant with other typical features often predominantly related to financial, non-financial and operational features.

5.4.2.2 Factors related to PM activities and processes – defining strategy traits (Theme categories 2, 3, 4, 5, 8, 9, 10, 11, 12, 14)

Table 5.26 provides some example breakdowns of PM activities and processes categorised according to PM characteristics used to describe strategy across the case participants.

Table 5.26: PM characteristics used to define strategy and related PM activities and process

Coded data-driven themes	Ent-A	Ent-B	Ent-C	Ent-D	Ent-E
<p>Theme 2: Financial and non-financial-related factors used to define strategy and mission statement</p>	<p>1 Strategy, vision and mission clearly stated. 2 Strategy was based on mission statement that consists of - product factor (quality products, innovation, service), - economic factor (price), - people and relational factor (team, staff, customers and community), - market-focus factor (lead globally), - reputation factor (ethics), - knowledge and information, resources, continuous improvement, key performance areas (KPA)</p>	<p>1 Strategy and vision or mission statement was not clearly stated. 2 Strategy explained using: - economic factors (earning money, marketing), - product factors (skills specialist, innovation), - technical factors (using social media, blogs), - relational factors (joining training bodies, professional organisations, speaking to the target audience), - reputational factors (owner's personal lived failed business and telling the truth, ethics) and - people factor (taking the fear away from people who are afraid of social media).</p>	<p>1 Strategy and vision or mission statement was not clearly stated. 2 Strategy was explained using key aspects of sales training, sales staff and growth of clients and customers. 3 Strategy was long- and short-term represented by - economic factors (generating income); - product factors (skills specialist, unique selling point), - people factor and reputational factor (partnership-building and people-development 'interns as staff').</p>	<p>1 Strategy, vision or mission statement was not clearly stated. 2 Strategy was explained using internal processes with the focus on an economic factor (market access, turnover and income growth), - people factor (internal personnel, independent agents, customers and other external parties), reputation factor (ethical workmanship), - product factors (diverse, innovative products), regulatory factor (statutory and compliance requirements).</p>	<p>1 Strategy and vision or mission statement was not clearly stated. 2 Strategy was explained to indicate the product-service, market-access and environment-sensitive strategy to develop, apply and expand the available skills in the enterprise's workforce. 3 The strategy focused on an economic factor (pricing and turnover, selling point targeted at a specific niche market), - people factor (customers, skills development and growth), - product factor (quality product), - reputational and positional factor (skills specialist)</p>

Coded data-driven themes	Ent-A	Ent-B	Ent-C	Ent-D	Ent-E
					as unique selling point targeted at a specific niche market)
Theme 3: Strategy formalisation by proper documentation.	Strategy formalised	No formalisation of strategy	No formalisation of strategy	No formalisation of strategy	No formalisation of strategy
Theme 4: Supporting strategy defining and related processes	Involves owner, external business partners or internal and external members (with financial, marketing and operational skills)	Involves the owner and spouse as business partners, leadership and management (with strategy, creative, marketing and operational skills), and other personnel (with administrative, marketing, operational and creative skills)	Involves owner (also friends and family) and partners, leadership and management (with strategy, accounting, coaching, sales, business and training skills) and cascaded to telesales staff (personnel)	Involves the owner primarily as leadership (with strategy, sales and business skills), inputs from partners (academics US-based), family members and middle management, external parties (marketing and sales, audits), and other personnel (with operations and administration skills)	Limited to the owner as leadership and management (with strategy, accounting, coaching, sales, business and training skills) and various other strategy related processes outsourced due to lack of internal skills (such as accounting, labour law, legal and tax-related matters) and no clear evidence of other personnel involvement

Source: Author's compilation

In Table 5.26, the cross-case analysis showed no clear commonality of characteristics used to define strategy. It is noteworthy that strategy across the case participants contained varied factors related to PM financial and non-financial elements identified relative to economic, people, products, reputation and relational factors. The analysis showed that there was no formally documented strategy in four out of the five (5) case participants and no clear vision and mission statement. Explanations were provided to narrate the mission of the enterprise. Additionally, the strategy focus varied from growth- and product brand- to customer-market driven. Support for the strategy

involved various people ranging from business partners, family members, leadership provided by the owner and management, and other personnel with diverse skills.

5.4.2.3 Factors related to PM activities and processes – designing and deploying strategy characteristics (all thematic categories)

Other factors related to the characteristics of PM processes were analysed to establish the various stages or phases involved (see also Theme 5, 8), illustrated in Figure 5.34.

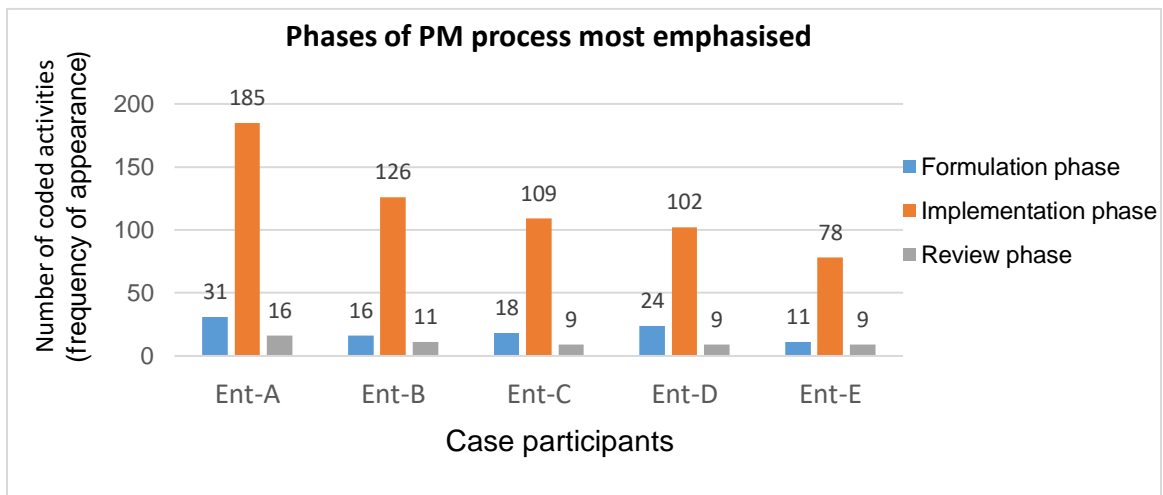


Figure 5.34: Phases of PM process mentioned the most across case participants

Source: Author's compilation

Figure 5.34 revealed a pattern demonstrating that the implementation phase was a crucial PM process across all case participants with more activities emphasised compared to the formulation and review phases. The activities associated with PM process phases (see also thematic categories 5, 7, 8, 13) were analysed in Table 5.27 (Appendix I).

Table 5.27: Number of PM activities mentioned relative to PM process phases

		Ent A (232 activities)	ENT- B (84 activities)	Ent-C (65 activities)	Ent-D (62 activities)	Ent-E (44 activities)
Formulation phase of PM process		31	16	13	15	11
PM activity	<i>Setting up a strategy</i>	✓	✓	✓	✓	
	<i>Adapting strategy</i>	✓	✓	✓		✓
	<i>Alignment</i>	✓	✓		✓	
	<i>Resource allocation</i>	✓	✓			✓
	<i>Setting targets</i>	✓	✓	✓	✓	
	<i>Knowledge-gathering</i>	✓	✓	✓	✓	✓
	<i>Setting goals</i>	✓	✓	✓	✓	
	<i>Planning</i>	✓	✓	✓	✓	✓
	<i>Sharing values</i>	✓		✓	✓	
	<i>Setting up a structure</i>	✓	✓	✓		
	<i>Strategy choice</i>					✓
Implementation phase of PM process		185	54	44	35	29
PM activity	<i>Executing strategy</i>	✓	✓	✓	✓	✓
	<i>Translating strategy</i>	✓	✓	✓	✓	
	<i>Accessing market</i>	✓	✓	✓	✓	✓
Review phase of PM process		16	14	8	12	4
PM activity	<i>Review strategy</i>	✓	✓	✓	✓	✓

Source: Author's compilation

In Table 5.27, the key areas of the PM process were populated to demonstrate the activities of the enterprise or operational strategy receiving more emphasis. There are 15 activities in three (3) distinct phases of the PM process with five (5) out of the 11, revealing a common pattern across the case participants. At the formulation phase of the PM process, there is one (1) activity and two (2) out of the 11 'knowledge-gathering' and 'planning' where case participants placed greater emphasis. The implementation phase had three (3) activities from which two (2) showed a common pattern in 'executing strategy' and 'accessing market'. In the review phase of the PM process, a common pattern across all case participants is shown in 'reviewing strategy'.

5.4.2.4 Factors related to PM activities and processes – tools and methods used designing, and deploying strategy (Themes 7, 8, 9, 10, 15, 16, 18, 19, 21, 22, 23, 24, 25)

The strategy, PM processes and activities were analysed across case participants to search for a thematic pattern on particular SME and PM characteristics categorised as tools and methods used in the design and deployment of strategy. In the category of PM systems (thematic categories 7, 16, 19, 21), varying findings across the case participants showed that the tool used most used was an internal document developed in-house (home-grown) and primarily done on Microsoft® Excel. The PM systems also consisted of a range of other systems (thematic categories 16, 18, 19, 21); some acquired externally included Pastel, Sage, Client-Relationship-Management (CRM), a special internally developed reporting system, posters, route maps. Others such as financial notes, a summary of important notes, post-it notes and pages for notes on long term goals were done manually.

Other technology and social media related tools (thematic categories 7, 8, 9, 15, 16) included Google, the internet, websites, social media, LinkedIn, Facebook, Twitter, email, Mac 10 and Microsoft® Word. The methods used (thematic categories 7, 8, 10, 23) included relevant elements of the principles related to the BSC, ISO9000 and DT strategies providing a PM system for frequencies of measuring, monitoring and improving KPAs, financial and non-financial KPIs or critical success factors (CSFs), and other methods of adapting strategy by frequent reviews of internal operations, communication, innovations and outsourcing PM activities. The findings are illustrated in Figure 5.35 expressed in degrees of the prevalence of financial and non-financial factors concerning BSC (also Appendix S).

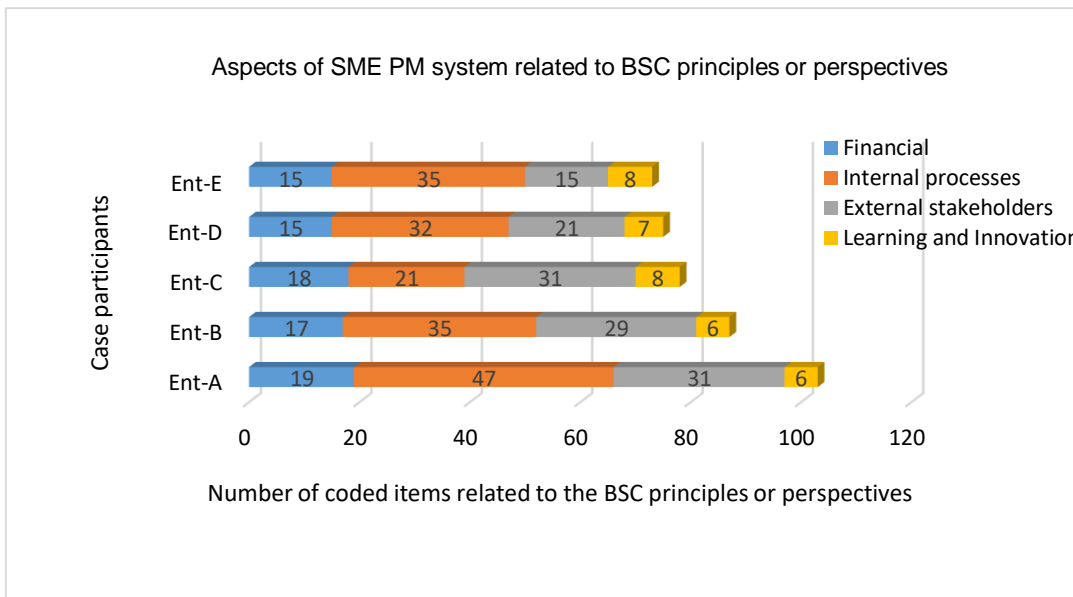


Figure 5.35: Prevalence of coded items concerning BSC-related perspectives

Source: Author's compilation

Figure 5.35 shows the varying frequency of the code items in the structure of each PM system, characterised by and encompassing most of the four perspectives of the BSC. What emerged from Figure 5.35 was a depiction of some case participants' internal processes and external stakeholder BSC-related perspectives or principles showing a higher frequency occurrence in their PM system. Furthermore, some case participants justified using or not using the scorecard and those that acknowledged the adoption of BSC principles pointed out:

...it is the principle that we apply; ...so we take the manufacturing section and break it down into that, so Balanced Scorecard is really what you are referring to. It's nobody's formal BSC system it is an internally home-grown system; ...it is how we monitor our business (Appendix F, Ent-A paragraph 19, 20, 53).

...I do not use a scorecard, because we are not big enough going about the scorecard... (Appendix F, Ent-C paragraph 9).

Various reasons (thematic category 22) were given to justify the PM systems adopted, and related principles were revealed in comments from case participants. The areas of benefit included:

- a keen interest in making sense of undertaking PM (Appendix F, Ent-A, paragraph 34);

- unfavourable prior experiences of compliance with law issues (Appendix F, Ent-D, paragraph 25);
- PM was undertaken due to the failure of the first attempt at business (Appendix F, Ent-B, paragraph 3);
- wishing to have external parties handle the PM for the enterprise (Appendix F, Ent-E, paragraphs 10, 11, 14); and
- use of long term goals to determine what the enterprise wanted to achieve in the future (Appendix F, Ent-C, paragraph 1).

The KPI measures were monitored informally by some case participants (thematic category 18), and pertain particularly to customer complaints and satisfaction. Similarly, customer compliments and feedback were received informally, either verbally or via a website when prompted by the management. Employee satisfaction, or lack thereof, was conducted informally by observation.

5.4.2.5 Analysis and conclusion on instrumental SME and PM features and factors

The data analysis and findings suggested that the case participants were conversant with PM (terminology, requirements, understanding and importance). Resources, skills, information and sources were available and processes in place to undertake or conduct PM to measure the health of the enterprise, success and sustainability. However, for the majority, the will to formalise or document their PM processes was yet to develop. The findings also suggest several areas and elements where the principles related to the BSC and DT featured to encourage and support the SMEs' efforts to integrate the PM system with other sub-systems and strategies. The findings highlight the important SME and PM features, factors and other aspects that are instrumental to strategy, PM activities and processes used by the case participants. Consequently, the cross-case analysis focused on the processes followed to design (formulation) and deploy (implementation) PM and to evaluate the integration of BSC and DT related principles as presented in the next sections.

5.4.3 Main Theme 2: Processes to design, develop and deploy strategy and PM (RSQ 2 and 3)

Main theme two related to research sub-questions two (RSQ2) and three (3) (RSQ3) which were set based on the literature review in Chapter Two:

RSQ2: How are DT- and BSC-related PM techniques used by SMEs in the various business activities?

RSQ3: How does the process used for PM and encouragement of design skill sets influence SMEs' business performance and the environment?

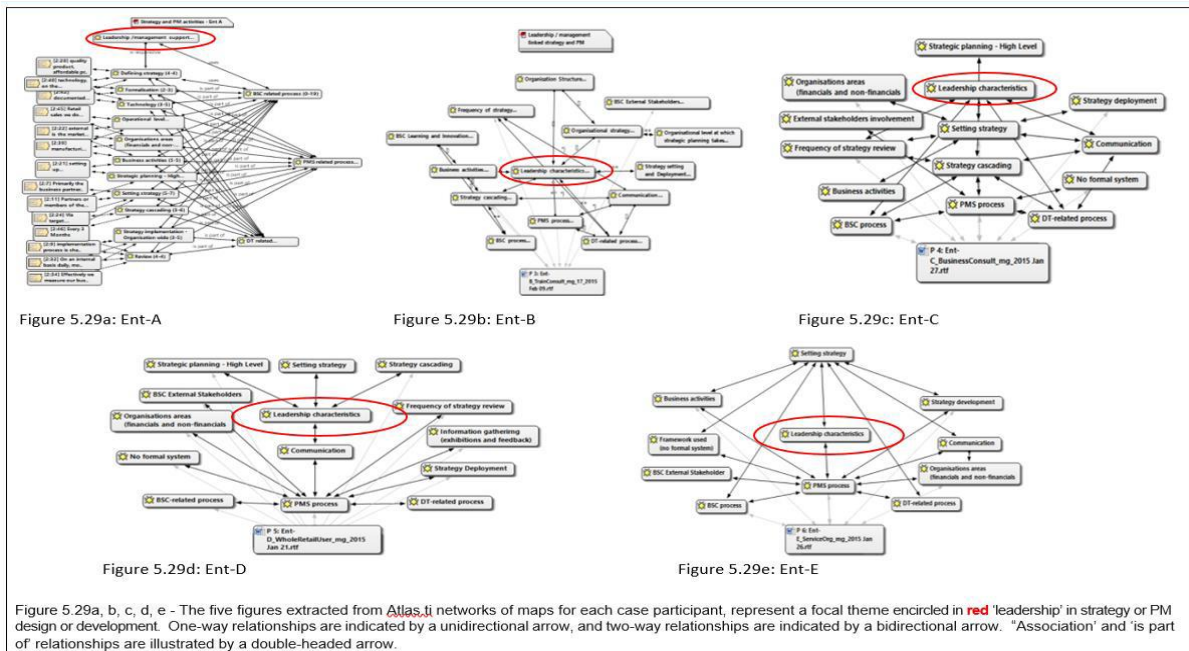


Figure 5.29a, b, c, d, e - The five figures extracted from Atlas.ti networks of maps for each case participant, represent a focal theme encircled in red 'leadership' in strategy or PM design or development. One-way relationships are indicated by a unidirectional arrow, and two-way relationships are indicated by a bidirectional arrow. "Association" and "is part of" relationships are illustrated by a double-headed arrow.

Figure 5.36a,b,c,d,e: Cross case analysis Factors for defining strategy – Leadership related to Strategy

Source: Author's own

The research questions are addressed by outlining the findings on the relevant thematic categories that emerged, linking various factors and processes to setting strategy or PM, cascading and gaining consensus. Firstly, to provide the basis for the descriptions of processes followed to design and develop the strategy or PM. A cross-case analysis of important factors is illustrated in Figures 5.36a, b, c, d, e. The figures result in consideration of key findings across case participants from thematic category four, Leadership, circled in red (all figures 5.36) to show their importance to thematic category nine (9), strategy, and relationship as factors for defining strategy across the case participants.

In Figure 5.36, commonalities in thematic category four emerged across the cases, in that Leadership was an important central factor relative to strategy (thematic category 9) when defining strategy or PM. Patterns emerged from extracted ATLAS.ti™ networks revealed, not only the positioning of leadership (which includes owner-manager and management) relative to strategy, but also various other PM-related activities, including strategy setting or development and interconnected BSC-related and DT-related principles. Common PM activities, their relationship to leadership and interconnections are shown in Figure 5.37.

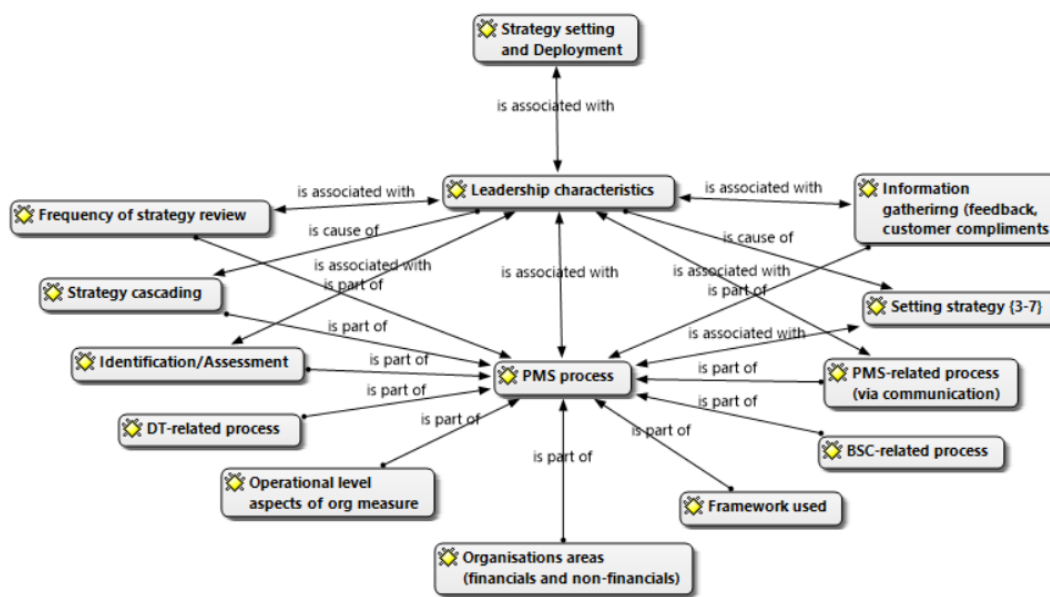


Figure 5.37: Positioning of leadership linked to critical PM activities

Source: Author's compilation

In Figure 5.37, leadership emerged as not only connected as the cause of strategy-setting and cascading associated with reviewing, but also very much part of guiding PM frameworks utilisation, other processes and thinking capabilities. Further analysis in the following section provides an extended understanding of the design (formulation) and the development of PM processes.

5.4.3.1 The process followed to design (formulation) and develop strategy and PM

The analysis of strategy and PM formulation in line with thematic categories 11, 12, 14 and 15, considered the findings in Table 5.25 section 5.4.1 together with Figure 5.37 to address RQS2. Firstly, Table 5.25 and related discussions revealed that the case participants had been in existence long enough to have accumulated data and

information for enterprise performance. The findings shown in Figure 5.37 suggest that the process may begin with leadership, particularly the owner-manager, (at an individual level) constructing data and information (own and organisational knowledge) for the various PM activities. Leadership would initially consult enterprise performance data or information analysis to prepare for strategy design and development and, therefore, understand the processes before (pre-planning), during (planning) and after (post-planning). The PM formulation process was necessitated and is presented next.

- **Pre-planning: strategy setting, gathering data and information**

In one case participant, (Ent-A), where strategy and PM were documented formally and were available in hard copies and electronic format (thematic category 3), the analysis returned various findings on the sources for enterprise strategy, performance data and information. Informality was evident in the other four participants where information was found in fragmented electronic format sources and on their websites. There were no clear findings on the processes followed by these participants to source and collect data or information for analysis or assessment purposes, and as a means to prepare for setting strategy.

In some case participants, the processes followed for identification and selection of critical key areas (KAs) or aspects of concern or where problems may have existed, were triggered by a need to review strategy and direction (thematic category 5), improve or delete certain areas from the current strategy and initiate the decision-making process. The findings suggest that strategy setting may commence with reviewing strategy (PM and BSC-related) and thinking of improvement ideas (DT-related aspect) before developing performance measures. Typically, integrating the principles of the BSC and DT seems fitting at this early phase of the processes. Naturally, the process would be followed by using the critical aspects identified and selected from the available data and information in strategy setting.

- **During planning: strategy setting - using data and information**

The findings revealed that varied processes of setting strategy took place at a strategic level, (thematic category 4), in four of the five case participants, (Ent-A, B, C and D). They were initiated by the owner and often including strategic stakeholders (owner-manager, spouse, business partner and other operational managers). The strategy was shared and communicated with KPA managers and other personnel. At this

phase, the four case participants used available information to initiate and facilitate the process at a strategic level by meetings with other strategic level leadership for support and to communicate identified KAs for review, improvement or deletion.

A review explored the strategic details (identification and assessment) conducted quarterly or annually in most of the case participants. The objective of strategy review was primarily for progress to targets on performance measures and the vision or mission (BSC-related processes), their appropriateness, feedback and relevance to staff for action. For example, one case participant (Ent-A) followed a principle known in their enterprise as 'filter it down' and 'break it down' into bits to select the most important objectives, adopting the iteration process (DT-related processes) until consensus was reached.

Two facets of strategy-setting were considered in enterprise Ent-B. For a long-term strategy, the process was limited to high or strategic level management for personal goals. The short-term strategy was designed by close involvement and regular sessions with other personnel from various parts of the organisation.

Case participant Ent-E was an exception as he justified limiting strategy formulation to high-level management due to a minimal or lack of skill sets in the enterprise and expressed the following view:

...I come up with my own...mainly; ...my biggest problem being an SME; ...was having no verbal connection about the business with anybody; ...I had no interaction with anybody to brainstorming ideas; ...I always had to do it myself (Appendix F, paragraph 12).

- **Formulating (defining) enterprise vision and a mission statement (strategic level)**

In four of the five case participants, the processes followed to design, develop and formulate the vision and mission statement were not formally documented and also not stated clearly (thematic category 2). All case participants utilised financial and non-financial measures to describe their vision, mission or objectives and, therefore, demonstrated their awareness and understanding of PM.

Two of the participants (Ent-B and C) stated that their processes considered the vision and mission in terms of how many enterprises (as clients and customers) could be grown annually concerning the training offered and time spent working with the clients.

In these enterprises, the design process began with the management team (at the strategic level) consisting of the owner-manager and business partner in a break-away set up (outside the organisation) to think about the importance of strategy and how to achieve it. During the break-away session, management used flipcharts (informal documents for data collection) and explored strategic details to generate ideas (identification and assessment); a process conducted at least annually with attempts for quarterly reviews.

At a strategic level, diverse available information was used by case participants to formulate (define) strategy-setting with high-level objectives or aims and mission statements to achieve set goals. The findings revealed traces of principles related to BSC and DT strategies and techniques of identification, selection (assessing), communication, review and decision-making used by case participants at a strategic level to design (formulate) their strategy.

- **Translating or cascading strategy-setting (subsidiary and operational levels)**

At various subsidiary and operational levels, the translation of the strategy varied. In four of the case participants (Ent-A, B, C and D) the belief was to sit down with employees (BSC-related internal stakeholder) as key area owners (KAOs) and ask questions to select appropriate (DT-related aspect) KPAs, KPIs and enterprise initiatives and get consensus. From the KAOs viewpoint, the focus was on re-enforcing the relevance of strategy, communicating and discussing KAs and strategies deemed appropriate and useful to ensure achieving set objectives.

In one case (Ent-B), setting short-term strategy was designed by close contact involvement and regular sessions with other personnel from various parts of the organisation. The primary objective was how the enterprise was going to reach the following month's targets. One case participant (Ent-E) could not cascade strategy setting due to limited skills and key PM activities being outsourced. This participant did not believe operational level personnel had the skills to assist with strategy-setting processes, as expressed in the comment:

...I do not think that employees would be at that level...; ...I did not have employees that could confirm; ...that there was a lack of input; ...in general,

if you got the skills available in general, it is much better... (Appendix F, paragraphs 12, 15, 19)

Four of the case participants indicated that sharing PM knowledge or information directly or indirectly by the owner-manager in the cascading process transferred skills from a strategic to an operational level and contributed to developing PM competencies and shifting the mindsets of stakeholders in their enterprise. In one case participant (Ent-E) where there was a lack of skills, the findings seem to suggest there was no evidence of strategy-setting at an operational level and the approaches or processes followed were not clear. In sum, the findings showed that critical strategy areas (CSAs) identified in, before and during the planning stage were cascaded to an operational level for improvements.

- **Post-planning for strategy setting**

At this phase, four case participants (Ent-A, B, C and D) translated their strategy by setting targets for and with all personnel, including independent agents (Ent-A and D). The objective was to clarify the vision of the enterprise and the details of identifying and selecting strategic priorities and objectives (that is, selecting performance measures, setting targets, aligning strategies and initiatives, allocating resources, establishing milestones) at an operational level. Key-area owners (KAOs), and all personnel (management team, employees and independent agents) from various areas of the organisation were involved in supporting the design and implementation of PM.

5.4.3.2 Analysis and conclusion on processes to strategy or PM design (formulation)

Given the various sectors in which the case participants' enterprises operated, no clear organisation-related similarities could be expected. The only similarities emerged as a result of categorising the data analysed following BSC-related, PM and BSC processes. The differences in processes to design and develop strategy were to be expected due to the uniqueness of each enterprise and the traits, factors and items constituting the PM system. Similarly, the differences in the way BSC and DT principles were used across organisation levels by owner-managers (leadership) to develop strategy and PM system 'with' 'partially inclusive of' and 'for' other stakeholders to enact the strategic plan. Emerging patterns in processes were noted, where the BSC-

related principles and DT techniques were integrated into strategic and operational activities and short- and long-term plans. The results showed:

- Ways to engage internal and external stakeholders, PM knowledge, learning and self-development in strategy and PM processes.
- Identification and assessment of PM data or information to tailor the strategy planning and setting to suit the enterprise and their KAs of responsibility.
- Aligned strategy-setting to KAs and relevant PM data and information to ensure monitoring and improvement of KAO would be focused.

The undocumented processes to support robust strategy and PM design or development with guidelines about how the process should take place and promotion of these processes in some of the case participants' enterprises were missing. There was a particular gap in processes followed at the planning phases of strategy development. For example, the findings on strategy planning showed no clear preparatory processes as a precedent or leading to strategy-setting.

The findings seem to suggest that setting strategy (at strategic level) objectives, purposes and vision were attained by optimising and utilising enterprise know-how and memory by presenting, informing, seeking ideas (DT-related aspect) to or from stakeholders (BSC-related internal and external stakeholders). At both an operational and individual level, the translation of strategy across enterprises was assessed for appropriateness of strategy and PM data and information by and optimising resources and taking into consideration the following:

- Identifying the KAOs as users and their responsibilities in the process;
- Determining the quality of PM data and information to be gathered and reviewed and purpose for its use; and
- Developing KPIs, targets, initiatives and tailoring the performance measures (BSC-related aspects) for relevance to KAOs.

What became clear in considering the case participants' integrated approaches to initiate, guide and provide support to strategy or PM design (formulation), was that leadership involved stakeholders (BSC-related internal and external) in helping gauge their KAs' needs and requirements, and ensured that their views were considered by asking questions (DT-related iteration process) to focus on key performance areas and indicators, setting targets and goals. Also, it may be the intention of case participants

to transfer PM skills by indirect training (BSC-related learning and innovation), raise awareness and impart PM knowledge by reviewing and planning or setting a strategy in their enterprises.

This study could add to the definition of strategy planning by stating that the planning process may begin with preparatory data or information related to PM before the initial stages of strategy-setting. The term all-encompassing may be linked to inclusivity, collaboration, cooperation and optimal allocation and utilisation of resources to achieve set objectives. From these results, it is essential to perform a cross-case analysis on how the case participants' planned strategy was put into action by PM implementation concerning business processes and operations, as presented in the following sections.

5.4.4 Main Theme 3: Processes to Implementation of Strategy and PM in operational activities (RSQ 2 and 3)

Main Theme 3 related to research sub-questions two (RSQ2) and three (RSQ3), which were based on the literature review in Chapter Two:

RSQ2: How are DT- and BSC-related PM techniques used by SMEs in the various business activities?

RSQ3: How does the process used for PM and encouragement of design skill sets influence SMEs' the business performance and environment?

The two (2) RSQs are addressed by outlining the findings based on the thematic categories 24, 25, 26 and 27 in Table 5.25 and considering the main elements in the findings depicted in Figure 5.37, to present emerging patterns on strategy and PM implementation across daily operations. The findings also include evidence identified in terms of the specific operational area, methods on how PM- BSC- and DT-related processes were used in strategy and PM implementation by case participants. RSQ2 is addressed in the following section.

Figure 5.37 positioned leadership centrally with strategy-related aspects. ATLAS.ti™ networks of maps linked strategy aspects with BSC- and DT-related process shown in Figure 5.38 interwoven with implementation and several other relevant aspects.

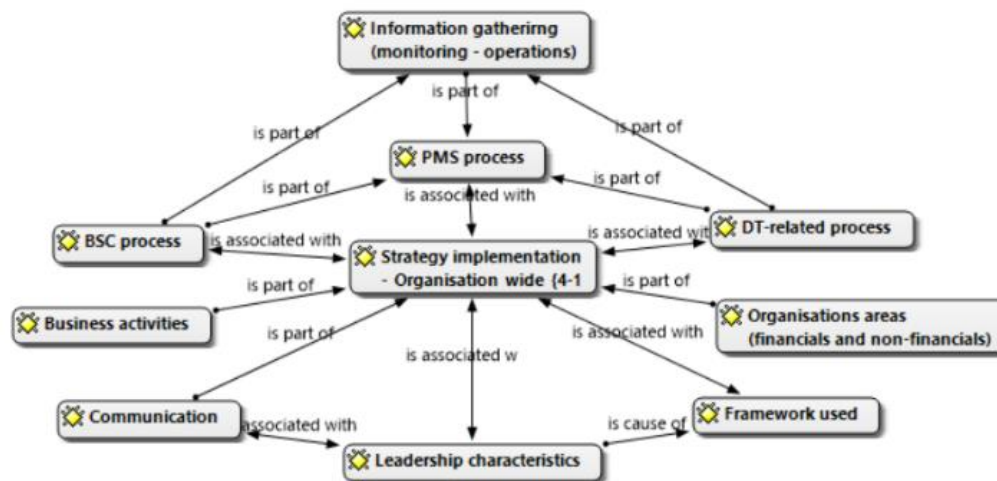


Figure 5.38: Linkage of strategy implementation with key PM-related processes

Source: Author's compilation

In Figure 5.38, the strategy implementation process is shown to be part of, associated with and the cause of various aspects, areas and processes concerning the business or operational activities, BSC-related perspectives and PM processes. The framework is guided by leadership characteristics and considering PM data or information, including the DT process, as sources for learning and innovation. Communication is a tool or technique to use in the business processes at implementation, for identification, assessment, monitoring and review. Business activities are shown as one of the elements in Figure 5.38 and, similar to thematic category 23, provided evidence of various business processes in the enterprises which facilitated the identification of operational areas for a practical demonstration of PM implementation to address RSQ2:

RSQ2: How are DT- and BSC-related PM techniques used by SMEs in the various business activities?

5.4.4.1 Strategy or PM implementation in business processes

The strategy of PM implementation in business processes was analysed in line with thematic categories 24, 25, 26 and 27 in Table 5.26. The findings varied across the case participants and began at various entry points. In Ent-E, strategy and PM implementation was explained and illustrated concerning the workshop area of the business, and the process began with the vision. The principles of DT were reported to be activated by non-standard activities (PM key performance area), various

subsequent requirements, and considered input from leadership and other BSC-related internal and external stakeholders.

Ent-B called the process “*a fumbling process*”. He explained that in implementing PM, the DT principles go into the numbers, KPIs, staff involvement, internal processes (aspects of BSC-related perspectives) and how they were designed and implemented to help leadership and management understand and monitor PM across the enterprise. Processing involved monitoring of external stakeholders, on-line influence and PM data and information obtained from the internet.

In Ent-A, the process began with consolidated PM data being filtered by a knowledge funnel. Ent-A explained that DT was very much part of PM at all points of the manufacturing operations using the funnel approach. KAOs or operators were relied on to monitor errors or deviations during implementation to ensure correct processing. At this stage, a parallel application of BSC-related and DT strategies were used at specific break-points in the process to test three (3) aspects:

- does the system produce the ‘data expected’ in terms of error identification;
- what the KAOs may do on error identification; and
- efficiency in improvements.

Ent-D explained that implementation of PM depended on the KAOs to detect findings in input for further centralisation by the owner-manager. This was a manual process, with PM data and information recorded and centralised to the owner-manager for transfer to an electronic format for summaries and postings using KA-appropriate instruments or tools.

In Ent-C, strategy and PM implementation was called a “circular process”, using manual processes which entailed recording data and information using KA-appropriate tools or techniques. Ent-C explained that in implementing PM, the principles of DT go into the numbers, KPIs, staff involvement, internal processes (BSC-related perspectives) and how they were designed and implemented to help leadership and management understand and monitor PM across the enterprise.

The findings showed that during the implementation process, an effort was made for sharing communication to ensure stakeholders understood what the enterprise wanted to have in a particular situation. The various findings on the approaches, diverse benefits and problems were acknowledged when using the PM system at strategy and

implementation and when used in their business. The implementation processes remained undocumented in some cases, were perceived not to be complex, and the PM- BSC- and DT-related strategies used were for purposes unique to the case participants' KAs setting.

The findings in the following section facilitated the research sub-question three (3) RSQ3:

RSQ3: How does the process used for PM and encouragement of design skill sets influence SMEs' the business performance and environment?

Across the participants, the findings showed that, at the individual KAOs level, using DT- and BSC-related principles in PM processes influenced how the key stakeholders related to the operations' decision-making processes and their motivation to a specific understanding of a given KPA situation.

At the individual leadership level, the processes influenced how leadership relates to their environment, due to the knowledge, skills and authority to enable enterprise-wide thinking on KAs topics and to explore new ideas.

As a result of a better understanding of PM activities and related contributions, the case participants mentioned performance improvements, influence on the behaviour of individuals and the motivation to work even if not being rewarded in performance metrics. The processes also influenced how leadership made rational financial decisions, which might affect the long-term goals of the organisation.

For example, by improved communication and talking inclusively to a group of key individuals or KAOs and using flexible, impromptu *ad hoc* meetings for brainstorming, operators in interlinked-processes understood the relevance and alignment to the KAs to the enterprise's objectives at an operational level.

At an organisational level, engaging in PM, BSC and DT in the business operations internally to produce significant improvements in processes, products, services and strategy and understanding the external atmosphere and forces to produce enterprise-wide and owner-manager transformation on PM attitude, processes and practices.

Furthermore, one case participant was aided by an open-door policy of collaboration and external accountability for labour and regulatory matters. In another case

participant, it ensured improved assessment of ways in which personnel or staff carried out the tasks set out in their KPAs (internal accountability).

In one case participant, it helped with reporting on whether limited (economically) resources were utilised efficiently and effectively. More importantly, objective, reliable data were routinely and continuously collected from KAs to provide data to counter any negative customer perceptions on the effectiveness and quality of service or product offered by the enterprises. From the owner-manager's perspective, it offered experiences to drive evidence-based strategy to change or review plans.

5.4.5 Main Theme 4: Processes and experiences with PM integrating BSC- and DT-related principles (RSQ 4)

Main theme four related to research sub-question four (RSQ4) which was set based on the literature review in Chapters Two and Chapter Three:

RSQ4: How can existing DT- and BSC-related processes in use be merged into an integrative strategy?

The RSQ4 is addressed in line with thematic categories 28 to 32, by mapping key findings on processes followed in the previous section 5.4, and opinions and perceptions of the integration of BSC and DT-related principles across the participants.

5.4.5.1 Opinion on PM processes in business activities and BSC and DT integration

The analysis of the case participants' understanding of the PM process and integration of BSC and DT (thematic category 28) returned views on the importance of these concepts. The opinions expressed on the importance of DT varied across the cases. Ent-A viewed DT from the point of view of designing a product or process, its definition and how important it is to the PM system He believed that PM, BSC and DT (engrained in staff) monitoring should help in to engrain design in everyone in the organisation. Ent-B was aware of DT and used it regularly in the enterprise; however, he viewed it as a non-linear process, not answering questions but providing experiences. Ent-C felt that PM, BSC and DT should be integrated. He reported greater use of integration in the enterprise. He believed that DT in marketing should always result in some kind of PM as the opposite would entail lack of knowing the thought processes of the enterprise. In Ent-D, the views differed due to their core business, thus limiting the use of DT, but acknowledged the importance of active staff involvement in the process of

integration. Ent-E expressed strong views, stating that DT is self-perpetuating and critical for thinking things through. He believed that every part of DT should be measured and that PM, BSC and DT principles should not be exclusive one from the other.

5.4.5.2 Business areas affected by the integration of BSC- and DT-related principles

The findings showed that BSC- and DT-related integration in business areas (thematic category 29) were traceable in all case participants. Customer involvement and innovation emerged as common areas across the participants. Other areas included operations, staff, market-access, products (Ent-A), tools such as visuals and sounds, products (Ent-B, C, D, E), asking questions and identifying problems, searching for various solutions (Ent-C, D, E), people and internal processes (Ent-B, C, D, E), KPI and financial aspects of PM integration (Ent-C, D).

5.4.5.3 Opinions on the influence of PM integration on the business environment

The case participants viewed the integration of PM using BSC- and DT-related principles (thematic category 30) as influential in the business environment in areas or activities such as:

- asking questions,
- early awareness of product mismatch with the market,
- collaborative processes,
- customer and stakeholder involvement,
- designing new products,
- formalisation,
- formal meetings,
- testing markets,
- clarity of processes,
- having active and vibrant programmes for new products (but process undocumented),
- the creativity of staff sketching ideas,
- evaluation,
- testing performance of products (Ent-A),

- giving staff authority for creativity and flexibility concerning customers, and
- creating a culture rather than a tradition (Ent-B).

5.4.5.4 Opinions on BSC- and DT-related characteristics and integration influence on performance in enterprise

The case participants viewed the integration of BSC- and DT-related principles and related characteristics as being influential to performance (thematic category 31) in the following ways:

- encouraging stakeholder suggestions (involvement),
- a positive mindset encouraged by leadership (but people are reluctant to change),
- DT and design change happens from within and in all levels of operations,
- motivated staff not feeling threatened,
- incentivise staff, not financially but by improved KPAs (Ent-A),
- creating and communicating a culture to give staff permission not to think formal legalistic way of doing things (Ent-B),
- defining culture to enable expression of differing new views and workings,
- people experiencing processes encouraging innovation,
- communicating lessons from past success (or not) and experience,
- encouraging a different approach to thinking to use looking forward without restrictive formalities, and
- communicating formally but working closely to encourage informality and understanding (Ent-B).

5.4.5.5 Opinions on integrating PM framework sequence of process

The case participants viewed the sequence of processes for integrated PM (thematic category 32) in different ways. In the view of Ent-A, the process begins with PM, BSC and DT-related principles as a core part of the business. It has to revolve, involve, evolve and end with implementing PM and management systems as a way of improvement. From the point of view of Ent-B, it involves improvisation; however, he would not know how to put the process in or document it to formalise it. Ent-C would use steps such as using flow-charts and PowerPoint. Ent-D would use visible charts but was not clear on sequence processes. Ent-E would not know how to document it

and felt it would be difficult to apply without being bogged down in paperwork and would not know how to document it.

5.4.5.6 Analysis and conclusion on processes and experiences with PM integrating BSC- and DT-related principles

What also emerged was that integration of PM, BSC and DT may happen where there is prior knowledge, learning and experiences about the performance-related aspects. However, this is not always a pre-requisite. The status of the enterprise, its internal and external context, resource availability, where leadership and stakeholders are willing, open-minded and have the skills and disposition for PM initiatives are also important factors. In the implementation process, leadership plays an important role in exploring, establishing, promoting and emphasising the deliberate (at times accidental) nature of PM, its approaches and integration. The processes occurred at various levels, in real-time and moment-by-moment as KAOs or operators reflected on what learning and experience was happening and how to respond to the emerging need and strengths of their operations and activities. Noteworthy was the relatively high level of abilities to integrate PM system principles and strategies related to the BSC and DT in daily activities. This partly reflects the largely positive perceptions that owner-managers have of PM initiatives, which appeared to be attributed to ease of use and simplicity of the processes. Notwithstanding when and how it happened, the integrated PM was purposefully oriented (at times accidentally) to knowing about the impact of learning or experience and improvement in daily operations, and responding to this information in ways that would promote enterprise-wide and cross-functional learning and experience. The differences in the way the principles of BSC and DT were integrated into operational activities was expected because of the sector-uniqueness of the varied case participants. Despite the variances, the findings provided evidence of the principles in KA activities, actions, learnings and experiences at the operational level.

Similarities and patterns in KA activities were also noted, where the BSC-related principles and DT strategies were implemented. Leadership and KAOs integrated the principles and strategies into the immediate, short- and long-term activities plans and operational actions KAs. Where the principles were implemented, the owner-managers:

- sought knowledge from stakeholders (KAOs) by analysis and interpretation of PM information, to learn and tailor or improve the PM process or programme to suit the respective operational areas and align planning to PM information to contribute to the enterprise objectives.
- Provided leadership and technical support to eliminate any barriers to the optimal involvement of stakeholders in the process or programme, with the focus on providing KAs information progress to stakeholder's and lifting acceleration achievement.
- Recognised their KA short-falls, promoted and celebrated the contribution strengths and abilities of KAOs, encouraged setting high personal, self-development and growth goals, thought and provided support in ways stakeholders may engage or guide their future learning and self-PM.

The structures that supported documentation of learning or experiences with innovations developing subsequent robust PM integration in the operational activities was missing in some of the case enterprises. There were no records with clear outlines or guidelines about how the implementation of PM and resulting improvement happened or should happen and its impact on monitoring PM activity and processes. This may create a gap in learning the implementation processes, resulting in a missed opportunity to establish an organisational memory bank for future reference on problems experienced and how to arrive at solutions and improvements that worked.

5.5 SUMMARY

The discussion in the previous sections provided clear evidence on the implementation processes in the operational activities of the case participant organisations. It addressed concerns and threats to the sustainability of PM system implementation highlighted in the literature review. The findings, therefore, suggest that integrated PM framework was feasible to implement, with enterprise-specific refinements about the sequencing of key elements and to optimise the probability of sustained implementation.

Despite the difficulties reported, the findings are encouraging, as the feasibility and sustainability of PM system innovation are highly evident and appreciated in the case participant's limited-resource enterprises. The processes used for the formulation and implementation of strategy and PM facilitated the identification of opportunities, helping

to attain the ultimate objective of this study which was to develop an integrated framework for PM of SMEs. The discussion and interpretation are presented in the following chapter.

CHAPTER SIX: DISCUSSIONS AND VALIDATION

6.1 INTRODUCTION

In the previous chapter the results of the data analysis on features, factors and processes in the design and implementation of strategy and PM in daily operations were presented along with the differing approaches of the case participants. In this chapter, the findings and related issues are discussed and interpreted, and an integrated PM framework for SMEs and related validation processes is developed.

6.1.1 Goals of the chapter

The goal of this chapter is to discuss the findings based on the analysis of the empirical data and provide interpretations concerning the literature review. The aim is to address the formulated main research question (MRQ):

How can the BSC- and DT-related principles contribute to an integrated PM framework for use by South African SMEs?

The objective is to examine the potential for the integration of PM with the BSC and DT related principles or strategies, ultimately, to develop, present and obtain validation for an integrated PM framework that SMEs may be able to adapt to their specific enterprise to ensure growth and sustainability.

6.1.2 The layout of the chapter

This chapter consolidates the important findings based on the analysis that emerged from the four main themes developed in Chapter Five concerning the literature review and to evaluate and understand the PM and design skill sets followed in the case participants in Section 6.2. Section 6.3 introduces the developed integrated PM framework based on the findings and highlights the crucial processes. In Section 6.4, the validation of the theory developed is explained. Further discussion on the difficulties with the PM framework is covered in Section 6.5. The benefits of the integrated PM framework are discussed in Section 6.6. The discussion of the chapter is covered in Section 6.7, followed by a summary Section 6.8.

6.2 REVISITING THE KEY FINDINGS LEADING TO THE DEVELOPMENT OF AN INTEGRATED FRAMEWORK

Two important premises were established in the introduction to the study to understand its epistemological and ontological position (see Section 1.3.7). Chapters Two and

Three outlined a new paradigm to processes and various principles related to BSC and DT strategies for PM system integration. The literature review chapters are revisited and briefly highlighted in the following sections, to support the emerged main themes and key findings, and to guide how the integrated PM framework was developed to achieve the objectives of this study.

6.2.1 Main Theme 1: Instrumental features for the process to design and develop strategy and PM

PM is recognised as one element of a general management system comprising many essential components, each representing its system; however, all interact and working together to produce outcomes which form a PM system (Armstrong, 2019). Organisational theory depicts an enterprise as an open-system, generally consisting of interrelated contributing parts and processes for PM in a known environment to facilitate sustainability (Miller & Rice, 1967:296). The components of key factors (that is, organisational profile, perceptions on SME and PM characteristics, and processes to design and implement strategy and PM) differ significantly in features and processes between case participants. Still, there are similarities in the categorisation of factors. The conclusion can, therefore, be drawn that the factors deemed to be instrumental for the integration of a PM system are dissimilar.

6.2.1.1 Profile of SME case participants

Both the case participants and the focus group members met the delineation criteria of this study, in line with the definitions provided by the NSB Act, 1996, and the Amendment Act of 2004, and 2019 (South Africa, 1996; 2004, 2019a). All case participants have been operating their enterprises for more than ten years and are led by owner CEOs or Managing Directors. The leadership has a high-level of education and adequate accumulated experience with diverse skills and knowledge.

Taking the duration of operational and other factors into consideration, it is apparent that the case participants are established and, therefore, demonstrate sustainability. Based on these factors, the proposition can be made that there is coherence between the existence of the enterprise, duration, education, skills and experience. This agrees with a study by Sitharam and Hoque (2016:281), which found that highly educated SME owners can attain and develop skills to sustain the enterprise.

Presumptions can be made that the basic essential documents, such as enterprise profile, strategy and PM, would be formalised and documented to sustain the enterprise. Four out of the five participants have no documented or formalised strategy and PM and prefer to narrate their strategy or PM-related factors or processes. One participant has hard copy documentary sources and related aspects on its website, but four have strategy or PM and related aspects widely spread across websites. Formalisation is considered to be relevant and necessary by the participants, and the intention is to develop such documents soon, although it is perceived as a tedious and difficult exercise. The lack of formalisation echoes the findings of Hussin and Yusoff (2013:449) on elements of informality in documenting strategy or a PM framework in SMEs. Neneh and van Zyl (2012:119) state that the competencies for every valuable area of improving enterprise performance are under scrutiny, and more so, those that still pose unique challenges due to their environmental background (Bvuma & Marnewick, 2020:1). The assumption that a higher level of education in leadership impacts on strategy or PM can be refuted when informality is a factor. The statement by Sitharam and Hoque (2016:281) that a high-level education in enables SMEs to attain and develop skills for enterprise performance or PM can be disproved.

6.2.2 Features and factors related to strategy and PM traits

In general, the literature refers to factors and processes as critical items, actions or activities that should be present for a particular plan or situation to be successful (Eybers & Giannakopolous, 2015). The identification of such factors and processes should be considered for enterprises to be successful in using DT and the necessary integration of BSC related principles (Nielsen *et al.*, 2017).

- **Critical factors for strategy and PM characteristics**

The IA Adviser (2015:37-40) emphasised the sustainability of an enterprise from the perspectives of direction, vision, readiness, people, processes, data, technologies capabilities and consistency of existing measurement practices. The findings highlighted that strategy and vision is talked about but not documented. The mission statement is documented but not stated clearly in four out of the five participants; one participant has formalised these factors. Strategy concerning traits and processes is explained in different financial and non-financial terms (PM and BSC-related), operational, technological and strategic factors. Additionally, different resources, skills,

information, sources and processes are identified as factors to describe strategy and PM initiatives in the participants' enterprises.

From the findings, it is clear that there is a sound level of knowledge of strategy and PM-related aspects and that the participants are conversant with PM know-how (terminology, requirements, understanding and importance). This is in contrast to the findings by Fauske *et al.* (2009: Online) and Kirsten *et al.* (2015:13) that there is a lack of or inadequate knowledge of PM concepts. However, the findings do confirm a lack of vision in line with findings from Koumar (2016:147) and Ledwaba and Makgahlela (2017).

Additionally, Kaplan and Norton (2015) associated PM with methods or systems to solve general problems using financial and non-financial measures from four perspectives to measure business performance. In addition to various other systems and technologies, some of which were acquired externally, different home-grown PM systems were identified as instrumental factors by the participants. Similarly, the elements of the principles related to BSC, DT and other strategies were identified as methods or tools to provide PM system structures, along with the frequency of measuring.

It is apparent that the participants do not have sophisticated PM systems or frameworks; however, reasonably appropriate PM, BSC or DT principles are used to decide on which new systems to invest. These findings agree with some of the PM system elements given by Hussin and Yusoff (2013:449) as important to address issues related to resource constraints, time and costs to implement. Beyond that, the findings seem to contradict the concerns raised by Mosalaka (2007:5) and van Zyl (2020) on the competencies and skills in SMEs, particularly relating to the PM types as critical factors.

Eybers and Giannakopolous (2015) referred to processes as critical items alongside factors that should be present for a particular plan to succeed. Studies considered identifying these processes as the most crucial requirement to establish and deploy strategy and related objectives (Peters, 2019; Wieslander, 2009:46). Different terminologies for PM processes are used by participants and were classified across categories in line with the processes identified by Fuertes *et al.* (2020), Hill *et al.* (2014) and Taticchi *et al.* (2009) as being ideal for an SME PM system. These include assessment, design, implementation, communication alignment and review. What

became apparent when considering the participants' strategy and PM processes are that there were three (3) phases of the process following categorisation. These phases are formulation (design), implementation (deploy) and review. Additionally, the implementation is the most categorised of the processes instrumental to strategy and PM.

Saunila (2016) states that PM is a comprehensive process, and all enterprise activities should be considered for their impact on performance. Other scholars contest that strategy in SMEs should not be expressed as a concept, but by activity (Hussin & Yusoff, 2013:450; Kerr *et al.*, 2005:93-112). Participants used different phrases or words to describe strategy or PM activities in line with the BSC-related principles of Kaplan and Norton (2015; 1992:71-79). These principles begin by asking stakeholder-focused questions when setting strategy and vision and translating the vision and strategy of an enterprise into KPA-focused measures. However, scholars emphasise the need for a systematic review to ensure effective PM maintenance (Armstrong, 2019; Rompho, 2015; Najmi *et al.*, 2005:109-122). Participants explained that strategy-setting took place when the strategy was reviewed and that this occurred periodically or at certain intervals facilitated by leadership and other stakeholder involvement and at various levels in their enterprises. It can be concluded, therefore, that the identification of these activities is triggered by factors intended to direct, re-direct or improve the strategy to benefit from using available resources. Bellisario and Pavlov (2018) state that strategy and alignment should be considered in a PM system for optimisation of resources. These findings are further supported by evidence provided in the literature for the significance of numerous other factors triggered as a result of identified setting strategy and vision concerning strategy review and alignment activity factors.

Firstly, vision plays an important role in DT in generating insights to support making decisions (Liedtka, 2017:52). In the BSC, the role is designing a coherent strategy set (Bochenek, 2019:9) and PM is about articulating the vision of various stakeholders (Mamabolo & Myres, 2020). Secondly, the literature associates stakeholders with a group(s) or individual(s) that may influence or be influenced by strategies, practices, plans or goals of an enterprise (Laine & Vaara, 2015; Freeman, 2010).

In turn, leadership (top management) influences driving investments in new improvement plans or programmes and plays a role in setting vision, mission, values

and leverage competencies and ensuring the effectiveness of PM across functional boundaries which is moderated by employees' experience and other internal or external factors (Massingham *et al.*, 2018; Nielsen *et al.*, 2017; Hussin & Yusoff, 2013:449; Franco-Santos *et al.*, 2012:99). These factors were outlined by the participants explaining the leadership, various stakeholders and other factors found to be instrumental to the strategy, PM and related processes.

6.2.3 Main Theme 2: Process of designing and developing a strategy

Leadership: The findings positioned leadership (owner as manager) in a pivotal role when defining strategy or PM, including strategy-setting or development processes and interconnected BSC- and DT-related principles. This confirms the views held in the contingency and agency theories on the importance of leadership and the recognition of the relationship between leadership (owner as a principal), aspects related to enterprise resources, achieving set objectives and proposed performance results (Redden, 2019; Dossi & Patelli, 2010). Micheli and Manzoni (2010:466) suggest that leadership be enabled to facilitate the formulation, implementation or review of organisational strategy by processes followed to communicate results to stakeholders and promote and re-enforce a performance improvement culture.

- **Processes followed to design and deploy strategy and PM**

Scholars have associated PM with choices of actions, information, metrics and processes to quantify the efficiency and effectiveness of an enterprise's performance (Smith & Bititci, 2017; Zeglal, 2012; Franco-Santos *et al.*, 2007; Neely *et al.*, 1995).

Data and information as a source for PM: In Section 6.2.1.1, the length of time the participating enterprises have been in existence seems to suggest that adequate data and information for enterprise performance should have accumulated. However, no clear finding was evident in four of the five participants on the processes followed to source and collect data or information. The PM data identification analysis or assessment process as a means to prepare for setting strategy was informal and not properly documented.

There is, therefore, a lack of formalisation of data sourcing and collection. By implication, this means missed opportunities for enterprise data and information optimisation as a PM resource and contradicts considerations outlined by Bellisario and Pavlov (2018) as aspects to facilitate strategy and alignment. Whicher, Raulik-

Murphy and Cawood (2011:44-52) contend that the use of PM data or information should not only be seen as an aspect for strategy planning and related processes when needed but also as constant awareness to highlight strategic areas of enterprise performance.

Pre-planning for strategy setting: In pre-planning for strategy setting, the findings revealed a process that begins with leadership, particularly, the owner-manager (at an individual level) engaging with strategy and PM data and information (own and organisational knowledge) to review strategy in preparation for design and development processes. The findings suggest that, in this phase, there is a trigger of actions from the necessity to review strategy or PM due an event. Beyond the need for strategy review, the literature indicates that a PM system should consider strategy and alignment to facilitate the optimisation of resources (Bellisario & Pavlov, 2018).

Initiating strategy setting: Wiesner and Millett (2012:98) identified strategy as one of the activities to improve the sustainability of an SME and the most important aspect in the PM process instituted at the organisational level. Initiating the need for a change in strategy and PM, the findings revealed the processes followed for identification and selection of critical key areas (KAs) from data or information, or aspects of concern or where problems may have existed or improvement required, often inclusive of leadership and other relevant stakeholders (such as the enterprise's partners) at an enterprise level, management at the subsidiary level and other key personnel at an operational level.

Two issues arise here; firstly, the findings suggest that the strategy review (PM and BSC- related aspect) may be triggered by the need to improve KAs which, in turn, trigger the actions that follow to identify and select PM data or information by improvement ideas (DT-related aspect) before developing performance measures. Secondly, the findings demonstrate the ability of leadership or managers to identify causes that lead to improvement strategies (Saunila, 2017). Bellisario and Pavlov (2018) emphasise the need to consider strategy and alignment in the processes of strategy and PM.

During strategy setting (at strategy and subsidiary level): The success of an enterprise depends on meeting all stakeholders' changing needs and, therefore, cannot build a self-centred PM system (Striteska & Spickova, 2012:1). Managers must be able to identify causes or requirements for strategy improvement (Saunila, 2017).

During the strategy-setting phase, leadership used available data and information to facilitate engagement with accessible and supportive strategic and subsidiary level stakeholders. *Ad hoc* meetings were used to communicate, explore (DT-relates principles), identify and select strategic key areas (SKAs) for review and vision or mission (BSC-related processes) areas for improvement or deletion.

However, the process followed is informal, and no formalisation of the planning process was evident. Two issues arise from these findings; firstly, it is apparent that leadership guides relevant stakeholders by examining data or information to develop and set strategy. Secondly, integrating the principles of BSC and DT seems fitting at this early phase of the processes.

Translating or cascading strategy at subsidiary and operational level: According to Nielsen *et al.* (2017), PM should cross functional boundaries. Employees' experience moderated its effectiveness. When the correct questions are asked, more ideas can be created and the best answers chosen (Massingham *et al.*, 2018; Kolko, 2018; Franco-Santos *et al.*, 2012:99; Adair, 2009: Online). The strategy and vision were cascaded down to the subsidiary levels and across the enterprise by target setting and monitoring with input from key area personnel.

At a subsidiary and operational level, KAOs were involved as decision-makers, asked questions to identify and select solutions (DT-related principle) to deliver a higher-level strategy to ensure a successful PM effort. The process followed was informal and often involved leadership (KAOs) sitting down with employees on an *ad hoc* basis (BSC-related internal stakeholder), asking questions (DT-related aspect), identifying and selecting KPAs, KPIs and enterprise initiatives to gain consensus.

In this phase, the findings suggest that, on the one hand, leadership guides subsidiary and operational stakeholders by intensified engagement with data or information to align with a set strategy. It can be concluded that by cascading, leadership directly or indirectly shares PM knowledge or information and attempts to transfer skills from a strategic to an operational level, therefore contributing to support the development of PM competencies and shift the mind-sets of stakeholders in their enterprise.

A top-down and bottom-up approach was apparent in the findings in support of the views of Hussin and Yusoff (2013:450), who suggest the PM effort should be a two-way process, supported by a mix of the bottom-up approach (Groen *et al.*, 2012:136).

Some participants used a top-down approach with no input from other people. The propositions can be made that there need to be certain requirements and the process should occur in a collaborative, cooperative and adaptive context to encourage innovation, trust and empower capabilities, facilitate alignment and success in strategy and PM. These revelations confirmed the processes deemed ideal for an SME PM system, as outlined by Fuentes *et al.* (2020), including those related to the implementation of strategy and PM.

6.2.4 Main Theme 3: Processes to Implementation of Strategy and PM in operational activities

The notion exists that the design and implementation of PM systems happen iteratively rather than linearly and may, therefore, appear difficult (Armstrong, 2019). Additionally, Laury *et al.* (2019) warn that PM approaches used or followed, and processes may not seem a straightforward and simple task.

Approaches adopted or followed: The findings revealed various approaches followed by the case enterprises in the implementation of strategy in their daily operations, primarily occurring at an operational and individual level. The case participants have diverse, supportive approaches promoting PM integration in place, sometimes called FID/BID to display a top-down and bottom-up process. In others, the approach is called BID to show that a top-down and bottom-up approach is applied, underpinned by the owner-manager's experience of DT techniques and BSC-related principles. Others applied a circular approach displaying that a top-down approach was followed to monitor, review and improve the daily activities, and the other used a sequential approach where only top-down was followed for the implementation process.

The conclusion, therefore, is that the differences in the approaches adopted in the principles related to BSC and DT integrated into the operational activities at implementation process was expected, due to the uniqueness of each case participant, their varied sectors and different contexts of operation. By implication, the processes involved may differ and be dependent on the context where PM occurs.

At an operational level: The processes were diverse and began at various entry points of operational areas. The BSC-related principles and DT strategies were implemented at the operational level, with leadership and KAOs integrating the

principles and strategies into the KAs immediate, short and long-term activities and their operational actions. At times the KPAs were monitored (BSC-internal processes) and performance movements filtered using the funnelling process (DT-related approach), with the need for improvements triggered by deviations from the set standards. In others, the vision aligned with operational objectives triggered the need to monitor operational activities. In turn, *ad hoc* communication processes were triggered for brainstorming, identification, selection and testing of ideas to reach consensus on the best solutions (DT-related process) to adopt in the business processes. The findings showed that, during the implementation process, an effort was made for sharing communication to ensure the stakeholders' understanding of what the enterprise wanted to achieve in a particular situation.

Although the processes were undocumented, the principles of DT were reported to be activated in KPAs due to various requirements, input from leadership and KAOs and including other BSC-related internal and external stakeholders. The process occurred by improved communication and talking inclusively to an individual or group of key individuals or KAOs using flexible *ad hoc* meetings for brainstorming. The conclusion, therefore, was that the differences in the implementation processes adopted with the principles related to BSC and DT integrated into the specific operational activities was expected.

Despite the variances at the operational level, the findings provided evidence of the principles in KA activities. Although the processes may appear unclear, imperfect or chaotic, as suggested by Laury *et al.* (2019), in some ways they go against the claims that there may be a misfit of DT and BSC-related principles with existing enterprise processes, or difficulty of implementing resulting ideas, organisational culture clashing with DT principles and mind-sets as highlighted by de Paula *et al.* (2019) and Carlgren *et al.* (2016).

The findings revealed that using DT and BSC related principles in operations in the PM processes influenced how the key stakeholders related to the operations' decision-making processes and their motivation as possessors of a specific understanding of a given KPA situation, influencing the behaviour of individuals and the motivation to work even if not rewarded in performance metrics. Therefore, it can be concluded that the processes followed to monitor, review and improve the daily operation or activities used both a top-down and bottom-up approach for implementation. The findings align with

the flexibility, transparency, reactivity and proactivity recommendations by Cocca and Alberti (2010:196-200).

At organisational level: The findings indicate that participants engaged internally in PM, BSC and DT-related principles and process in the business operations to produce significant improvements in processes, products, services and strategy and understanding the external forces to produce enterprise-wide and owner-manager transformation on PM attitude, processes and practices.

In the previous section, it was stated that difficulties were part of the norms experienced due to PM complexities. It can be said, however, that the iterative nature of DT strategies can enable clear communication of ideas in problem-solving, by its creativity and allowing flexibility in illogical, imperfect or, at times, processes that seem chaotic (Kolko, 2018). For BSC, the findings to provide evidence to support or refute the application-level criticism made against the BSC as a hindrance to creative learning or experiences and innovation in enterprises were not clear (Madsen & Stenheim 2015; Antonsen, 2014; Hoque, 2014).

6.2.5 Main Theme 4: Processes and experiences in the integration of BSC and DT related principles

The literature supports much-needed studies on interventions to examine how the range of components inter-relate or interact to produce outcomes in an enterprise's performance (Okwir *et al.*, 2018).

The findings showed opinions that integration of PM, utilising the BSC and DT-related principles or processes can happen where there is prior knowledge, learning and experiences about the performance-related aspects (although not always a pre-requisite), the status of the enterprise, its internal and external context, resource availability, where leadership and stakeholders are willing, open-minded, and have the skills and disposition for PM initiatives.

In the implementation process, leadership plays an important part in exploring, establishing, promoting and emphasising the deliberate (at times accidental) nature of PM, its approaches and integration. The processes occurred at various levels, in real-time and moment-by-moment as KAOs or operators reflected on what learning and experience were happening and how to respond to emerging need and strengths in their operations and activities.

Noteworthy was the relatively high level of ability to integrate a PM system by the principles and strategies related to the BSC and DT in daily activities, partly reflecting the largely positive perceptions that owner-managers have of PM initiatives, which appeared to be attributed to the simplicity of the processes and ease of use.

Integrated PM was purposefully oriented (at times accidentally) to knowing about the impact of learning or experience and improvement in daily operations, and then responding to this information in ways that would promote enterprise-wide and cross-functional activities learning and experience. Ladzani *et al.* (2013:3999) maintain that strategic management tools (including PM and BSC) and thinking strategies (including Design Thinking) among SMEs are increasing since managers and owners are looking increasingly to strategies in their quest for competitive advantage. Neneh and van Zyl (2012:122) advocate the significant benefits of such tools for SME performance and emphasise the effect of the tools in forcing the managers or owners to think continuously about open enterprise questions and solutions.

The findings suggest that the design, development and deployment of strategy and PM processes occurred in parallel or often interchangeably, although imperfect or appearing chaotic in some instances. However, the actual DT integration into the BSC-related principles in PM processes has been demonstrated. In these processes, the integrated BSC and DT related principles or processes show both leading and following roles at all times. The roles interchanged by engagement, cooperation, respect and trust to refocus the enterprise strategy and its activities, particularly to ensure that PM processes suited how the strategic goals and performance were to be achieved and sustained better.

The active involvement of customers, employees, managers, suppliers, regulators and the surrounding community is evident in various aspects of the PM process undertaken by co-creation and not just collaboration. Studies have considered the identification and design process to be the most crucial in establishing both the enterprise's strategic objectives and strategies (Peters, 2019; Wieslander, 2009:46). The literature supports the iterative rather than linear design and implementation of PM systems and related processes, in consideration of the need to be extremely flexible, transparent, reactive and proactive, given the resource constraints (Cocca & Alberti, 2010:196-200).

Based on the findings of this study, these phases may represent the foundation of continuous strategic thinking to enable a successful PM implementation process,

which SMEs often lack. Despite the challenges and benefits reported, the findings provided a platform and the sequence of key elements to assist in attaining the ultimate objective of this study which is to develop an integrated framework for PM of SMEs.

6.3 THE DEVELOPED INTEGRATED PM FRAMEWORK FOR SMES

To develop an integrated framework, the literature review identified approaches, assumptions and difficulties associated with the processes at varying levels of strategy planning, PM and implementation in enterprises. Crucial to the success of an integrated framework was the role of leadership in ensuring the processes' success. The skills required for a leadership role were identified by Shute and Becker (2010) as including better PM and benchmarking. Olawale and Garwe (2010:731) classified the competencies as critical to ensuring the sustainability of SMEs. These aspects and elements provide an important infrastructure for this research to develop feasible, sustainable and effective PM innovations and subsequently incorporating the aspects and elements in an integrated framework with the various stages of strategy and PM processes may promote its success.

As a theoretical framework, the BSC takes objectives and strategy as its starting point and begins by asking "What do shareholders or stakeholders want?" The vision and strategy of an enterprise translate into measures across four different areas, finance, customer, internal business process and learning and growth (Kaplan & Norton, 2015; 1992:71-79). The BSC framework provides the most integrated approach for measuring enterprise performance. Efficient and effective business processes are implemented by internal resources and capabilities. The business processes relate firstly to the perspective of the customer which eventually leads to superior organisational performance (Qehaja *et al.*, 2017:585; Kaplan & Norton, 2015; Mainardes *et al.*, 2014:48).

Huang *et al.* (2011:4975) claimed that the BSC provides a multi-dimensional view of an enterprise's overall performance and suggest a sequence of perspectives that reflects the value-creating activities of an enterprise. The sequence of the BSC begins with learning and growth, followed by internal, business processes, customer and financial perspectives. The BSC design includes elaborate processes for identifying measures selected to inform management about the enterprise's progress to achieving its goal (Andersen *et al.*, 2001:5; Olve *et al.*, 1999:320-8). On the contrary, studies

showed that SMEs have difficulties to define or select formal measures (Andersen *et al.*, 2001; Mintzberg, 1981).

The ideal dimensions and the principal characteristics for PM in SMEs are proposed by Taticchi *et al.* (2009) to include the processes of strategy and PM assessment, design, implementation, communication, alignment and review. Figure 6.1 shows the structure of the developed integrated strategy PM framework, which consists of the strategy, PM, BSC and DT principles, activities and processes of identifying, communicating, assessing, monitoring, reviewing, testing and improving. At the core of the framework are the four important steps, pre-strategy planning, strategy planning, strategy implementation and post-strategy implementation, as discussed in detail in the sections to follow.

INTEGRATED PM FRAMEWORK FOR SMES 'BSC/DT Combined'

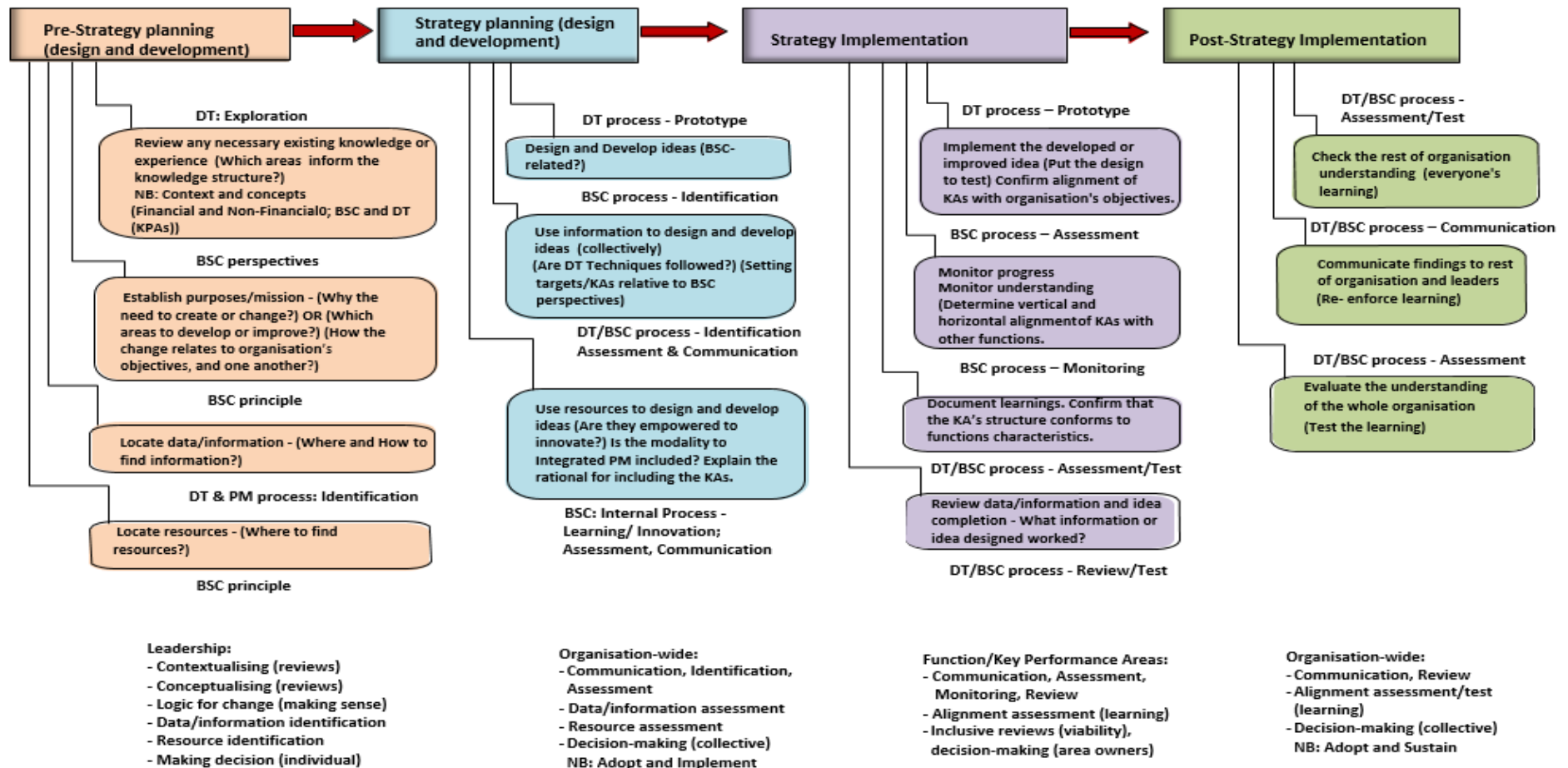


Figure 6.1: Structure of the developed integrated strategy PM framework (1st version)

Source: Author's compilation

In the integrated framework shown in Figure 6.1, the pre-strategy planning is the preparatory stage, generally upstream with activities of leadership that involve organisational, PM context and concepts, resources and systems. The second stage, strategy planning, represents typical formal decisions made inclusively by relevant stakeholders on the objectives, processes and intended innovation in KAs. In the third stage, strategy implementation, specified activities, and KAs of performance developed according to the strategy comes under daily activities. Finally, post-strategy implementation involves testing and adopting improvements. The integrated strategy, PM, BSC and DT aspects flow across these processes.

The foundation of the framework is the notion that problems, issues, or both, relate to organisational and individual learning or experiences and are bound by the environment or context (internal and external) in which the operational activities occur. Therefore, necessitating a mix of internally developed PM responses incorporating the designerly skill sets. The pivotal role of the owner-managers (leadership) in supporting PM efforts is documented in the literature. Management should provide a flexible environment to encourage innovation, promote a culture of trust, open-mindedness and develop systems to help relevant stakeholders engage in integration.

With the rapidly changing business environment, Boland and Collopy (2004:199-192) emphasised the need to be prepared to deal with challenging problems, strategies that enhance problem-solving skills and DT skill sets. They called on leadership to start thinking like designers, organise their enterprises like a design team and ultimately adopt design attitude to transform products, services, processes or how strategy or PM could be developed (Elsbach & Stigliani, 2018; Owen, 2007).

Leadership is required to investigate data related to specific aspects or issues, reflect on what and why problems or difficulties might occur and consider approaches or strategies (concepts) that will promote better PM efforts and outcomes for the enterprise. For this to happen, the owner-managers in their role of leadership need to examine critically both visible and invisible experiences and practices and those taken for granted in light of evidence about organisational and individual learning. The Design Support for Business (2011) suggested leadership-related success factors should include:

- a) finding new avenues to generate innovation;
- b) pushing existing markets, increasing opportunities for opening new markets and market value; and
- c) evaluating the enterprises' performance.

The owner-managers should, therefore, explore avenues that offer new possibilities in the integration of PM with designerly skill sets to challenge their thinking and those of key role players.

However, throughout the phases, there seems to be a trigger of actions due to the necessity to review strategy or occurrence of an event, followed by guidance (from leadership seeking PM data and information) and intensification (developing strategy with the involvement of stakeholder, monitoring and review). Bourne *et al.* (2000:754-771) suggested that the development of a PMS may be separated conceptually into processes, stages or phases of design, implementation and use. In terms of PM processes in SMEs, Huang *et al.* (2011:4975) provided a sequence of perspectives based on the BSC-related principles to reflect value-creating activities. The InCaS emphasise the intensity and importance of interfaces and mutual relations between all capitals (Nupap, Chakpitak, Neubert & Tra-ngarn, 2016). Lee and Huang (2012) looked beyond the view of interfaces of these capitals and sought to evaluate integration by relationships between BSC implementation and accumulation.

Scholars maintain that the integration of dynamic resources or specific processes, activities, or capabilities and competencies (including individual capabilities) enables enterprises to gain a competitive advantage by organisational learning or innovation (Brink, 2019; Zhao *et al.*, 2019; Guokun & Yungang, 2016; Eisenhardt & Martin, 2007:1107). From the viewpoint of small enterprises, researchers state that integration may seem a prerequisite for pursuing and ensuring a successful PM, specifically to create, discover and exploit new opportunities successfully (Ferreira & Coelho, 2020; Zahra *et al.*, 2006:917-955).

Based on the findings, there emerged a trigger of actions to necessitate improvements in strategy, processes, products or services. As a consequence, the integrated PM framework may start by incorporating **(D)**esign Thinking at the initial stage of the PM process and the **(P)**re-strategy planning preparatory stage (more divergent). The stage provides a set up for studying and understanding the enterprise's context, concepts, data and resources. The stage should facilitate the processes for reviews, identification

and decision-making on necessary improvements to the vision, mission, strategies and operational objectives.

The initial stage generates inputs for the strategy planning stage (strategy **(D)**esign and development) that identifies detailed measures, measurement plans, sets internal and external targets and objectives for the organisational and operational processes in a convergent manner. The detailed measures are used for strategic alignment and applied as input for the strategy **(I)**mplementation stage to ensure the accurate translation of strategy into action and achieving improved measurement results. The implementation stage entails using the measurement results, primarily focused on monitoring, analysing, reviewing, suggesting improvement initiatives for organisational or operational performance and facilitates activities in the last stage of the framework. Finally, the **(P)**ost-strategy implementation tests suggested improvement for collective decision-making to re-enforce organisation-wide continuous improvement and adoption for routine use.

For purposes of this study, the initial letters for each stage are taken into consideration. **D**esign Thinking, **P**re-strategy planning, strategy planning, **D**esign and development, strategy **I**mplementation and **P**ost-strategy implementation to form the now called **DPDIP** approach for the integrated PM framework. The framework operates as a continuous process in an attempt to improve enterprise-wide PM initiatives due to its minimalistic approach.

It should be recognised that the process movements may not always be linear through the various stages, for example, pre-strategy planning, and post-strategy implementation may be iterative or occur in parallel. The process may also move from post-implementation directly to strategy implementation or planning, creating repeated circular movement or iteration in the various processes and stages. In the sections to follow, a detailed explanation of each of the four stages is provided. Laury *et al.* (2019) and Harbour (2009:10) warn that PM may not seem a straightforward and simple task to undertake due to its dependence on resource-constrained, capability bounded and behavioural factors.

- **The process to consider at the pre-strategy planning preparatory stage**

Considering the infrastructure and construct for developing an integrated PM framework, Gotore (2011:17-19) suggested the system principles be based on

sufficient information, identifying areas for long-term future growth, with a focus on new areas in the short-term, and looking inward for value in resources (that is, people in the enterprise, systems used and processes or procedures followed). Aguinis (2013:2) linked PMM to a process of continual identification, measurement, development of individual performance, teams and alignment of performance with the strategic goals of the enterprise.

The pre-strategy planning stage has heuristic potential for gaining knowledge, experiences and learning on critical areas of PM, problems requiring redress and take into consideration:

- Gaining a preliminary understanding of what the existing organisational, operational and individual knowledge, learning and experiences tell you (that is, Identifying the internal and external variables at various contextual levels and implementation framework or approach to understand the problems).
- Establishing why there is a need for improvement or change (that is, Prioritising the variables that are key to the implementation); and
- Understanding where to find PM data, information and resources (that is, Locating the implementation drivers and important key features such as leadership, consultation and communication, and resources).
- PM data, information and processes used may help guide owner-managers in terms of learning and experiences of areas requiring review and how or where to allocate and optimise scarce resources best to those requirements that objectives may be achieved.
- Subsequent KAs recommended for improvement are specifically identified for further development.

In essence, contextualise (internal and external) people, systems, processes and PM data and information (resources to contribute to achieving set objectives and results), and identify the drivers or strategies for adoption in specific KAs so that contextually appropriate interventions and strategies (concepts) to enhance the probability of sustained PM may be developed. The process should ensure PM data and information results of both quantitative and qualitative KAs (that is, actual results vs planned or set-objectives or goals for improvement or developmental results) and their conformity or non-conformity to the set objectives.

In this instance, DT and PM processes may be used to identify, assess and review the current status of enterprise-wide PM data and information and resources for interim decision-making on KAs for improvement. The framework fosters organisational learning, enhances research efforts and communication and supports decision-making (Chiesa *et al.*, 2007:199). It may focus on the improvement or development of new processes, activities or products (Haque & James-Moore, 2005:100-122) and should be used both reactively and proactively to change the organisational and operational culture. This stage provides input for strategy planning (that is, setting and translation). PM is not just used for reactive monitoring but to disseminate strategy and change culture proactively (Awwad & Akroush, 2016:3; Haque & James-Moore, 2005:100-122).

- **The process to consider ‘strategy planning’ design and development stage**

At the integration level of PM systems, comprehensiveness and consistency of measures and dimensions according to the business strategy are emphasised (Giovannoni & Maraghini, 2013:979-1009). The stage should provide clarity and the rationale for individual, strategic and operational level stakeholders to use for appropriate KA indicators of performance to align with the set objectives of overall enterprise activities. Neneh and van Zyl (2012:122) advocate the significant benefits of using DT for SME performance and its effect in forcing owner-managers to think continuously about open enterprise questions and solutions. The stage should ensure the following:

- Only specific recommended KAs for improvement are developed further.
- Using PM data and information, resources and ideas to design multi-component strategies, measures and factors for effective implementation of PM processes to attain set objectives and targets are developed (that is, to ensure mutual understanding and consensus on how PM will be successfully achieved or implemented).
- Analyse the organisation strategy – based on the principles of the frameworks on which strategy of SMEs are set out, the vision and mission statement may be set and explained concerning the enterprise-specific and operational context.

- Identify and understand the problems to remedy – determine and source formal and informal ways to find solutions to define a clear set of what the enterprise aims to achieve.
- Seek inclusive-consensus of KAOs on the goals and objectives to achieve – taking into consideration the development of enterprise objectives and PM, strategies, resources framework and improvement strategies.
- Develop suitable and specific initiatives or relevant supporting material (if training activities are required), KPIs not only for achieving results but also to optimise people and resources, process improvement and flexibility, and encourage people to adapt to the KPA and KPIs.
- When KPIs are finalised, seek inclusive consensus with KAOs on the processes and format to consolidate KPIs and reporting PM back into strategic planning and implementation processes to enable decision-making concerning the requirements and actions for improvement.

This may appear to be the most difficult step in the process; however, leadership must find a balance and DT techniques and processes are a relevant source to use. Wiklund *et al.* (2009) refer to organisational theory, indicating that different tools may be used to deal with constraints and problems associated with PM. The stage provides an opportunity for an enterprise to align and coordinate the implementation of different initiatives, in terms of timing and areas to ensure integration of the framework aspects and, therefore, ensuring sufficient coverage of KAs and elimination of stand-alone areas. Moreover, the process may help to foster a culture of effective learning and innovation in organisational and operational areas and bring about effectiveness and efficiency for self-measuring KAs, operations or activities. The planning stage, therefore, ensures that the systems to meet the needs for various users, the right KA data and information, the KPI reporting format and time for learning or experience to be acquired may be developed. This is consistent with Bititci *et al.* (1997a:524) who support the view of providing a platform to guide the implementation of the framework to ensure the effectiveness and efficiency of PM processes.

- **The process to consider at ‘strategy implementation’ stage**

Hussin and Yusoff (2013:449) advise that the methods and processes to implement strategies should consider the limitations facing SMEs. In this stage, the organisational and operational change and recommended improvements in PM initiatives should be

demonstrated as to how specific processes of strategy, PM, BSC-related and DT strategies or techniques may be used or followed to address particular needs throughout the integrative process. The developed framework demonstrates:

- Putting the developed strategy into action (that is, how the developed strategy is implemented across the organisation); processes and techniques or tools or mechanisms to facilitate and ensure that improvements are put into action.
 - Monitoring the KA performance (at organisational and operational level) in line with the objectives of the developed strategy (that is: how are strategies performing or progressing in comparison to set objectives and targets?). Regular monitoring and reporting of actual KA performance compared to planned or set objectives. The process should facilitate owner-manager and KAO interaction by available or required needed PM data and information for users to make decisions and deliver as required. The PM data and information should also assist the owner-manager to establish what has happened to date, what is currently happening and what is likely to happen if the current status persists for the financial year and years to come and what actions if required, should or need to be taken to achieve the agreed performance targets.
 - Capturing, recording and documenting the KA-specific PM undertaken (that is: what is learned and experienced in the process of implementation?). Measuring, monitoring and managing performance are integral to improving processes followed, products developed and services provided. It is, therefore, critical that the learning and experiences for new knowledge are documented for organisational memory.
 - Evaluating the completion of the implementation process (that is: What PM data and information, idea or design worked?). The PM data and information should also assist the owner-managers and KAOs to establish what has worked or is currently working, what improvements or impact occurred or are currently occurring and which products, services and agreed performance targets for decision-making on PM improvements to adopt or reject.
- **The process to consider at ‘post-strategy implementation’ stage**

Before the final decision-making on improvements to reject or adopt as routine in operational activities, Leavy (2010:9) states this stage may trigger the requirement for

leadership to test and re-test the processes implemented for the interim results (short-term and long-term) by:

- Evaluating the understanding of learning and experiences across the organisation (that is: To what extent do organisations' stakeholders understand the learning and experiences?). KPIs should be well defined in consultation with KAOs concerning the consistent collection of data and easy understanding and use by all stakeholders in the organisation. All stakeholders should have a common understanding of KPIs, therefore finding a balance in ensuring that KPIs are not complex, too broad or too narrow.
- Communicating the findings across the organisation and relevant stakeholders (that is: what learning and experience need to be re-enforced?). Misunderstanding the improved learning to be adopted may exist between the overall measures of success of the organisation and those at an individual level. Tests should be undertaken at an operational level and activities to ensure a clear consensus on PM system KPIs at both organisational and operational level;
- Re-evaluating the understanding of the whole organisation (that is: what gaps in the learning and experience still exist?). To provide and ensure clarity on how targets at an individual level contribute to the overall organisation targets and objectives, and how business processes and KA targets contribute to targets and objectives as a whole.

At this final stage, the activities may help to identify gaps or needs and facilitate decision-making for improvements and the value of the integrated PM framework measured against the organisational objectives. It is noteworthy that, in the four (4) PM processes of the integrated DPDIP approach, frameworks have a common thread of asking questions first to find a solution, a typical demonstration of DT philosophy as described in the literature review. The initial structure in Figure 6.1 that developed following the analysis and results of the interviews and documentary analysis required validation from the SMEs to fully realise its completion. As a result, two focus groups (validations) were conducted, as discussed in the following sections.

6.4 VALIDATION OF THE DEVELOPED THEORY

The main themes 1, 2, 3 and 4 (features, PM processes and integration) developed from the categories following the data analysis in Chapter 5 were used in this section

to verify whether the developed theory IPMF reflected characteristics true to the lived reality of SMEs in the Cape Chamber of Commerce and its affiliates. Also, whether it was structured and suited for an SME context, for adoption and customisation to the integrated PM processes in their context, expressing the reality experienced by these enterprises.

- **Suitability of PM to SMEs (BSC and DT-related principles perspectives)**

Studies revealed views that a PM system such as the BSC can be a good fit for SMEs (Chillida, 2009:9). Proponents of the BSC praise its suitability for SMEs, citing that the enterprises can develop customised scorecards to fit their unique situations or context, to benefit the overall organisational strategy (Pourmoradi *et al.*, 2016:56; Kaplan & Norton, 2001). Well documented studies have shown that almost 60% of enterprise in the world are reported to be using the BSC (Fuertes *et al.*, 2020:13; Cooper, Ezzamel & Qu, 2017). Scholars in the SMEs focused research on where the BSC was found to be used for feedforward control, attest to better financial performance, higher levels of exploitative innovation and perceived positive effect of the BSC (Malagueno *et al.*, 2018).

From the perspectives of the design and innovation fields, the literature provided evidence of the use of DT in SMEs with benefits in areas of improved performance, better innovation culture and ripple effect resulting from knowledge sharing (Lattemann *et al.*, 2020). Other benefits based on the integration of DT in an enterprise where it can become the foundation for competitive advantage are reported (Wrigley *et al.*, 2020; Björklund *et al.*, 2020). Scholars attest to the benefits of adopting DT in an integrated approach, where forward and backward mapping, advocacy coalition and communication improvements form part of the mix of the bottom-up and top-down approaches (Kolko, 2018; Hussin & Yusoff, 2013:454; Groen *et al.*, 2012:136; Monte & Fontenete, 2012:246). Additionally, honesty is required when DT is used for business people to start thinking like designers to transform their ways in how business processes or strategy or PM could be developed (Elsbach & Stigliani, 2018; Owen, 2007).

6.4.1 Validation: Focus group one

The first focus group validation of the developed IPMF was done with a group of SME experts who are established SMEs in their own right and involved in the training of

other SMEs. In the validation with Focus Group One (FSG1), the description of the framework was more literal (Figure 6.2 screenshot example, the full transcript is found in Appendix U). The views and opinions expressed showed the typical phases or stages of the framework experienced during the PM processes in their enterprises.

	A	B	C	D	E	F	G	H
1				FOCUS GROUP ONE: SMES experts involved in the development of other SMES				
2				Focus group 1: FG1: Ent-A Marketing & Branding	Focus group 1: FG1: Ent-B NPO Skills development	Focus group 1: FG1: Ent-D Training/Skills development	Focus group 1: FG1: Ent-E Service industry	SUMMARY FINDINGS: FOCUS GROUP ONE
3				less than 50	less than 50	less than 50	More than 700	
8	Number of employees			4	4	12	More than 20	
9	Number of years			Yes	Yes	Yes	Manager / Director	
10	Owner or manager (or both)			Service	Service	Business Development	Built Environment	
11	Sector							
12	General: PM & DT (Attributes, influences, Processes & experiences)		Briefly describe your most significant experience(s) with PM.	Thinking of PM in terms of its similarity with M&E	Agreeing with other participants referring to M&E as the 'language of SMEs' for PM	Agreeing with other participants to associate M&E with PM	Agreeing with other participants to associate M&E with PM	FOCUS GROUP ONE SUMMARY OF FINDINGS: So basically I'm hearing that your general experience and how you use performance measurements with <i>delivery, working with clients and employees, delivering projects to clients, delivering services to clients' annual projects, NPO, Governments project and MGNC, also SMEs</i> and
13								
18		Based on the developed integrated Performance Measurement (PM) framework	What characteristics, knowledge or skills do you agree with? If not, what characteristics, knowledge or	Agreeing with the explanation of the BSC and DT and other terminologies used in the framework	Agreeing with the explanation of the BSC and DT and other terminologies used in the framework	Needing clarity with terminologies contained within the displayed developed framework (DT and BSC and others) Agreeing with the explanation of the	Agreeing with the explanation of the BSC and DT and other terminologies used in the framework	FOCUS GROUP ONE SUMMARY OF FINDINGS: So what I'm hearing from this part is that, 1) <i>basically agree, theoretically, with what it is like but if it's a corporate that deals with its clients</i>

Figure 6.2: Example of Focus Group One Data Analysis screenshot

Source: Author's compilation

As shown in Figure 6.2, using comments, comparisons and examples, the participating members expressed their agreement with what was presented and described in the IPMF framework, in the sense that the phases included reflected the typical stages that they would experience or had experienced.

- **Characteristics, knowledge and critical skills for PM in SMEs**

Focus group participants were asked whether they agreed with or could say what could be added to the IPMF. In terms of the characteristics, knowledge or skills critical for PM in SMEs, the views expressed by FSG1 (Appendix U) indicated that the group members agreed theoretically with the IPMF framework, and commented:

...for HR but if for budget is like and practicalities - but in practice there is never feedback. [FSG1 Ent-B]

...happy with model; ...add stakeholders, clients... [FSG1 Ent-C]

...happy with model; ...add stakeholders, clients, but there is a gap with what actually happens; ...for example, if you look at the purple...; ...but add the client perspective, staff, union etc... [FSG1 Ent-E]

...only when there is problem, then there is feedback then they go back to step 1... [FSG1 Ent-F]

In this section, no changes to the framework were suggested by the FSG1 participants, although the stakeholders' section was highlighted as missing and that it might look different in practice.

- **The structure of the framework**

Concerning the validation of the IPMF integration based on the inter-relation of BSC and DT related principles, the views expressed agreed with the framing and strengths of the IPMF (Appendix U). Comments and suggestions by FSG1 members were as follows:

...looking at big picture is good, but, the steps and what are the measurable; ...it provides a good indication and guides with needs to planning all the time; ...a lot of planning and areas to covered before you identify what to do. [FSG1 Ent-B]

...is all about corrective action, allowing independent thinking, passion and togetherness, it promotes unity happening at each step. [FSG1 Ent-C]

...DT is a buzz word currently and SMEs are using; ...looking a block one...; ...there should a finger in the pulse the big picture is great. [FSG1 Ent-E]

... the first step is conceptualising (theoretical view), also in terms of quality; ... it is more like an independent monitoring, in terms of business unit projects you need other stakeholders; ...departments and individuals. [FSG1 Ent-F]

Other opinions expressed by FSG1 participants on the weaknesses of the IPMF included:

...there need to be loop of going back; ...to check did it happen etc..; ...processes need to be interactive; ...consider the colouring for SMEs...; ...the two blocks must be combined; ...you plan and then implement [FSG1 Ent-F]

...it does not allow complete iterations circles; ...needs a rolling flows; ...there should be go and no go, if yes go but if no go back...; but for simplicity...; ...it covers a lot of things, but it is too much to process for an SMEs in terms of budget, but will imply breaking it down...; ... use of colours based on structure for fast track purposes...; ...add a block and put right across the top, to know what the main thing is; ...start with a Mission and Vision, value and have a rope for all other activities, yellow block perhaps... [FSG1 Ent-E]

...organisations have different levels; ...it can work because of decision making. For SMEs many of the steps would not work ENT-B

...suggest use of colours for small business or different colour for medium business. [FSG1 ENT-C]

Other suggestions offered included views on consideration of methodologies of 'what if and what now', DT as part of the planning followed by a reflection section on what has been learnt and to show why the framework is simplified. In this section, improvements to the framework were suggested. Views expressed highlighted the theoretical base of the framework, and that it is extensive for limited-resourced SMEs.

- **Suitability of IPMF to SMEs**

To validate suitability with the SME contexts, views expressed by FSG1 participants included comments such as:

...organisations have different levels; ...it can work because of decision making. For SMEs many of the steps would not work; ...this is a theory of product development, but this is not how it actually happens, the processes of product development; ...SME do not have money, limited resources; ...some processes could be done by the outsider... [FSG1 Ent-B]

...SMEs may apply 40% and iterate; ...SMEs are limited by resources; if heading said for Corporates...at least it can have four steps and one colour to work for SMEs; ...if SMEs do not see quicker results it may not fly; ...if you are outsider as an owner of the SMEs, then they could drive the process. [FSG1 Ent-E]

...agree but SME in terms of budget and time; ...it will be a good tool, but a challenge will be implementation; ...it depends on the belief of the SMEs.

[FSG1 Ent-C]

...it is good as a basic tool; ...need to be streamlined to talk to more practicality of SMEs considering the control measures; ...I need to know what I need to do at pre-planning stage... [FSG1 Ent-F]

A modification in the framework was suggested by putting the heading for vision at the top, creating loops between phases, colouring to indicate suitability for SMEs to the structure of the IPMF (path for adoption). Various ways of how different SMEs could customise the IPMF to suit their unique context were suggested. The suggestions also confirm the argument by van Zyl (2020:14) that there is no clear line on PM. Ates *et al.* (2013) and Bititci *et al.* (1997a:533) regard PM as a closed-loop control system used to deploy policy and strategy.

6.4.2 Validation: Focus group two

Focus Group Two (FSG2) consisted of a mix of SMEs, some in the early stages of their enterprise and others well established. The validation with the FSG2 discussions confirmed the FSG1 outcomes with minor adjustments (Figure 6.3 screenshot example and full transcript in Appendix U).

	A	B	C	J	K	L	M	N	O
1									
2				FOCUS GROUP 2: SMEs at early stages of their enterprises (1 year or more)					
3				Focus group 2: FG2: Ent-A (Yapha) Tourism	Focus group 2: FG2: Ent-B Pool table Manufacturing	Focus group 2: FG2: Ent-C Shamila Construction	Focus group 2: FG2: Ent-D Naahad Photography	Focus group 2: FG2: Ent-E Hospitality (Food services)	SUMMARY FINDINGS: FOCUS GROUP TWO
8	Number of employees			less than 50	less than 50	less than 50	less than 50	less than 50	
9	Number of years Owner or manager (or both)			less than one year	more than 2 years	less than one year	9 year	less than one year	
10	Sector			Tourism & transportation	Manufacturing	Construction	Advertising	Food and beverage	
11	General: PM & DT (Attributes, influences, Processes & experiences)	Briefly describe your most significant experiences with PM.	Having gained experience from employing people in own business relative to challenges of measuring 'reliability' issues, non-quantifiable stuff like 'integrity', 'character' and 'outcomes-based learning'	Arrived 5 minutes late into the discussion (DID NOT PARTICIPATE IN THIS SECTION OF QUESTIONS)	Having had challenges finding available suitable human resources for performance and growth of organisation either through internet or network support	Arrived 15 minutes late into the discussion (DID NOT PARTICIPATE IN THIS SECTION OF QUESTIONS)	Having challenges to finding locally reliable information (via internet) to measure market or growth areas or base for management	FOCUS GROUP TWO SUMMARY OF FINDINGS: So basically I'm hearing that your general experience is with having had challenges in finding reliable information and means to measure aspects related to human resource, market or growth for organisation management. So it's to do with, sounds like it's mostly to do with your human resource related	
13		Based on the developed integrated Performance Measurement (PM) framework:	What characteristics or knowledge do you agree with? If not, what characteristics, knowledge or	Needing clarity in terms of the displayed developed framework being 'specific to an individual or general'	Arrived 5 minutes late into the discussion: Needing clarity with the question discussed and terminologies contained within the displayed developed	Needing clarity with terminologies contained within the displayed developed framework	Arrived 15 minutes late into the discussion (DID NOT PARTICIPATE IN THIS SECTION OF QUESTIONS)	Needing clarity with terminologies contained within the displayed developed framework (DT and BSC)	FOCUS GROUP TWO SUMMARY OF FINDINGS: So what I'm hearing from this part is your questioning lack of clarity in terms of: 1) whether being developed as a 'general' or 'individual specific' focused framework.

Figure 6.3: Example of Focus Group Two Data Analysis screenshot

Source: Author's compilation

Concerning the validation in Figure 6.3 by FSG2 participants, the phases of the framework and the design of strategy or PM planning and implementation phases were

also highlighted by views expressed on the characteristics, structure and suitability criteria.

- **Characteristics, knowledge and critical skills for PM in SMEs**

In response to the question asking focus group participants whether they agreed with or could add to the IPMF, the views expressed (Appendix U) indicated that all participants agreed with the IPMF framework, with strong views expressed by participants:

...it seems very comprehensive but seeking clarity on being or not being 'industry-specific'. [FSG2 Ent-D]

...agreeing with other participants but seeking clarity on term 'KPI'... [FSG2 Ent-E]

...agreeing..." [FSG2 Ent-A, FSG2 Ent-C]

...agreeing; ...in terms of Design Thinking is it fine because it is about innovation of a product...; ...how do you improve your product for your targeted market. [FSG2 Ent-B]

In this section, no changes to the framework were suggested by the FSG2 participants. All were in agreement to re-enforce views expressed in the FSG1 discussions and highlighted the comprehensiveness of the framework.

- **The structure of the framework**

Concerning the validation of the IPMF integration based on the inter-relation of BSC and DT related principles, the views expressed by FSG2 agreed with the framing and strengths of the IPMF (Appendix U):

...it will help procedural; ...I am choosing things, it is comprehensive, just looking at things that applies to my business...; ...this actually does not apply to me." [FSG2 Ent-B]

...I think the picture is starting to form, on pre-strategy where there is Balance Scorecard; ...personal belief is that people make or break any business or any organisation. [FSG2 Ent-A]

...looking at the summaries of the sketch, they have got the nice base – I see development. [FSG2 Ent-E]

...irrespective of what industry, it will help generally to sustain the business; ... I think this is for everybody; ...you know and, even if you have been in existence for like years, maybe just putting into a format that as you progress you can fall back on to this – and you know you go the plan, going back to basics where did I go wrong, what can I do to improve, what did I miss? [FSG2 Ent-C]

Other opinions expressed by FSG2 participants on the weaknesses of the IPMF included:

...identification of a problem or opportunity if it were to be first or precede exploration; ... you identify the problem first then identify the opportunity were to come first then exploration come, thereafter you are going to explore the problem is - that you are solving or the opportunity you are trying to exploit. [FSG2 Ent-A]

...if you can have two pages and say this one is for the start-ups and this one is for existing. I think that will be a better idea... [FSG2 Ent-B]

...taking step one and two and lock it up in activities with targeted set time, systems and organisation-wide stakeholder's needs and requirements to grow; ...no mention of putting a team together. [FSG2 Ent-C]

...agreeing with other participants that no mention of putting a team together. [FSG2 Ent-D]

...from the top to bottom to achieve your objectives of tasks or mission set up for organisations; ...strategic plan should be at the beginning of the business, that is where you want to track and monitor your performance and tick off your boxes. [FSG2 Ent-E]

In this section, improvements to the framework were suggested by the FSG2 participants and re-enforced FSG1 suggestions. The views raised covered, for example, combining the four phases or stages into two (to reflect simplification in the context of SMEs). Others suggested re-arranging some frames of the phases or stages and strongly suggested the need for a loop between the different phases or stages of IPMF.

- **Suitability of IPMF to SMEs**

To validate suitability with the SME contexts, views expressed by FSG2 participants included:

...to me it is about returns and making the money; ... but for me these processes, I think it does not filter down to my level of understanding; ...but I am learning something here; ...I think it is very important to monitor progress. [FSG2 Ent-B]

...irrespective of what industry, it will help generally to sustain the business. [FSG2 Ent-C]

...there is a structure here; ...I can see it clearly; ...it just does not appeal to me; ...I do not know if it is the layout... [FSG2 Ent-D]

...there is nothing that allows me to track any form of finance, from start to the end; ...it would be a better strategy, I do not see a word money... [FSG2 Ent-E]

The FSG2 participants suggested changes to the framework on modification to returns, money and finances, filter to the level of understanding of SME and some issues on the structure and layout for appeal. Once more the lack of clear lines on PM and related processes advocated by van Zyl (2020:14) was confirmed and, therefore, seems to suggest various ways that SMEs can potentially customise the IPFM to suit each unique context.

Overall, a few changes in the framework were suggested in the previous sections. The improvements from the two (2) focus groups were incorporated but still keeping the initial structure. The vision and mission were added to the frame with directional loops to show the iterative nature of the PM, DT and BSC-related principles and processes, to compile the final version IPMF in Figure 6.4. Final member checking follow-up with both FSGs participants and case participants yielded no further improvement and was, therefore, considered validated in the characteristics, structure and suitability. Both focus group participants thought that what was represented in the framework expressed their personal experiences or their knowledge gained in their practices of PM and related processes.

INTEGRATED PM FRAMEWORK FOR SMES 'BSC/DT Combined'

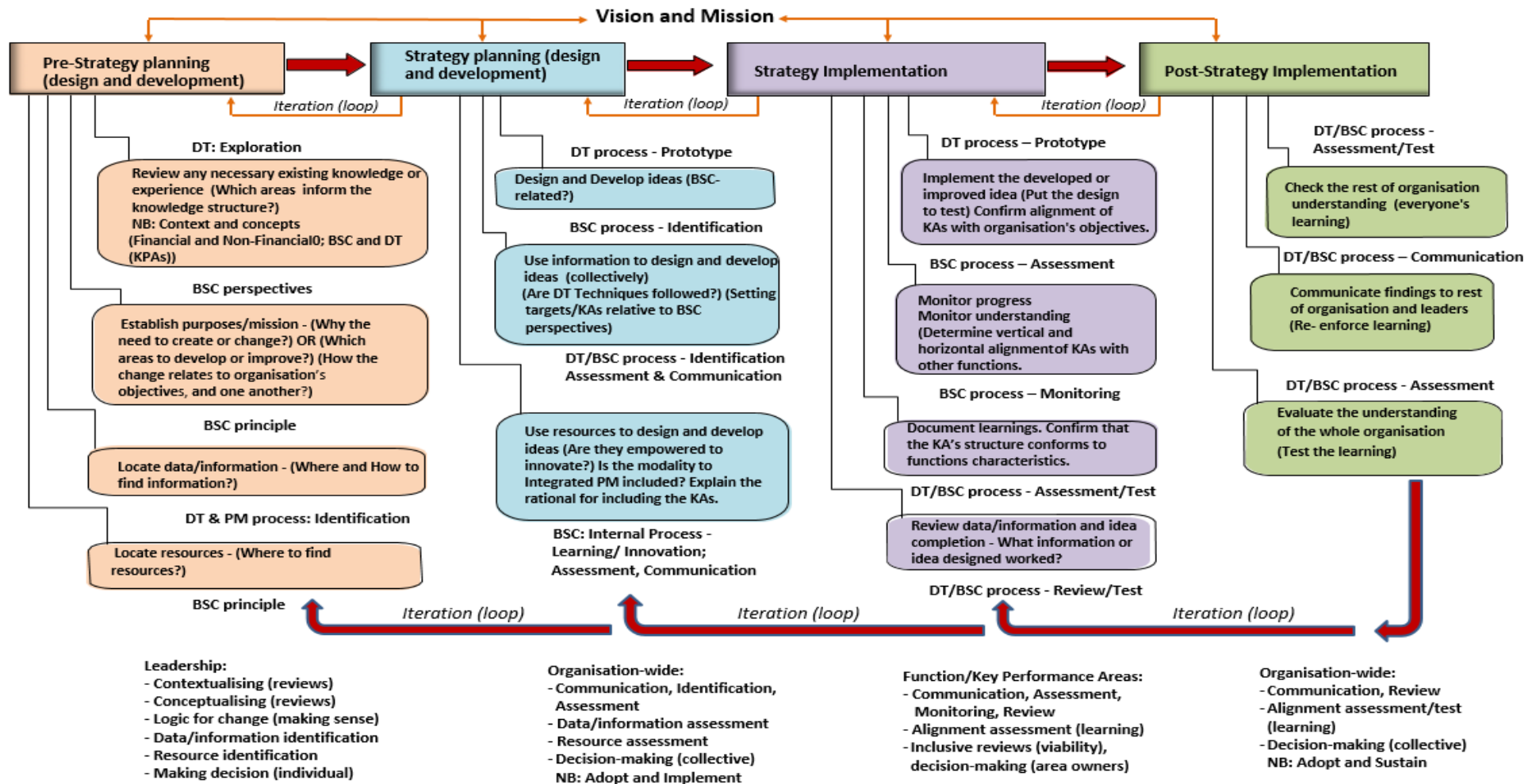


Figure 6.4: Developed integrated PM framework for SMEs (using the principles of the BSC and DT)

Source: Author's compilation

The IPMF framework in Figure 6.4 included the suggestions from both case participants and focus group members and has passed the validation process by FSGs as representative of its potential customisation and suitability to the environment.

6.5 CHALLENGES WITH THE DEVELOPED INTEGRATED PM FRAMEWORK

Notwithstanding, the minimalistic perspectives discussed in the previous sections, the framework and processes may have their problems. The DPDIP approach framework, when integrated, is not finite. On completion of a specific process, it requires iteration and continuous application in subsequent processes continuously shaped by learnings and experiences (that is: what people think as they experience PM, their reasoning and motivation) (Beckman & Barry, 2007:44). An integrated PM framework allows for increased information accessibility since information is consolidated and unified under one system to eliminate unnecessary redundancy or loss of data items or performance (Franco-Santos *et al.*, 2012:99).

The framework also enables determining the location of PM data and consistency. The data represents a continuous state of change and may pose a challenge because data as an object requires transformation by people to turn it into value and inform on PM learnings and experience (knowledge). The learning and experiences may be visible; however, they often reside in people's heads as they grapple with making sense of the PM processes and data. To leverage on existing and available knowledge to achieve set objectives, the participation of all stakeholders and finding a balance in determining the points where PM data and information are captured, timely identified, shared or reported, becomes imperative (Groen *et al.*, 2012:120-141).

The integrated PM framework may be relative to the culture of the enterprise, suggesting that successful implementation is subject to the enterprise's uniqueness and PM requirements and may, therefore, not necessarily apply to another enterprise. Consequently, the journey to integration in PM often contains non-stop learning not guided by any prescriptive guidelines to enable a natural sequence of planning and implementation.

6.6 BENEFITS OF DEVELOPED INTEGRATED PM FRAMEWORK

The integrated DPDIP approach may enable stakeholders to access PM data and information on what has or may occur at various stages (that is, before, during and

after). The resulting benefits to the enterprise would be to encourage continuous thinking about open business questions and solutions (Neneh & van Zyl, 2012:122). Similarly, when improvements and results are fully documented, the framework may be used as a source of readily available PM data and information (visible and hidden). It will allow leadership to facilitate the formulation, implementation or review of organisational strategy, communication of results to stakeholders and promotion and re-enforcement of a performance improvement culture as suggested by Micheli and Manzoni (2010:466).

When planning strategy, the framework should not only be used when PM data or information is needed, there should be a constant awareness of highlighting the strategic benefit key areas of their enterprises and other practical benefits (Whicher *et al.*, 2011:44-52). At the implementation stage, by learning and experience, new knowledge and PM data and information may be created to provide points of reference for solutions for future problems. Gotore (2011:13) lists the benefits as including fostering and developing a learning enterprise at a personal and organisational level.

6.7 DISCUSSION

What has become apparent is that the integrated DPDIP approach framework highlights that, while BSC- and DT-related principles can be integrated into PM systems, it does so by backing up processes of learning, communication, testing, re-testing and decision-making. Notwithstanding the complex process, the purpose should be to promote the identification and location of existing organisational and individual PM data and information (both visible and hidden). For example, working style and diversity of thought, ensuring the preliminary understanding of context and concepts to constitute the interim criteria of PM indicators related to strategy planning, implementation and review or improvement requirements (Deloitte, 2016:35).

These discussions highlight the importance of thinking and influencing problems while still meeting the requirements for an integrated PM system and confirms that traditional PM may not be an optimal approach. The emphasis now is for SMEs to embed a contemporary organisational PM culture, irrespective of their sector, organisation, business unit or function. Consequently, an integrated PM needs to become a culture and lived reality of all stakeholders in the enterprise. With the recent South African national policy initiatives and the emphasis on creating jobs and increasing the employment rate by SMEs (NDP, 2012), the need for DT innovations in business

strategy and PM may appear to strengthen the integrative aspect of PM to the sustainability of these enterprises.

6.8 SUMMARY

The previous chapters considered the findings on how the strategy and PM, BSC and DT processes were applied and implemented in the varied settings of the case participants. This chapter revisited the key findings and developed a multi-level, four-stage framework of strategy design, development and implementation processes (that is pre-strategy planning, strategy planning, strategy implementation and post-strategy implementation), derived from concepts of existing literature and results of implementation in the Cape Metropole SME sector. Noteworthy should be the recognition that movement of the processes through the stages may not always be linear; subsequently, the many different components in development and implementation clearly emphasise each case's specific and signature features and factors.

This chapter highlighted the facets of the framework likely to be important in each phase or stage while considering the concepts and contexts of the SME sectors' integrated PM systems. As in prior models, the framework developed articulates the variables identified as playing a vital role in achieving a designerly integrated PM framework for SMEs. Instead of replicating the existing literature on the topic, the chapter recognises that the framework was developed by a view shaped by the enterprise chosen contexts, concepts and related levels serving as primary integration aspects.

The key findings on the processes to design, develop and implement strategy and PM process facilitated the identification of opportunities to address the main research question. With the integrated DPDIP approach to the PM framework, planning (design or formulation) and implementation include, and are influenced by, context, concept, relevant aspects, learning and experiences. The framework need not be based on prescriptive recipes, but on ways, people or processes work. Its planning and implementation processes should to raise PM awareness, generate a richness of diverse PM data and enable sharing of information, demonstrate flexibility and multiple uses of PM and DT strategies.

Notwithstanding, the complexity of the processes, perhaps PM should be a part of the way that the enterprise works and viewed as a reward in itself as it makes enterprise and stakeholder life natural. However, arguments against this notion are that, if money or reward is the main motive (motivation theory), it could have a negative effect and cause a decline in performance when referring to valence, expectation, exchange and transaction and equity theories. Hence the view that motivation for achievement could also be applied with good performance results (Lehtinen, 2018:7; Adams 1963). Chapter Seven evaluates the achievement of the research objectives and other considerations of this study.

CHAPTER SEVEN: CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

In the previous chapter, the main research question of this study was addressed by the developed integrated successful PM framework and discussions thereof. In this chapter, the overall conclusions of the research are described by evaluation of numerous considerations of this study.

7.1.1 Goals of the chapter

This chapter's objective is to assess whether the objectives set for this study were reached. It will also describe the problems and experiences encountered during the process of this qualitative study by evaluating of numerous considerations concerning the research problem, questions and objectives, responses of the findings to these aspects and various other research-related requirements.

7.1.2 The layout of the chapter

Section 7.2 begins by evaluating whether the developed integrated PM framework has addressed the formulated problem. The main research question, sub-research questions and research aims are revisited and discussed in Section 7.3. Section 7.4 reflects on the thesis and discusses the implications. In Section 7.5, the contributions of the study concerning trustworthiness and rigour are described. The limitations of the research are discussed in Section 7.6. Reflections on the study experience are provided in Section 7.7. Section 7.8 contains criticism and offers suggestions and recommendations. In Sections 7.9, future research suggestions considering the limitations of this research are covered. Section 7.10 ends with a summary and concludes the chapter.

7.2 REVISITING THE RESEARCH PROBLEM FORMULATION AND DEVELOPED FRAMEWORK

The literature reviewed in this research revealed a gap on the utilisation of PM from a practical case perspective, with reference particularly to the processes followed among SMEs in the CMSA. The literature reported a heavy reliance on financial PM by SMEs and argued the inadequacies of these one-sided traditional approaches (Giannopoulos *et al.*, 2013:3; Ismaila, 2011:2; Chavan, 2009:395). This led to the formulated research problem statement of the study that "Traditional performance measurement strategies

contribute little to facilitate the sustainability and financial viability of South African SMEs". The following sections provide evidence drawn from the previous findings to address the research problem identified.

The findings indicated that there was a shift of mindset by owner-managers to an appreciation of mixed approaches and strategies concerning ways in which PM was undertaken in their enterprises. This was evidenced by the factors (environmental, cultural, structural, technology, skills) and processes carefully selected for suitability to the case participants' context to demonstrate awareness, understanding and utilisation of relevant strategy, PM, BSC-related concepts, principles and DT strategies. By doing so, the SMEs further demonstrated abilities and competencies in that the sustainability of their enterprises, performance and measurement goes beyond traditional PM, not in financial measures only. Many other non-financial variables and creatively thought-out-processes are also used to achieve an integrated PM framework.

The instrumental factors most cited were the PM system, its structure, construct and processes, leadership support and available internal resources and capabilities. This confirms work by Urban and Naidoo (2012:150-153) which linked measures with sustainability. It is, therefore, critical for enterprises with limited resources and skills to use in-house (home-grown) developed PM systems. The SMEs showed how they engaged relevant stakeholders in the processes to bridge the knowledge gap related to the utilisation of PM, BSC and DT principles.

Moreover, the findings showcased how the factors and processes interacted with one another in the SME organisational and operational context. This is consistent with a study by Mbo and Adjasi (2017:406), which showed that, in a practical organisational setting, ultimate performance is a product of many interplaying variables. Consequently, to sustain SMEs and their PM efforts, the developed integrated PM framework goes beyond traditional financial PM to address this study's formulated problem by three (3) aspects of pertinent requirements:

- Understanding the organisational environment to find the right balance in PM-related issues, factors, processes and their linkages;
- Coverage of key PM measures and areas with flexibility; and
- Leverage on the available resources and internal experts or stakeholders.

This study does not necessarily support the view of the complete elimination of external consultants in helping with the PM affairs of SMEs, but rather to advance the optimal utilisation of available resources in the enterprises. Furthermore, rather than replicating the literature review on the topic, the study recognises that such an integration framework arises by the organisational, operational contexts, PM, BSC and DT concepts chosen for emphasis, and by the contextual and structural levels that serve as key participants in the PM initiatives of the enterprise. Like other frameworks before it, this study offers not only an integrated framework that articulates those variables in the SME context but also those who, in the researcher's opinion, is likely to influence the sustainability and viability of SMEs.

7.3 REVISITING THE RESEARCH QUESTIONS AND AIMS

The main research question, sub-research questions and research aims were set for this study. The discussions in the sections to follow evaluate how the findings and discussions in the previous chapters address these questions, how the key objectives set for this study have been met and the standing of the findings comparative to the publications reviewed, commencing with the main research question.

7.3.1 Main research question and objective

This section addresses the overarching research question for this study: How can an integrative framework consisting of the BSC and DT contribute to the ultimate sustainability and financial viability of South African SMEs? The purpose was to determine whether the research objectives were met: a) to examine the potential for integration of PM based on the principles of the BSC with the DT strategies and b) deliver on the ultimate developed integrated PM framework that SMEs may be able to use and adapt to their specific enterprise for sustainability and successful PM initiatives.

The discussion in Chapter Six provided evidence to support the developed integrated PM framework in response to this study's main research question. Similarly, the literature reviewed in Chapters Two and Three investigated the domains relating to PM, BSC, DT strategies and explored the possibility of using these domains for an integrated PM framework (Nielsen *et al.*, 2017; Bentes *et al.*, 2012:1790-1799; Davis, 2010:6539; Borja de Mozota, 2009). The findings and pertinent properties of these domains determined the framework developed. The findings were used as guidelines

to identify items and data fitness to the framework to achieve the main research objectives. Finally, the four stages relevant to strategy and PM (including BSC-related principles and DT strategies) processes emerged, and the appropriate data was achieved by careful selection following the case participants' interpreted flow of PM processes. The chapter highlighted the facets of the framework likely to be important in each stage while considering the concepts and contexts of SME sectors' integrated PM systems. Like other previous models, the developed framework articulates the variables that were identified to play a key role in achieving a designerly integrated PM framework for SMEs. Subsequently, instead of replicating the existing literature on the topic, the chapter recognises that the framework developed by a view shaped by the chosen organisational contexts, concepts and related levels serving as primary integration aspects.

The key findings on the processes to design, develop and implement strategy and PM process as applied in the case participants' contexts, facilitated and revealed identifiable opportunities to address the main research question in this chapter. The findings also indicated that an integrated PM occurred where the leadership had high quality reliable and relevant enterprise-wide PM data and information at the preparatory stage. Subsequently, with the integrated DPDIP approach to the PM framework, the strategy planning and implementation processes are influenced by leadership, context, relevant concepts and aspects, stakeholder learning and experiences.

The framework need not be based on prescriptive recipes, but on ways in which people or processes work. Its planning and implementation processes should be to raise awareness of PM, generate rich, diverse PM data, enable sharing of information, demonstrate flexibility and multiple uses of PM adopting the BSC and DT related principles and strategies. Noteworthy should be the recognition that the movement of the processes through the stages may not always be linear. Subsequently, the different components of development and implementation clearly emphasise the specific organisational signature features and factors of each case participant. Notwithstanding the complexity of the processes, perhaps an integrated PM framework should be part of the way that the enterprises work and be viewed as a reward in itself as it makes life easier for enterprises and stakeholders.

7.3.2 Research sub-questions and related objectives

The four research sub-questions are discussed in the sections to follow to provide evidence to support the developed integrated PM framework. Drawing from the findings in Chapter Five, it will determine how each question was addressed and determine attainment of set objectives.

7.3.2.1 Research sub-question 1 and the related objective

RSQ1: Which processes are used by SMEs' to design and measure the performance of various business activities, products, internal processes, strategy, or services? This question had two objectives, firstly to identify and gain an improved understanding of performance measurement systems (PMs) adopted in the five case participants. The intention was to seek clarity on perceptions and benefits of the systems. The second part of the objective was to document the PMs, BSC- and DT-related processes used in their business activities to present the sequence of events structurally.

The findings in Chapter Five suggested several important SME and PM areas, instrumental elements and processes of strategy and organisational PM identified and in use by case participants to support integrated PM systems with other sub-systems and strategies. The findings also indicated that the owner-managers (leadership) were conversant with the principles related to BSC and DT. Resources, skills, information and sources were readily available and processes in place to undertake enterprises PM using BSC and DT for improvement. However, the formalisation of PM processes was yet to develop and help to define strategy appropriately was needed to realise the benefit and have the critical information to enhance better-informed decision-making.

The processes to design and develop PM-related activities were demonstrated in the findings in Chapter Five, to begin with gathering organisational and performance data and information and making it available in a simple form for use as part of PM activity. Additionally, to demonstrate and communicate the relevance and importance of strategy and PM as a reflective process or practice, minimising and refocusing potential competing initiatives or strategic directions. Other activities involved establishing strategy and PM processes or routines (such as regular strategy and PM process reviews) and co-developing expectations and flexible ways on how KAOs should engage in PM. Underpinning most of the owner-managers' processes to strategy design and development was a mind-set that defined an innovative culture to enable

learning and improvement as useful steps to foster a sense of PM importance and ownership across the enterprise.

In addressing research sub-question one, the design and development of strategy and PM processes and activities of the enterprise were circumstantial. At times the process came about due to a need for revision or failure of strategy and various other experiences. In addition, it appeared that the design and development of strategy and PM processes occurred in parallel or often interchangeably. Furthermore, the processes appeared imperfect or chaotic in some instances, but this happened because of integrating DT in the BSC-related PM processes.

In sum, what emerged was that PM integration of BSC and DT related principles might happen where there is prior knowledge, learning and experience on performance-related aspects (although not always a pre-requisite). In key performance areas (operational activities) four phases for an integrated PM framework emerged from the analysis: pre-strategy planning, strategy planning, strategy implementation and post-strategy implementation. These phases are triggered by various requirements of actions, guided by leadership, intensified activities with relevant stakeholders to encourage iteration between thinking, testing and the actual discovery of key drivers to change performance. Furthermore, it may occur in consideration of the status of the enterprise, its internal and external context and availability of resources. Its success and effectiveness may take place where leadership and stakeholders are willing, open-minded, have the skills and disposition for PM initiatives and think outside the limiting environment.

7.3.2.2 Research sub-question 2 and the related objective

RSQ2: How are DT and BSC-related PM techniques used by SMEs' in the various business activities? Similarly, Research Objective 2: To document the processes followed by SMEs in their daily business activities to structurally present the sequence of events involved when applying performance measurement systems on the perceived benefits of the systems.

The findings in Chapter Five revealed practical events of processes in the daily operational activities of the case participants. The findings demonstrated an environment where there was strong confidence in PM processes with the SME owner-managers' visibility and hands-on, active participation in the PM implementation

processes. The findings provided evidence where simple *ad hoc* communication was used to facilitate inclusivity and a collaborative paradigm, to promote cooperation and trust across their operational areas and employees on how KA performance objectives were to be measured, achieved and sustained.

Noteworthy, was the apparent ability of the owner-managers to stimulate continuous improvements in daily activities by iterative monitoring, following various self-developed approaches called FID/BID, BID or, at times, a 'fumbling' process and to create improvement using informal meetings, simple flip charts and a summary of notes to facilitate strategically aligned measures and objectives. By so doing, the implementation processes facilitated quick decision-making in the identification of problematic KAs and finding better ways and solutions to develop new or strategically aligned and improvement-oriented performance measures, activities and processes.

In addressing research sub-question two (RSQ2), the relatively high level of ability to integrate PM system principles and strategies related to the BSC and DT in their daily activities was noteworthy. Partly reflecting the positive perceptions that owner-managers have of PM initiatives, which appeared to be attributed to ease of use and the simplicity of the processes. Furthermore, the processes occurred at various levels, in real-time and moment-by-moment as KAOs or operators reflected on what learning and experience were happening and how to respond to emerging needs and strengths of their operations and activities. However, the differences in the way the principles of BSC and DT were integrated into operational activities at the implementation process was pronounced, but this was to be expected given the varied uniqueness of each case participant.

7.3.2.3 *Research sub-question 3 and the related objective*

RSQ3: How does the process used for PM and encouragement of design skill sets, influence SMEs' business performance and the environment? In response to the research objective: To investigate and identify the different or similar BSC- and DT-related principles and elements complementary or contradictory to each other and their effect on the performance and environment of business. Chapter Five identified the influence of PM, BSC- and DT-related principles at an organisational level as knowing about the impact of learning or experience and improvement in daily operations and responding to this information in ways that would promote enterprise-wide and cross-functional learning and experiences. The processes also offered a very resource-

efficient development to facilitate viability by utilising existing limited resources and talent in the enterprises. At an operational level, KAOs or operators are empowered to give input on decision-making for improvements and requirements in their areas of specialisation. At an individual level, leadership is pivotal to the importance of exploring, determining, continuously promoting and underscoring the deliberate (at times accidental) nature of PM, its approaches and integration.

In addressing research sub-question three (RSQ3), the findings showed that, when considering the principles of the BSC and DT in the PM of daily activities, the processes may offer viable resource-efficient developments by using existing resources and talent in the enterprises. This would enable continual pragmatic flexibility to facilitate quick decision-making, with minimal formalities to foster the maintenance and sustainability of strategy and PM implementation over time for both short- and long-term benefits.

7.3.2.4 Research sub-question 4 and the related objective

RSQ4: How can existing DT- and BSC-related processes in use be merged into an integrative PM strategy? Research objective: To examine the potential for integrating performance measurement based on the principles of the BSC with other newer thinking strategies (DT). Based on the findings chapters, the instrumental factors were considered to initially determine the KAs from the perspective of the case participants' SME, followed by the developed relationships of these factors, processes with leadership, their perceptions and interpretation of the process flow.

From the data analysed and discussed in the previous chapters, the message that emerged was that these SMEs are complex enterprises just like their larger corporate counterparts. Notwithstanding their limited resources, these enterprises operate in and are surrounded by, a continuously changing business environment, which may affect their survival and sustainability. In considering the enterprise-wide data, the findings revealed that, when it comes to an exact area of strategy, PM or KPAs that may require review, attention and emphasis, this study confirmed leadership as an integral stakeholder. It may appear imperative that leadership consider understanding the principles of established PM frameworks (such as those of the BSC) and value the benefits that DT may offer to the PM processes of the enterprise. In addition, the integration of PM by BSC- and DT- related strategies, entails that owner-managers (leadership) should look inwards to their enterprise resources to find ways that

enhance the innovative thinking skills sets in their PM processes. Moreover, thinking is the most inherent activity of what happens in people's head as they learn and experience things.

As shown from the practical experiences of case participants in Chapter Five and the developed integrated PM framework in Chapter Six, in applying the understanding of, for example, BSC-related principles when the PM processes are undertaken, DT can be integrated from strategy planning to implementation at any entry or break-point to develop and render desirable KA-specific measures as indicators. Not only as a simple measure of results and outcomes, but to monitor, learn and improve on what is unfolding in the daily operational activities effectively and, therefore, ensure the sustainability and viability of the PM processes.

Initially, the process to collapse enterprise-wide data captured by the in-house PM system into a handful of measures may not appear to be ideal. However, this obstacle can be addressed by concentrating on only a few directly observable progress measures and sharing the core values and vision of the enterprise to provide focus and direction for stakeholders. From a PM perspective, this seems to support the quality experts contrasting views in that the principles of Six Sigma teaches people how to fish, whereas the BSC teaches them where to fish (Kaplan & Norton, 2006:292). From a DT perspective, the findings go beyond traditional approaches, supporting Gottlieb *et al.* (2017:21-22). They emphasise the use of qualitative methods to gather data and incorporate users at various stages of development and implementation as designers' work.

7.3.3 Analysis of research objectives

The previous sections provided summaries of how the thesis responded to the main research and sub-questions with evidence to support the developed integrated PM framework and highlighted how the findings stand on key publications from existing literature. The summaries are shown in Table 7.1 for ease of reference and to highlight the chapters where the relevant aspects of the literature review and empirical findings were analysed. The ultimate objective of the study has been addressed in that the findings demonstrated that the SMEs could benefit from an integrated DPDIP approach framework. Furthermore, results confirm that the DT- and BSC-related principles should be used for strategy, PM and improvement based on the shared values and vision across organisational, operational and, potentially, at the system level.

Table 7.1: Summary of how and where the research objectives were met

Research Sub-Question 1:			
Which processes are used in the enterprise to design and measure the performance of various business activities, products, internal processes, strategy, or services?			
<p>Research Objective 1: To identify and gain an improved understanding of performance measurement systems (PMs) adopted in South African SMEs. The intention is to seek clarity on perceptions and benefits of the systems.</p> <p>Research Objective 2: To document the PM processes followed in their business activities with the intent to present the sequence of events structurally.</p>	<p>Key to the objectives: Are the PMs used in case participant SMEs similar or in line with Kaplan and Norton's Balanced Scorecard (BSC) as reviewed in Chapters One and Two?</p> <p>Are the processes used to design PMs generically in line with those reported in the literature as reviewed in Chapters One and Two?</p>	<p>Analysis (How the research objective was met): The responses to the research sub-questions were identified according to each case participant and then analysed to find out whether each enterprise used or adopted PMs. If they have, which PMs do they use, why do they use it, how do they perceive it and how does it benefit the enterprise</p> <p>The responses were identified according to each case participant and then analysed to find out which processes are followed by each enterprise to design PMs. If they do, where are the processes followed in the business, when and how are they used and who are the parties involved.</p>	<p>Findings (Where research objectives were met):</p> <p>Chapter Five</p>
	<p>Are the processes used to measure and the thinking strategies to improve an enterprise's performance generically in line with those reported in the literature as reviewed in Chapters Two and Three?</p>	<p>The responses were identified according to each case participant and then analysed to find out how each enterprise measures performance in practice. If they do, how are the processes used in the business areas, when are they used, who are the parties involved and what and how does the PM assist the enterprise and what they do with the information provided.</p>	Chapter Five
	<p>Are there processes or strategies to improve performance and DT strategies, in line with the literature reviewed in Chapters Two and Three?</p>	<p>The responses were identified according to each case participant and then analysed to find out whether based on information provided by PM each enterprise adopted or used other strategies to improve performance. If they do, which strategies and why and how they are used.</p>	Chapter Five
Research Sub-Question 2:			
How are design thinking and performance measurement techniques used in various business activities?			

Research Objective 1 & 2 cont....	Key to the objectives: Are the strategies used in business activities to improve enterprise performance (that is, DT) generically in line with those reported in the literature as reviewed in Chapters Two and Three?	Analysis: The responses were identified according to each case participant and then analysed to find out how each enterprise used BSC and DT related principles, strategies or techniques in business activities PM in practice. If they do, in which business activities are the strategies or techniques used, how are they used and who are the parties involved.	Findings: Chapter Five
Research Sub-Question 3: How does the process used for performance measurement and to encourage design skillsets influence the business performance and environment?			
Research Objective 1 & 2 cont....	Key to the objectives: Are the processes of PM and DT strategies of influence to the enterprise performance and its environment and are they generically in line with those reported in the literature as reviewed in Chapters Two and Three.	Analysis: The responses were identified according to each case participant and then analysed to find out how the processes of PM and DT in each enterprise influence its performance and environment in practice. If they do, which business area is influenced, how is it influenced, who did it influence and what was the benefit to the enterprise?	Findings: Chapter Five
Research Sub-Question 4: How can design thinking and performance measurement processes in use be merged into an integrative strategy?			
Research Objective 1 & 2 cont....	Key to the objectives: Are the processes or principles of BSC and DT strategies in use integral in PM, and in line with other strategies as reported in the literature as reviewed in Chapters Two and Three?	Analysis: The responses were identified according to each case participant and then analysed to find out how the processes or principles of the BSC and DT could be merged into an integrative strategy or PM. If BSC and DT related principles could be merged, in which business areas, what would be the processes and how would they apply.	Findings: Chapter Five
Main Research Question: How can an integrative framework consisting of the BSC and DT attribute to the ultimate sustainability and financial viability of South African SMEs?			

<p>Main Objective (theoretical): To examine the potential for integrating performance measurement based on the BSC principles with other newer thinking strategies (DT).</p>	<p>Key to the objective: Use a literature review to identify the processes and techniques and principles (that is, BSC and DT) used as a guideline to identify common business activities in which the techniques and processes were used successfully.</p>	<p>Analysis: The findings from the literature review were analysed to understand how the processes, techniques and principles (that is, BSC and DT) were used integratively to highlight the business activities in which the techniques and processes would apply.</p>	<p>Findings: Chapters One, Two & Three</p>
<p>Main Objective (empirical): To document the PM processes followed by South African SMEs in their business activities to present the sequence of events structurally. The processes used will facilitate the identification of opportunities revealed, therefore resulting in an ultimate objective of developing an integrated framework.</p>	<p>Collect and analyse the data then locate the business activities or areas in which the systems or principles of the BSC and DT are applied effectively by case participants SMEs.</p>	<p>The findings from this study's empirical data were consolidated, analysed and discussed to present how the processes, techniques and principles (that is, BSC and DT) were used integratively by the case participant SMEs; and to highlight the business activities in which the techniques and processes were applied. Therefore providing an understanding of the <i>status quo</i> and assisting with developing an integrated PM framework for SME.</p>	<p>Chapters Five & Six</p>

Source: Author's compilation

7.4 IMPLICATIONS

The sections to follow reflect on the implications of the thesis, look back at the conceptual framework and improvements, methodology, practical implications drawn from the findings and conclusions to set the scene for discussions of future research opportunities. In turn, the related sub-sections describe the conceptual, managerial and policy implications.

7.4.1 Conceptual implications

The thesis has taken an iterative approach to building theory, drawing on both existing literature and empirical work and findings on conceptual development. This involved developing and refining a conceptual framework, with implications for the concepts of strategy, PM and DT in their respective fields. The resource-based view approach infers that the common denominators for strategy development, deployment, prospects for successful integration of processes and capabilities that are critical to PM knowledge transfers in enterprises reside in the internal contexts of an enterprise such as leadership. Commitment to PM initiatives may play a role in facilitating the enterprise PM requirements, needs and organisational objectives.

7.4.2 Managerial implications

Based on the methodologies and arguments provided in the findings chapters in this study confirmed the practicality and usefulness of the processes in addressing PM in SMEs in developing countries. The findings also indicate that it may be possible for a limited resource SME to benefit from adopting the principles related to the BSC and DT in PM systems and processes, dismissing the idea that not having documented PM processes does not mean the non-existence of PM or systems in these enterprises. Hence, the recommendations that owner-managers should consider the aspects when designing and implementing activities aimed at enhancing DT skills in SME PM processes.

The data presented a compelling case for SMEs to take the initiative and provide guidance and support on how to navigate the PM and DT activities. By minimising procedures, it provided the flexibility of the framework for integrated PM and DT. The data presented also emphasised crucial elements of designerly thinking skill sets to provide a platform to drive learning by PM indicators and examples of how to recognise, engage and identify the points where the DT might be appropriate and

useful in the PM process. Applying DT- and BSC-related principles to PM in real-world operational settings may not be an easy task. To some SMEs, it may not be obvious what to do and how to do it to harness the potential of the principles related to BSC and DT. However, willingness and effort could be an important element in overcoming the challenge.

7.4.3 Policy implications

The study may act as a reference for policymakers. As in other emerging economies, South Africa's primary concerns are currently with job creation and reducing the high unemployment rate by SMEs. Notwithstanding their current performance, particularly with the high failure rate, this study advances the importance of PM initiatives that enhance designerly skill sets in business strategy to address environment-related problems to foster competitiveness (enterprise-specific training, optimal utilisation of internal resources and integrated PM frameworks or initiatives). The high failure rate of SME activities calls for policymakers to consider ways to assist and play a role in promoting and enhancing the ability of SMEs in PM integration initiatives for survival and sustainability.

7.5 CONTRIBUTION TO KNOWLEDGE AND RIGOUR

The literature indicated the need for an integrated PM system beyond traditional financial measures and to gain experience on the PM processes from the perspective of SMEs (Schumacher & Mayer, 2018; Nielsen *et al.*, 2017; Jääskeläinen & Sillanpää, 2013:441; Jamil & Mohammed, 2011:207; Fleming *et al.*, 2009:261). A study by Hussin and Yusoff (2013:457) calls for the integration of simple PM systems for SMEs with some DT practices, after the developing research on DT for business strategy. Similarly, PM scholars seem to have given limited attention to DT as a strategic contributor to PM and improvement. In Section 1.3, gaps were identified to motivate the study, including a South African perspective on developing studies reported on SMEs' PM and BSC mostly from a quantitative perspective. However, sources on the PM processes and integration from qualitative studies remain unknown. This study makes several advances and important contributions of both theoretical and practical significance to existing literature and knowledge, as discussed in the following section.

7.5.1 Contribution to the field of PM in strategic management

First, this study contributed to existing knowledge by establishing that an integrated PM framework based on BSC- and DT-related principles should be developed by simplified merging and interlinking of various instrumental factors and processes at organisational and operational levels. The study demonstrates that the success of the integration of a PM framework is significantly contingent to leadership providing guidance and support, optimally utilising the factors and processes to facilitate feasibility and viability of simplified PM initiatives for sustainability. This means that leadership influences the awareness, resultant uptake and application of BSC and DT strategies in the enterprise to develop stakeholder understanding, knowledge, skills and competencies. Stakeholder knowledge and competencies, in turn, influence the enterprise-wide mindset that undertaking designerly PM initiatives to sustain the enterprise is feasible and desirable. This ultimately leads to enterprise-wide PM knowledge-creation and know-how.

Secondly, this study provides qualitative findings and practical insights that helped to examine how the features of the strategy, BSC and DT-related principles complement each other in shaping the integrated PM framework. Scholars have argued that traditional PM is inadequate and one-sided and, therefore, leads to an incomplete understanding of the performance of the enterprise. The current study contributes to knowledge by developing a multiple-stage integrated PM framework about various related organisational and operational factors and processes.

Unlike many other frameworks in prior studies, this integrated PM framework has identified that DT occurs in PM processes from the preparatory stages of strategy planning to its implementation, in daily operational activities and at various entry-points or breakpoints of measurement, learning and experiences of KA performances in limited-resource enterprises. The integrated PM framework shows that, among the instrumental factors, leadership is central and a catalyst to the feasibility and viability of PM initiatives and its processes.

By developing stakeholder PM capabilities and on-going clarification on the benefits of PM, leadership enhances the enterprise-wide thinking and mind-set that PM is feasible and viable. This may ultimately lead to the organisational and operational KAs learning and experiences embracing DT and the stakeholders valuing their

participation in the PM initiative. On this basis, the contribution is supported by Kolko's (2015) remarks that people need their interactions with technology and other complex systems to be simple, intuitive and pleasurable.

Theoretically, the study has highlighted a framework based on Kaplan and Norton (2015; 1992) and Roger Martin's (2009) models, particularly, the principles of the BSC and DT. It is anticipated that the integrative PM framework will raise awareness and help encourage SME owner-managers to take full advantage of newer strategies. Similarly, to encourage the managers and owners of SMEs to seek better tools to enable more effective management of businesses and financial objectives and assist in gaining a competitive edge. The contribution is consistent with the statement by Machado (2013:142) that knowledge of the PM will benefit the SME.

Additionally, the framework may need practical scrutiny in other business sectors and the corporate world but still has a contribution according to the claim by Hussin and Yusoff (2013:457) that an improved, simple, integrated PM system with some DT practices is required for SMEs. This study also makes small but definite contributions that could add to the following definitions:

- a) proposes a general definition for PM as a continuous collection and reporting on a set of performance measures and processes used in an enterprise to determine the efficiency, effectiveness, or both, of an existing system (see section 1.3.4 in Chapter One);
- b) an enterprise is, therefore, explained as a system in the context of which, resources and activities are utilised efficiently and effectively for the holistic achievement of goals and objectives and innovation to reinforce those resources and activities (see section 1.3.7 in Chapter One);
- c) performance will refer to processes involving stakeholders, integrating and elevating thinking strategies to facilitate improved internal processes and related enterprise aspects for achieving successful PM (see section 2.8 in Chapter Two);
- d) PM may be described as, or equated to, awareness and knowledge of where an enterprise might be, where it can get to (vision), what can be used (strategies), and how to get there (mission) (see section 2.8.1 in Chapter Two);

- e) strategy planning by stating that planning for strategy may commence with preparatory data or information before the initial stage of strategy setting (see section 5.4.3.2 in Chapter Five).
- f) DT represents an approach to encourage flexible and open culture or environment where collaborative practices are used to inspire people with diverse skills and from different areas to participate in working together for improvement of strategy products, services and processes (see section 3.2.2 in Chapter Three)
- g) Additionally, it defines an integrated PM framework as an all-encompassing process that enables flexible, inclusive and creative efforts to gather, monitor, assess and improve organisational PM information and activities to achieve goals and objectives (see section 3.6 in Chapter Three).

Practically, the study endeavours to highlight the uniqueness of the case participants' BSC- and DT-related processes and experiences in daily operational activities. It contributes by presenting compelling cases to broaden the understanding of strategy scholars and owner-managers. It argues that the traditional PM approach may appear insufficient to assist the enterprises in the ever-changing environment and, therefore, advocating integrated PM frameworks. Lastly, the study provides up-to-date PM processes of SMEs in the CMSA. It confirms the practicality of an integrated PM process and its usefulness from the perspective of a developing country.

7.5.2 Contribution from the methodological perspective

As noted at different stages in this study, several difficulties were encountered. Firstly, getting hold of SMEs posed a significant challenge. Some initially indicated an interest in participating, suddenly showed reluctance and subsequently withdrew from the study. This may be attributed to the SMEs recognising that their enterprises did not meet most of the criteria set for this study to qualify as participants or perhaps for some other unknown reasons.

In South Africa, a lack of management and PM skills is the reason why SMEs fail to reach a certain growth stage and cease to operate. Altogether, five (5) SMEs consented to be interviewed, 21 documentary sources were obtained for analysis, and nine (9) SME focus group members formed part of this qualitative study. Notwithstanding the low sample size, the interviews, document analysis and focus

groups yielded a sizeable amount of quality and relevant data that gave significant insights and led to new learning and understanding.

The handling of data for analysis was a difficult exercise, but one that presented opportunities for new learning and led the researcher to develop an integrated data analysis concept map. The concept map outlines all the major elements of data and processes that were observed in the analysis. The process used integration of Microsoft® Word documents (for formatted transcripts) to use for data coding in ATLAS.ti™ software, which resulted in an extensive network of maps. Microsoft® Excel spreadsheets were used for developing themes for analysis and discussions. These methods ensured a transparent process to arrive at a final decision in the documentary presentation of data analysis. This is also a major contribution as the process was iterative and developed organically as the researcher conducted the data analysis.

Moreover, it provided a different scope in approaching data and its analysis. However, it is expected that researchers will further refine the methodology in future. This is in line with Friese's (2014) suggestion for prior preparation of documents to use in ATLAS.ti™ software.

7.5.3 Contribution testing the study's rigour and trustworthiness

Trustworthiness was addressed by analysis of documentary evidence, interviews and focus groups used interchangeably for corroboration of verbal information from SME participants in a documented format to improve rigour in this study. The SMEs were invited to review the findings reports and suggested improvements were incorporated into the final version. Due to the exploratory nature of this study, the case participants and focus group members each came from different sector operations and specific core businesses. Dependability was enhanced where pattern matching was done, both in case and cross-case analysis in various areas of PM activities in the enterprises (Chapter Five).

Logic models were developed and used throughout the thesis. For example, explaining the step-by-step layout of each of the seven chapters. The literature review chapters were used to uncover and argue the conceptual frameworks of the thesis (Figure 2.5). The use of concept maps illustrated the analysis framework in Figure 4.16. The logic model was applied to demonstrate the interdependence of

aspects vital to the topic of the study and the developed integrated PM framework (Figure 6.1).

Transferability was enhanced in the research methodology chapter for theoretical comparison of benefits against drawbacks and challenges of case studies for early identification of areas for caution and to facilitate relevance of this study. Similarly, the logic for replicability using multiple cases was provided in Chapter Four, explanation and arguments contained in Section 7.6 and generalisability issues as a result of the diversity of the case participants. Credibility was covered in the manner that this study adopted and followed a case study methodology (explained briefly in Chapter One and in detail in Chapter Four) with subsequent case participants' data developed in the findings chapters.

7.6 LIMITATIONS OF THIS STUDY

Given the exploratory nature of this study, a few important limitations emanate from the relatively small sample used, despite the sizeable amount of quality data and insights yielded. The SMEs sampled varied in sector operations and core businesses areas and had distinctive features, traits or cultures. The sample was taken from the CMSA and, therefore, representativity is a matter of concern. Notwithstanding the fact that the findings may not be generalised to the whole SME sector, however, may be transferable to other cases that share contextual characteristics with those developed in the dissertation.

The other limitation of this study is that the factors used and PM processes followed generated uniquely case-specific results and caution, therefore, has to be exercised as customisation is encouraged with the use of the developed integrated PM framework. Larger sample size would have helped to broaden insights to make the study even more extensive. More studies across similar or different sectors or locations will develop more insights into the integration of BSC- and DT-related principles or processes in SMEs, and experiences of PM teams which were strongly pronounced and clear in the case of this study. It is to be expected that more data will become available with future research, resulting in additional new factors and processes and, therefore, the limitation will not disappear even on replication of this study at a later period.

7.7 REFLECTIONS

The journey and other elements of the study were not without significant difficulties. For example, some of the questions in the interview were weak. They may need rewording to facilitate a thorough understanding of the questions and relevant response by the interviewee for future research. Secondly, the content and data analysis and presentation process had to be reconsidered given the volume of data collected; however, the issue was addressed for future research purposes and dealt with in Chapter Four with identified appendices. Similarly, the study yielded sizeable data beyond the developed research questions and provided findings in several valuable insights and could further contribute to many of the vacuums in the field that were pointed out in Section 7.6.

The findings and information will also be published in peer-reviewed journals to address academic and theoretical issues to complement this study. Overall, the experiences gained in this project contributed immensely to the growth of this researcher in that most of the protocols were conducted personally that is, conducting interviews, transcribing documents, learning how to use ATLAS.ti™ software and using it to capture the data and analyse the outcomes.

7.8 RECOMMENDATIONS

The overall evidence shows that SMEs engaged to some extent in integrated PM. Most of the SMEs in this study did not have sophisticated PM frameworks nor did they consult experts in PM, BSC or DT or have reasonable, appropriate PM, BSC or DT skills or training to decide on which new systems or processes to invest in or implement. As an alternative, they relied on their limited internal resources to facilitate development and maintenance of PM using the BSC- and DT-related initiatives in their enterprise, despite inadequate documentation of the processes followed.

This study gives insight into the PM processes followed by SMEs in the CMSA, considering their unique characteristics and those of their PM systems. From the perspective of the SMEs, PM as a daily activity does not mean that they need to acquire a formal system (it is costly). The study recommends that SMEs and owner-managers should dedicate time to understanding the principles of established frameworks. For strategy implementation to be feasible and sustainable, it is recommended that leadership should:

- Provide support by locating traceable context appropriate, valid, complete, accurate PM data/information (visible and hidden).
- Ensure the enterprise's awareness of the importance and the need for PM to enhance support for implementation of an integrated PM system.
- Ensure that the enterprise has the right mix of people (at management and operational level) and skills required; the PM team and KAOs have a role in the design and development of the strategy and PM systems; and people in the business activities should be empowered with the tools to be part of the PM and the environment to encourage such and creative efforts.
- Develop stakeholders' capacity to actively measure, interrogate and manage own areas' specific data; and demonstrate how PM data may be used to their KA's benefit.
- The integrated systems and processes for the collection, compilation and reviewing of PM data/information must be include data verification, preparation prior to recording, processing and disseminating of results.
- PM should not be limited to applying the principles of well-established PM frameworks; however, various other strategies, such as DT techniques, tools and information, may contribute to the improvement and integration of an enterprise's PM initiatives. Learn from and apply the principles from existing frameworks, such as the BSC and DT techniques, and be innovative in integrating the various systems and processes.

Establishing and implementing PM and its processes in their businesses may yield greater benefits than thought. Based on their unique SME, the business may be able to develop or adapt their PM systems by integrating various strategies, including the principles of DT and BSC, its processes, systems and people's knowledge to improve competitiveness.

The findings in this study give a few slightly different perspectives to the literature, which suggested a lack of PM competencies on the part of SMEs and informal PM systems implementation because of limited-resources. This study has shown that most of the SMEs exhibited a better understanding and positioning to undertake PM initiatives incorporating the principles of BSC and DT strategies and skillsets. Therefore, future studies and research into other similar or different sectors and

contexts to shed more light on the processes of PM integration and contextual peculiarities of SMEs are proposed.

7.9 FUTURE RESEARCH

Given the exploratory nature of this study, further research needs to be done to understand other important constructs (in consideration of other factors such as attitude, belief systems and values) that might be included to improve the integrated PM framework and its vital relationships and take this initiative to higher levels.

Beyond this study, new research projects will be required to build on case studies and examples that illustrate or determine the prospects for various SME sectors adopting the developed integrated PM framework. The new studies may be required within the borders of South Africa and possible expansion into the African continent for a broader view of the systems. Other areas of focus should include other stakeholders of enterprises as units of analysis. Moreover, they could look into what impact the aspects of the framework have on important components of good relationships, management in enterprise-wide key areas, especially those related to the BSC and DT.

7.10 CONCLUSIONS

The research problem in this study argued that traditional PM tools and strategies might contribute little to facilitate the sustainability and financial viability of South African SMEs. The literature reviewed supported the argument, revealing that such systems alone are inadequate for operations and decision-making and suggested requirements for an integrated PM system. While the traditional PM systems work to a degree in financial perspectives, SMEs today are already overwhelmed by disruptions to the business environment. Their sustainability requires not only looking at non-financial issues but also thinking about strategies to survive. In this study, the SMEs believed that the principles of BSC and DT are important and work in the activities of their enterprise's PM.

To these SMEs, integrated PM means focusing on the person (studying what KAOs or employees do), experience and process (visiting their KAs or work areas and learning or observing their attitude, behaviour and thinking on PM). Doing so means developing integrated PM frameworks that may help simplify complexity by adopting the BSC- and DT-related principles in PM initiatives. Such frameworks put the

enterprise and employee's experiences at the centre and move beyond traditional PM by designing and implementing BSC- and DT-related principles and processes in a collective and meaningful manner. Its processes encourage flexibility to improve productivity and increase stakeholder or employee engagement. It also develops understanding and satisfaction while providing training and raising PM importance in the enterprise and KAs. Moreover, it reinforces designerly skills capabilities using DT strategies to derive the highest level of value.

This study puts PM and the use of BSC- and DT-related principles in a new transformational role. By focusing on people, their experiences and processes, leadership and all other stakeholders have an opportunity to think like designers, creating a more engaging designerly integrated PM initiative and solutions. Applied flexibly in KPAs or daily operational activities, the BSC and DT (and its principles) is a rigorous and disciplined method or process of problem-solving. The use of both BSC and DT principles may present an opportunity for SMEs to reshape how their strategic operational activities work in the enterprise, to design and redesign its strategy, PM processes or procedures and facilitate positive KAOs, relevant stakeholders or employee interactions.

In conclusion, the SMEs were aware of the importance of PM to sustain their enterprises and had a fair understanding of the BSC and DT system and their principles. Although informal PM processes existed, efforts were made to keep to the principles of the BSC (to performance measure) and DT (to improve enterprise performance). Most importantly, it was noteworthy that SMEs displayed the ability to overcome the challenges associated with resource constraints. Although PM research on BSC and DT from a South African SME perspective is developing, it is primarily focused on quantitative research or theoretical aspects. This qualitative research study agrees with the conclusion by Hussin and Yusoff (2013:457) that the research focus embodies knowledge on areas of PM, BSC and DT adoption, but from a South African SME perspective.

The SME cases in this study provided evidence that not having a formal PM system does not mean that the task does not take place. Furthermore, making PM a daily activity and integrating newer strategies such as the principles of the BSC and DT to elevate the thinking strategies at all levels may be advantageous and beneficial to the overall enterprise. This research is valuable in that it is one of the studies to provide

real-life comprehensive evidence on integrated PM and processes not properly understood from the perspectives of SMEs in the CMSA. It also demonstrated that it might be possible for a limited resource SME to gain the benefits of a flexible integrated PM system with BSC- and DT-related practices, dismissing the perceptions that not having a formal, sophisticated PM system does not mean the non-existence of PM activities and systems or lack of DT importance and use in the SME enterprises.

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**APPENDIX A: ETHICAL CLEARANCE CERTIFICATE (UNISA) (CONFIDENTIAL)
– CASE STUDY (2014) AND FOCUS GROUP (2018 AND 2019)**



**COLLEGE OF ACCOUNTING SCIENCES
RESEARCH ETHICS REVIEW COMMITTEE**

2 December 2014

Ref #: 2014_CAS_0019
Name of applicant: L Mabesele
(researcher):
Student #: 8733287
Staff #:

Dear Ms Mabesele,

Decision: Ethics Approval

Name: L Mabesele, Department of Management Accounting, mabeselel@cput.ac.za,
0833466427

Proposal: An integrated framework for successful performance measurement strategies
within Cape Metropole small and medium enterprises

Qualification: Postgraduate degree

Thank you for the application for research ethics clearance by the College of Accounting
Sciences Research Ethics Review Committee for the above-mentioned research. Final
approval is granted for the duration of the project.

For full approval: The application was reviewed in compliance with the Unisa Policy on
Research Ethics by the College of Accounting Sciences RERC on 16 October 2014.

The proposed research may now commence with the proviso that:

- 1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the College of Accounting Science Research Ethics Review Committee. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.
- 3) The researcher will ensure that the research project adheres to any applicable



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national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.

4) *[Stipulate any reporting requirements if applicable].*

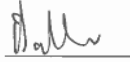
Note:

The reference number [top right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the CAS RERC.

Kind regards,



Prof HC Wingard
Chair: CAS RERC
wingahc@unisa.ac.za



Prof E Sadler
Executive dean



12 June 2019

To: Ms Lindiwe Mabesele

Via e-mail: Madbesele@cput.ac.za

Dear Ms Mabesele,

Re: Extension to application 2018_CAS_031

You have submitted an application to extend your initial ethics clearance application for the focus groups of the PhD study "An integrated framework for successful performance measurement strategies within Cape Metropole small and medium enterprises".

The amendment pertains to an extension of institutions that will provide the database for the selection of participants to the focus groups. The initial application indicated only the Cape Chamber of Commerce, whereas an affiliate, the False Bay College Centre for Innovation and Rapid Incubator has now also indicated their willingness to cooperate with the researcher. I acknowledge the permission letter from the False Bay College in this regard.

After scrutinising the original approval certificate 2018_CAS_031 it became clear that no amendment to the ethics clearance certificate is necessary, as it provides clearance for your focus group sessions in general.

As I cannot identify any additional risk in the extension, as chairperson of the CAS Research Ethics Review Committee, I will table the application as a notification to the CAS RERC for notification and record purposes.

Your original ethics clearance certificate 2018_CAS_31 is thus still applies.

Sincerely



Prof L J Erasmus
Chairperson Research Ethics Review Committee
College of Accounting Sciences

APPENDIX B: PERMISSION LETTER TO WILLING PARTICIPANTS

PERMISSION LETTER – CASE STUDY

Request for permission to conduct research at <obtain the name from the database provided by the Cape Chamber of Commerce>

Title: An integrated framework for successful performance measurement strategies within Cape Metropole Small and Medium Enterprises

Date.....

<insert contact person's name>

<insert contact person's building no. or room no.>

<insert contact person's Department>

<insert contact person's telephone number and email address>

Dear <insert contact person's title and name>,

I, Lindiwe Albertina Mabesele, am doing research with Prof HM van der Poll, a professor, in Management Accounting towards a PhD in Accounting Sciences degree at the University of South Africa. We are inviting you to participate in a study entitled: An integrated framework for successful performance measurement strategies within Cape Metropole Small and Medium Enterprises (SMEs).

Prior to this case study, a pilot test for the data collection instrument on the measurement of business performance was conducted within SMEs registered with the Cape Chamber of Commerce and Industry from various sectors for example, manufacturers, services providers, hospitality or any sector in the Cape Metropole of the Western province in South Africa. The objective of the pilot test facilitated a clear and simple understanding of types of questions for which after interview information would be sought on current Performance Measurements (PM) and design skill sets processes followed within local SMEs.

I would like to include your business in the case study research. Your business has been selected from the results and findings of a pilot study. Your responses obtained from the pilot study interview guide provided the researcher with information pertinent to the cases study. The information from your responses indicated either of the following; that your business is in existence for one (1) or more years; meets the

definition of an SME as per National Small Business Act, No. 102 of 1996 and the National Small Business Amendment Act, No. 29 of 2004; recent developments on the business PM, has undertaken other strategic improvement systems and your business performance system contains characteristic similar to popular PM systems such as Balanced Scorecard.

The study will entail that the SMEs answer semi-structured interview guide which encompasses questions on experiences and perceptions thereof. The purpose of the interviews is to elicit information on the processes used within the business to design and measure performance of various business activities, products, internal processes, strategy or services; how the design thinking and performance measurement techniques are used within the various business activities; how does the process used for performance measurement and to encourage design skill sets influence the business performance and environment; and how design thinking and performance measurement processes in use can be merged into an integrative strategy.

The study seeks to evaluate and document a structured and detailed understanding processes followed with existing PM systems, with the assistance of the SMEs. The ultimate objective is to develop an integrated and holistic framework that SMEs will be able to use and adapt to their specific businesses. It is anticipated that the framework will enable more effective management of businesses; assist with the achievement of the financial objectives and goals; raise awareness of SMEs to take full advantage of newer thinking strategies; gain competitive edge therefore contributing to government's objective of growing the economy through SMEs.

The unit of analysis is not restricted to a particular sector due to the empirical nature of this study, however targets would be business operations for example, manufacturers, services providers, hospitality or any sector. There will be no costs incurred by the participant during this study Therefore no payment or reward will be offered. No harm or offence will be caused to any participant in this study, as the research is mainly conducted with the objective of understanding the business processes, the contribution of performance measurement and newer strategies to improve business performance Therefore attempting to integrate the different strategies or systems for a successful adoption of PM systems by small businesses.

The participation in this study is completely voluntary. The information provided by you will be kept confidential and destroyed after the research project is completed. You, and the organisation you represent, have the option to stay completely anonymous and therefore will be referred to as Manager A or Business A however, should participants wish to disclose their details it will be totally optional and indicated so during and after interviews. Other data or ideas without due acknowledgement and permission will not be used. At no point will you be required to divulge sensitive information regarding you or your organisation. The results of the case study may be submitted for publication, journal articles and conference proceedings but individual participants will not be identifiable in such a report.

The researcher will take notes during this interview, and if you allow it, record the conversation using an audio recorder. We will discuss the measurement of performance and newer thinking strategies within the organisation, the usage thereof and the problems experienced regarding performance measurement and adoption of design skills sets. The researcher will require at a minimum 3 days for initial case visit, data will be collected and follow-ups (which will be much shorter) conducted based on a flexible schedule convenient to the participants. To complete the semi-structured interview guide participants will require 60-90 minutes and the interview will take place as per pre-determined agreed time schedule between participant and researcher.

The benefits of this study are that a final research report will be made available to you and your organisation documenting a structured and clearer understanding of current PM and design skill sets processes followed within local SMEs and a developed integrated framework. It is anticipated that an integrative approach would empower SMEs to challenge their thinking and seek better tools to enable more effective management of businesses; assist with the achievement of the financial objectives and goals; take full advantage of newer thinking strategies; gain competitive edge therefore contributing to government's objective of growing the economy through SMEs. This study will also contribute to the growing body of knowledge on areas of PM and integration of thinking strategies to such frameworks for successful adoption by SMEs.

Should you require any further information or want to contact the researcher about any aspect of this study or would like to be informed of the final research findings, you may

contact the researcher Lindiwe Albertina Mabesele (Doctorate candidate), Tel: +27 21 460 3620, Fax: =27 21 460 3689, e-mail: mabeselel@cput.ac.za

Should you have concerns about the way in which the research has been conducted, you may contact the supervisor Prof HM van der Poll, e-mail: Vdpolhm@unisa.ac.za, Tel: +27 11 652 0251 or the Cape Chamber of Commerce and Industry contact person Romilda Williams-Kearns (Business Information Officer), Tel: +27 21 402 4300, Fax: +27 21 402 4302, e-mail: romilda@CapeChamber.co.za

Thank you for taking time to read this permission letter and participating in the study.

Yours sincerely

Lindiwe Albertina Mabesele

PhD in Accounting Sciences Candidate (UNISA)

APPENDIX C: CONSENT FORMS FROM SME MANAGERS AND OWNERS

CONSENT TO PARTICIPATE IN THIS STUDY – CASE STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this case study research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be anonymously processed into a research report, journal publications and/or conference proceedings.

I agree to the recording of the semi-structure interview guide.

I have received a signed copy of the informed consent agreement.

Participant name & surname..... (please print)

Participant signature Date.....

Researcher's name & surname:

Researcher's signature: Date:

Witness name & surname..... (please print)

Witness's signature..... Date.....

APPENDIX D: PARTICIPANT INFORMATION SHEET



PARTICIPANT INFORMATION SHEET

Date:

Title:

Dear Prospective Participant

My name is and I am doing research with
(supervisor's name>, a(supervisor's position) in the Department of
.....(department name) towards a (degree title) at the University of South
Africa. We have funding from for We
are inviting you to participate in a study entitled

WHAT IS THE AIM/PURPOSE OF THE STUDY?

The aim of this study is to
.....

WHY AM I BEING INVITED TO PARTICIPATE?

.....
.....

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY / WHAT DOES THE RESEARCH INVOLVE?

.....
.....

CAN I WITHDRAW FROM THIS STUDY?

.....
.....

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

.....

.....
WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

.....
.....
WILL WHAT I SAY BE KEPT CONFIDENTIAL?

.....
.....
HOW WILL INFORMATION BE STORED AND ULTIMATELY DESTROYED?

.....
.....
WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

.....
.....
HAS THE STUDY RECEIVED ETHICAL APPROVAL?

.....
.....
HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS?

.....
Should you require any further information or want to contact the researcher about any aspect of this study, please contact (principle researcher's email, internal phone number and fax number).

Should you have concerns about the way in which the research has been conducted, you may contact (supervisor's email, internal phone number and fax number).

Thank you for taking time to read this information sheet and for participating in this study.

.....
Signature

.....
Name

APPENDIX E: SEMI-STRUCTURED INTERVIEW – INDIVIDUAL CASES

SEMI STRUCTURED INTERVIEW – CASE STUDY
Research Topic:
An integrated framework for successful performance measurement strategies within Cape Metropole Small and Medium Enterprises
Purpose of the study:
The ultimate objective of the study is to evaluate and document a structured and clearer understanding of current Performance Measurements (PM) and design skill sets processes followed within local SMEs, with the assistance of the managers or owner, leading towards the improvement of their existing PM systems through the development of an integrative and holistic approach.
A copy of the research findings and analysis may be requested by the interview respondents and the Cape Chamber of Commerce and Industry. It is anticipated that an integrative approach would empower SMEs to challenge their thinking and seek better tools to enable more effective management of businesses; assist with the achievement of the financial objectives and goals; take full advantage of newer thinking strategies; gain competitive edge therefore contributing to government's objective of growing the economy through SMEs. All responses will be held in strict confidence and only disclosed as Business A or Manager A (that is individuals or institutions will not be named unless so indicated). Please contact the researcher for any further information about the study at +27 21 460 3610 or e-mail to the researcher Lindiwe Mabesele, at mabeselel@cput.ac.za
Interview/Case No: _____
Respondent Role: _____
Business Activity (to be researched): _____
Interviewer: _____ Date: _____
Instructions:
The questions should take approximately 40–60 minutes to complete. This semi-structured interview questions are designed to gain an understanding on what and how performance measurement strategies are adopted within SMEs in South Africa. The questions are divided into two sections; Section A, business strategy, operational processes, performance measurements and thinking strategies questions and Section B the integration processes. The interview contains fifteen questions for section A and seven (7) on section B consisting of open ended questions.

GENERAL: DEMOGRAPHIC DATA

Organisation Name: _____

In what sector is the business: _____

What products and services does your business provide: _____

Number of employees: _____

Number of years the business in existence: Less than one year One year – 3 yrs

4 years and more _____

Your position in the company: Manager Owner Owner-Manager

Organisational chart / profile attached?: Yes No

What is the business perception on SME characteristics?

SECTION A: BUSINESS STRATEGY, OPERATIONAL PROCESSES, PERFORMANCE MEASUREMENT AND DESIGN ACTIVITIES

1. Please provide a brief overview of the strategy of your business? (*vision, mission, core business focus, strategic objectives and how are these achieved or coordinated*).
2. How is the strategy deployed? (*through frameworks of key processes*)
3. Who is part of planning the co's future (are employees part of it, value their ideas? (*business disciplines and department members involved in business strategy team?*))
4. In your opinion, is the business strategy supposed to be multi-disciplinary and across the business? (Elaborate)
5. Can you describe some details of what are the processes and activities that your business took to decide on what will be required to ensure the business strategy success?
6. How are strategies adapted, generated and communicated to managers and employees?
7. How and what technology do you incorporate in your business to ensure achievement of strategic objectives?
8. How do you monitor customer satisfaction or complaints besides the technology above? (*How do you generate ideas about the business and its strategy?*)
9. Can you tell me about the newer frameworks or techniques for business performance measurement (PM) and improvement that your business adopted or invested in recently?
10. What do you consider the most important that were done correctly during the process of implementing PM framework?
11. What are the types & characteristics of the PM systems used in your organisation? Your opinion? (*Who does the process involve? Suppliers, customers, employees, consultant, etc.*) *How did you decide upon these PM frameworks?*)
12. What are the typical challenges that you are experiencing as and when you are monitoring performance? (How are problems identified and solved?)

13. How would you best describe the implementation of the PM framework at your business? *Draw a map of the implementation process* (enclose an attachment). *(To what extent is there collaboration or interaction within your operational processes during the PM implementation process?)* Elaborate on the process.
14. Can you describe the typical operational business processes within your organization? *(What processes, if any, does the business follow for evaluating individual, group, and organisational performance? In which business activity/ies are the process used.)*
15. How are problems identified and solved?

SECTION B: Integrated strategy: BSC-related and DT-related processes and perceptions thereof

1. To what extent is the organisation aware of the design concept called “DT”?
2. How has the business adopted design skills or behaviour before, during and after PM process? In which business function do you use design skills? (that is is ***it also used as part of the business strategy***? *What impact this had on your business performance? Who is involved in the implementation of the DT within your business?*)
3. To what extent are principles related to the BSC and DT integrated in your business? *(How are the processes as described in the topics above used in each business activity to integrate design skills?)*
4. In your opinion, how does the BSC-related, DT-related characteristics and integration or cooperation influence (or will) the performance of SMEs? *(In your opinion, how does the integration process influence your business environment and performance?)*
5. In your opinion, if you were to integrate design skills into your PM framework, how would you suggest the process should follow in sequence?
6. Any other comment on the topic on this interview guide.

Your participation in this study is highly appreciated

APPENDIX F: EXAMPLES OF INDIVIDUAL CASES TRANSCRIPT FORMAT MICROSOFT WORD® DOCUMENT (GERUNDS)

IMPORTANT: FULL TRANSCRIPTS ARE READILY AVAILABLE SHOULD IT BE REQUIRED

Case Participant Ent-A - LDra					
SECTION A – STRATEGY OF SME					
Interview Lead Question: Please take me through an overview of the strategy of your business? (vision, mission, core business focus, strategic objectives and how are these achieved or coordinated).					
INTERVIEWER (INTVR)	Paragraph	INTEVIEWEE	Initial coding	2 nd coding	Final coding
Please provide a brief overview of the strategy of your business? (vision, mission, core business focus, strategic objectives and how are these achieved or coordinated).	Para 1	Response from Interviewee: In Principle, The 1) reason why we exist we want to be able to 2) provide a) good quality bedding and at b) affordable price, and to afford c) people with good sleeping patterns and to d) creating job & e) community empowerment, basically to 3) benefit our customer and the f) people who work for us.	1) Existing by 2) Providing: a) good quality bedding b) affordable price, c) afford people with good sleeping patterns d) creating job & e) community empowerment 3) Benefiting: 3) benefit customer f) people who work for us	1) Purpose (year's org in exist/sustain) 2) Key performance indicators (KPI)	Vision and Mission Financial and No
Basis Of The Strategy (Target Customers, Markets, Environment) How often do you review your strategy?	Para 2	Respondent provides a 1) documented strategy for the organisation, and reads from the document. 2) (Every 3 Months) reading from the document Respondent clarifying discrepancies "...meaning we did not achieve it..." "there are specific things and certain strategies in terms of growth the document we would wish not to be shared with other people in our industry"	1) Documenting strategy 2) Reviewing quarterly Achieving or not achieving Specifying strategies for growth and documenting it but not sharing with competitors		
What Does It Aim To Achieve (Provide New Or Existing Product To New Or Existing market, Differentiation On Price, Quality And Other Values Comparing Competitors)	(see para 1 above)		2) Providing a) good quality bedding and at b) affordable price, and to afford c) people with good sleeping patterns and to d) creating job & e) community empowerment.		
Who Is Part Of Planning The Future (Are Employees Part Of It Value Their Ideas) When you say business partners, we talking external stakeholders or consultants?	Para 3 Para 4	Primarily the 1) business partners involved in the 2) planning process but 3) implementation process is shared throughout the organisation. Umm... and certain 4) values shared within the organisation. Partners or members of the CC. If I may explain the 5) set-up of the structure. We have 1) two members in our business (there are basically my wife and a friend of ours). My wife is also the 2) financial	1 & 2) Involving business partners (planning process) 3 & 4) Sharing values & implementation process organisation-wide 5) Setting up structure capabilities a) Having members, partner and friend with skills - financial accountant, marketing director Composition of participants in setting strategy		

Participant Ent-B - NTra					
SECTION A – STRATEGY OF SME					
Interview Lead Question: Please take me through an overview of the strategy of your business? (vision, mission, core business focus, strategic objectives and how are these achieved or coordinated).					
INTERVIEWER	Paragraph	INTEVIEWEE	Initial coding	Category	Theme
Interviewer: Follow-on Questions: Interview Lead Question: Please take me through an overview of the strategy of your business?	Para 1	Response from Interviewee: We... primarily, 1) we earn money from training. As individuals, Richard and I are both 2) speakers and we will speak in front of audiences. So when 3) we train... we run public courses... a) invite people or b) other people invite us to go to them to in-house or to conference speaking. So our... uhm... 4) our strategy is a) to build... an expert reputation for each of us as individuals and for the b) business as a training provider. We build that expert reputation and then we are invited to come and train... speak or when we put out an advert... people recognize our name and our expertise and then they want to do business with us. So in order 5) to develop that reputation we produce a lot of material either through 6) social media... blogs... uhm... we write... we are 7) involved with other professional organisation... and we... uhm... 5) we produce books and other products...	1) Earning money 2) Speaking to target audience 3) Running public-speaking oriented product and training people in-house or conferences 4) Building Expert reputation for organisation and personal 5) Developing reputation and producing products 6) Writing using social media, blogs 7) Involving profession organisations and producing books	1) Economic factor 2) Skills 3) People factor 4) Reputation (Org & Personal) 5) Product 6) Technology 7) Member of a network	
	Para 2	There is a training body... it started about a year ago... 1) a new training body... we haven't joined yet... Uhm... we know that a 2) lot of business comes from professional referral. So we all 3) specialise in our own field... and somebody will say... my client is asking for social media training and I do physical networking so I am going to refer them to you... uh we get a lot of business that way and we refer other business to people. So that is 4) the kind of the strategy, is building the reputation putting up lot of content... relationships... professional relationship with people and doing the work that we love to do. So, just being in 5) front of audience as much as possible.	1) Joining Training bodies 2) Knowing most business come from referrals 3) Specialising in social media training and doing physical networking referrals 4) Building reputation and professional relationships 5) Being in front of audience	1) Training and development 2) Access to market 3) Skills specialists 4) Relationships 5) Customer focused	
	Para 3	I train social media... uhm and my training... people would say who is your 1) competition and they would go look and find other people who train social media but apparently 2) I have a unique perspective and I 3) communicate it in a way that makes it 4) real to people who are afraid of social media. And I can do that because I 5) had another business a couple of years ago that I lost... a franchise business. After I 6) lost the business... I lost a b) lot of things... So I c) lost all my money and I had to 8) market myself as a speaker and a trainer... I wrote a a) book about my story but I had no money to market myself so I 7) had to use social media.	1) Training in social media 2) Having unique perspective 3) Communicating to make social media real 4) Taking fear away from people who are afraid of social media 5) Having had a failed business before 6) Marketing self to speaking and training 7) Having to use social media	1) Competition 2) Differentiator 3) Communication 4) Empathy with customer 5) Previous experience learning 6) Self re-inventing before 7) Innovation & Technology	
	Para 4	I can 1) tell people the other truth about social media... and I am	1) Telling truth about social	1) Moral obligation	

APPENDIX G: CASE PARTICIPANTS' DOCUMENT CHECKLIST (21 DOCUMENT TYPES AVAILABLE VIA WEBSITE) FOR CONTENT ANALYSIS

IMPORTANT: EDOCUMENTS ARE READILY AVAILABLE SHOULD IT BE REQUIRED

The goal of document analysis was to analyse information that could involve or are about strategy and PM related aspects of business.					
NB: It is known that strategy or policy documents do include information on strategic and PM aspects of business, the question is: Which document includes information about strategy? Are stakeholders also involved in PM related aspect of business to highlight the quality of information in terms of the views about the organisation for which documentation could be a good indicator. If for instance, the documentation does not include stakeholder involvement in PM, it is interesting to notice what this means in relation to organisational strategy. # = identity number allocated for each document obtained per case participant					
Participants	#	Kind of Document	Categories of organisation documentation relating to strategy, PM, DT and stakeholder involvement	Availability of document (hardcopy and/or softcopy via Website)	Sampling technique if there are multiple documents
Case: Ent-A	A1 A2 A3 A4 A5	- Organisational Profile - Organisational Strategic Plan - Organisational Structure - Website – Blog - Digital catalogue (product focused)	- Structure - Strategy - Structure - Interaction with stakeholders (Strategy/PM & DT) Reflections of further engagement with customer on the enterprises activities (PM/DT) - Strategy	Hardcopies and softcopies via participant's website	Random and Purposive sampling
Case: Ent-B	B1 B2 B3	- Vision and mission - Testimonials & Blog - Digital catalogue (product focused)	- Involvement of stakeholders in strategic planning activities (PM) Role of stakeholders as members of enterprises' management/ operations (PM) Road map to achievement of the enterprise vision (Strategy) - Interaction with stakeholders (Strategy/PM & DT) Reflections of further engagement with customer on the enterprises activities (PM/DT) - Strategy	Only soft copies via participant's website (all)	Random and Purposive sampling
Case: Ent-C	C1 C2 C3 C4	- Mission and vision - No of employees - Testimonials - Catalogue: services offered (service focused)	- Involvement of stakeholders in strategic planning activities (PM) Role of stakeholders as members of enterprises' management/ operations (PM) Road map to achievement of the enterprise vision (Strategy) - Interaction with stakeholders (Strategy/PM & DT) Reflections of further engagement with customer on the enterprises activities (PM/DT) - Strategy	Only soft copies via participant's website (all)	Random and Purposive sampling
Case - Ent D	D1 D2 D3 D4 D5	- SME Manual 2015 (lists the types of records/accessibility) - Organogram (product focused) - Warranty document - Testimonials from customers (2010 – 2013) - Organisation overview (vision and mission)	- Listed records of organisation specific statutory, regulatory requirements and internally protected information guidelines. - Interaction with stakeholders (Strategy/PM & DT) Reflections of further engagement with customer on the enterprises activities (PM/DT) - Involvement of stakeholders in strategic planning activities (PM) Role of stakeholders as members of enterprises' management/ operations (PM) Road map to achievement of the enterprise vision (Strategy)	Only softcopies via participant's website (all)	Random and Purposive sampling
Case – Ent E	E1 E2 E3 E4	- Mission and vision - Organisation overview - Catalogue of services offered - Aftersales services - Testimonials and - FAQs	- Involvement of stakeholders in strategic planning activities (PM) Road map to achievement of the enterprise vision (Strategy) Role of stakeholders as members of enterprises' management/ operations (PM) - Strategy - Interaction with stakeholders (Strategy/PM & DT) Reflections of further engagement with customer on the enterprises activities (PM/DT)	Only soft copies via participant's website (all)	Random and Purposive sampling

APPENDIX H: EXAMPLE OF INDIVIDUAL CASES AND DOCUMENTARY ANALYSIS
LIST OF CODES MICROSOFT WORD® (OPEN CODES ONLY)

IMPORTANT: FULL LIST IS READILY AVAILABLE SHOULD IT BE REQUIRED

SECTION A							
INTERVIEW QUESTION 1 (IQ1): Please take me through an overview of the strategy of your business?							
Initial coding IQ1 (all participants - interviews only) = 142 codes							
Initial coding IQ1 (all participants - document analysis) = 31 codes (added)							
TOTAL CODES (IQ1) = 173 CODES							
Ent A (12 + 10 = 22 codes)	Interviews only					Document source	
		Initial coding (Gerund codes) interviews	12	Open code (Interviews)	Initial coding (Doc Analysis)	10	- Vision (NOT STATED) and Mission (Clearly stated) use of words 'high quality, comfortable and stylish products' 'customers globally' 'through innovative, ethical, inspired and world-leading organisation', 'educate our customers on the benefits and care of our products'
	1	a) community empowerment	f	1. Com: Community serviced (Comps)	1. lqgpc	f	- Diverse industry as part targeted-market focused strategy
	1	c) afford people with good sleeping patterns	f	2. Cus : Customer stakeholder (CusA)	2. Ethic / lntac	f	- Differentiator from competitors includes efficient service and delivery, committed team, meeting customer requirement, integrity, top quality products, in-depth knowledge about material and after-sales service.
	1	b) affordable price,	f	3. Fin: Financial (Rev)	3. Lead: (globally)	f	- Vision (NOT STATED) and Mission (Clearly stated) similar as in strategy profile above except for additional words 'provide ultimate customer experience'
	1	1) Documenting strategy	f	4. Form: Formalisation of strategy (Dacbt)	4. SPOC	f	- Core Values includes Business and people growth, Customer focus, Market leadership, Quick response, innovation, learning, Community and environmental care, Honesty and accountability, Resource utilisation, Continuous improvement
	1	2) Reviewing quarterly	f	5. Exp : Frequency of reviewing (ExpRby)	5. Team:	f	- Strategic goals include targeted key areas and goals set and required resources as well as assigned dates for achievement of objectives.
	1	a) good quality bedding	f	6. Prod: Product quality delivery (PDly)	6. Exp :	f	- Stakeholder engagement and networking as part of marketing, knowledge-gathering and market access focused strategy
		d) creating job &	f	7. Staf : Jobs	7. Exp :	f	- Diverse Products as part of digital product-marketing focused strategy
	1	Specifying strategies for: Achieving or not achieving	f	8. Why: Benefits measuring achievement or non-(Ach-NotAch)	8. Com , lntac	f	
	1	but not sharing with competitors	f	9. Why: Competitive advantage (CompAdv)	9. KPA:	f	
		Benefitting: f) benefit customer	f	10. Why: Cus : Customer stakeholder (Cus)	10. Mark:	f	
		growth and documenting it	f	11. Why: Growth (Grow) and			
1	g) people who work for us	f	12. Why: Workforce/Staff (Stf)				
Ent B	Interviews only					Document source	
		Initial coding (Gerund codes) interviews	25	Open code (Interviews)	Initial coding (Doc Analysis)	6	- Vision and Mission (NOT STATED) but use of words informative and entertaining 'world class sales training' to 'grow customers base' and 'increasing bottom line', and give teams 'performance improvement' skills and 'motivation' for application.
	1	2) Knowing most business come from referrals	f	13. Exp	11. lqgpc	f	- Diverse Products as part of digital product-marketing focused strategy
	1	6) Marketing cell to speaking and training	f	14. Access	12. Exp : lntac	f	
	1	6) Writing using social media, blogs	f	15. Access	13. Lead: (globally)	f	
	1	3) Communicating to make social media real	f	16. Com: Communication	14. Team	f	
1	2) Speaking to target	f	17. Com	15. lntac	f		

APPENDIX I: EXAMPLE OF INDIVIDUAL CASES ANALYSIS - THEMES AND CATEGORIES MICROSOFT EXCEL®

IMPORTANT: SPREADSHEET IS READILY AVAILABLE SHOULD IT BE REQUIRED)

0 Ent A Coding to guide Code list and ALL PARTICIPANTS - Excel

Tools and methods used: • • Involving people – top management, telesales team, other staff members, colleagues and family (BSC-related internal processes aspect/DT-

	A	B	C	D	E	F	G	H	I
1	Main Theme	Description of category	Final codes / Categories	Coded data-driven themes (Focused codes / Sub-categories)	Ent-A (initial codes from quotes)	Ent-B (initial codes from quotes)	Ent-C (initial codes from quotes)	Ent-D (initial codes from quotes)	Ent-E (initial codes from quotes)
2	Main theme 1: Important and Instrumental elements: Understanding SME, Strategy and PM (traits and features)	Features and factors deemed instrumental in relation to their strategy and PM processes within daily operations	Perceived important SME traits or characteristics	Theme 1: Financial and non-financial-related features perceived important for SME characteristics	Turnover, flexibility (operation and market selection), decision-making, and market access reach	Being responsive, adaptive, look for opportunities that larger enterprises do not take, have close relationship with clients and specialised and expert reputation	Have dynamic leadership, expertise in methods of bringing sales and customer, be numbers or matrix knowledgeable, key – have payment schedules and multi-skilled employees	Be entrepreneurial, react quick to external forces, offer better services and pricing	Have access to niche markets, specialised and expert reputation, independence, innovativeness due to vulnerability to economic changes
3			Factors for defining strategy - Strategy	Theme 2: Financial and non-financial-related factors used to define strategy and mission statement	Strategy, vision and mission was clearly stated. Strategy was based on mission statement that consists of product factor (quality products, innovation, service), economic factor (price), people and relational factor (team, staff, customers and community), market-focus factor (lead globally), reputation factor (ethics), knowledge and information, resources, continuous improvement, key performance areas (KPA's)	Strategy and vision or mission statement was not clearly stated. Strategy explained using economic factors (earning money, marketing), product factors (skills specialist, innovation), technical factors (using social media, blogs), relational factors (joining training bodies, professional organisations, speaking to target audience), reputational factors (owner's personal lived failed business and telling truth 'ethics') and people factor (taking fear away from people who are afraid of social media).	Strategy and vision or mission statement was not clearly stated. Strategy was explained using key aspects of sales training, sales staff and growth of clients and customers. Strategy was long term and short term represented by economic factors (that is, generating income), product factors (skills specialist, unique selling point), people factor and reputational factor (partnerships-building and people-development 'interns as staff')	Strategy, vision or mission statement was not clearly stated. Strategy was explained using internal processes with the focus on economic factor (market access, turnover and income growth), people factor (internal personnel, independent agents, customers and other external parties), reputation factor (ethical workmanship), product factors (diverse innovative products), regulatory factor (statutory and compliance requirements).	Strategy and vision or mission statement was not clearly stated. Strategy was explained to indicate the product-service, market-access and environment sensitive strategy with the purpose to develop, apply and expand the available skills within the enterprise's work force. The strategy focused on economic factor (pricing and turnover, selling point targeted at a specific niche market), people factor (customers, skills development and growth), product factor (quality product), reputational and positional factor (skills specialist as unique selling point targeted at a specific niche market)
4			Factors for defining strategy - Formalisation	Theme 3: Strategy formalisation through proper	Formalisation demonstrated through documenting	No formalisation of strategy	No formalisation of strategy	No formalisation of strategy	No formalisation of strategy

Ent-A Codes - Break downs IQs Codes - All Case Particip **All Thematic Analysis**

Ready 22:43 22/Dec/20

APPENDIX J: EXAMPLE OF INDIVIDUAL CASE PARTICIPANTS' DOCUMENT ANALYSIS MSEXCEL®

IMPORTANT: SPREADSHEET IS READILY AVAILABLE SHOULD IT BE REQUIRED)

0 Cross Case Interviews and eDocs and Focus groups analysis

File Home Insert Page Layout Formulas Data Review View ACROBAT Tell me what you want to do

Normal Page Break Page Custom Ruler Formula Bar Zoom 100% Zoom to Selection New Arrange Freeze Split Hide Unhide

Workbook Views Show Zoom Window All Panes

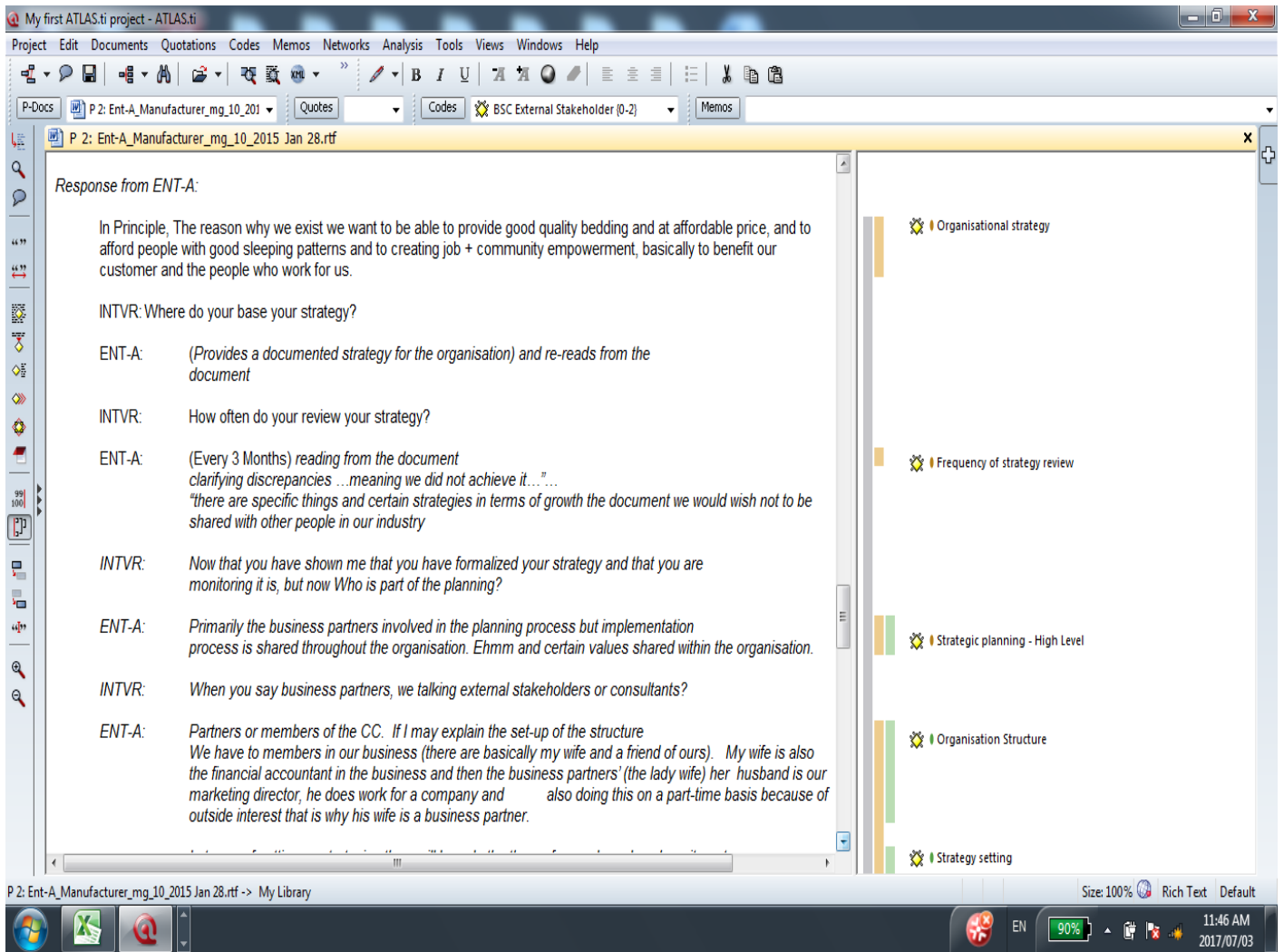
D5

	A	B	C	D	E	F	G
1		Document analysis: CI: Ent-A	Document analysis: CI: Ent-B	Document analysis: CI: Ent-C	Document analysis: CI: Ent-D	Document analysis: CI: Ent-E	
3	Documentary evidence - Profile	<i>Organisational Profile (vision and mission and other activities)</i>	<i>Vision and mission (website)</i>	<i>Mission and vision (website)</i>	<i>Organisation overview (vision and mission and other activities)</i>	<i>Mission and vision (website)</i>	
4		<i>Organisational Strategic Plan (vision and mission and other activities) (hardcopy only - confidential)</i>		<i>Number of employees (website)</i>	<i>Warranty document (website)</i>	<i>Organisation overview (website)</i>	
5		<i>Organisational Structure (hardcopy and website)</i>			<i>SME Manual 2015 (lists the types of records/accessibility)</i>		
6		<i>Testimonials and Blogs (hardcopy and website)</i>	<i>Testimonials and Blogs (website)</i>	<i>Testimonials (website)</i>	<i>Testimonial from customers (emails and website)</i>	<i>Testimonial and FAQs (website)</i>	
7		<i>Digital catalogue (product focused) (hardcopy and website)</i>	<i>Digital catalogue (services offered)</i>	<i>Digital Catalogue: services offered</i>	<i>Citogram (Digital catalogue product focused) (website)</i>	<i>Catalogue of services offered/After sales services (website)</i>	
9	Key concepts of Strategy and PM, BSC and IT						
10	Organisational Profile (vision and mission and other activities): Strategy	Vision (NOT STATED) and Mission (Clearly stated) use of words 'high quality, comfortable and stylish products' 'customers globally' 'through innovative, ethical, inspired and world-leading organisation', 'educate our customers on the benefits and care of our products'	Vision and Mission (NOT STATED) but use of words informative and entertaining 'world class sales training' to 'grow customers base' and 'increasing bottom line', and give teams 'performance improvement' skills and 'motivation' for application.	Vision (NOT CLEARLY STATED) but on website use of words 'helps organizations increase sales' 'improve profitability' 'build championship teams' 'the prerequisite of success' "; and Mission use of words 'improve the quality' 'transformation of the marketplace' and 'powerful	Vision and Mission (NOT CLEARLY STATED) but on website use of words 'offer range of innovative products' 'strive for service excellence' 'products are serviced and supported with spares and training' 'import international brands' 'national distribution networks'	Vision (NOT CLEARLY STATED) but on website use of words 'eco-friendly, 'green building' focus; and Mission use of words such as using 'unique stripping techniques, 'not to harmful to the environment' and 'recycled products'	
11		Diverse industry as part targeted-market focused strategy			NB: Environmental consciousness through new natural technologies		
		Differentiator from competitors includes efficient service and delivery, committed team, meeting customer requirement, integrity, top quality			Customer relationship (customer experience building, support and product-education/knowledge development; open communication/transparency		

Ready

Cases Interviews Codes Cases DocAnalysis Codes Focus Grp1 and 2 Codes

APPENDIX K: EXAMPLE OF INDIVIDUAL CASE TRANSCRIPT FORMATTED AND UPLOADED ON ATLAS.TI™ SOFTWARE (OPEN CODING)



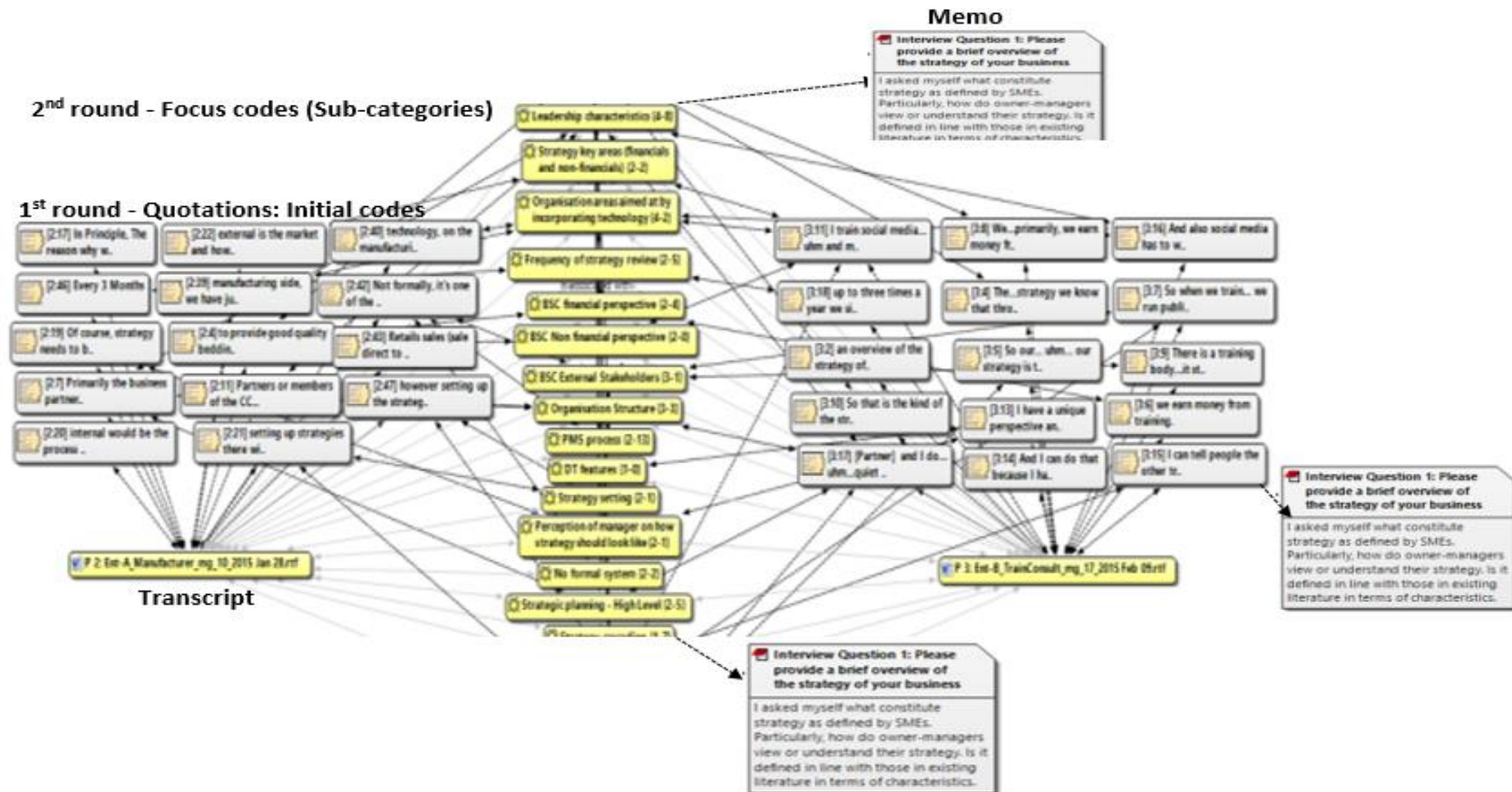
APPENDIX L: AFTER OPEN CODING - EXAMPLE OF ATLAS.TI™ PARAGRAPHS FOCUSED CODING, SUB-AND MEMOING

The screenshot displays the ATLAS.ti software interface with several key components:

- Network Views:** A sidebar on the left containing a 'Quotations' list with columns for 'Id', 'Name', and 'Start'. The list includes entries such as 'an overview of the strategy of...', 'And also social media has to', and 'Effectively we measure our bu...'. A red arrow points from the text 'Open codes - paragraphs (quotes)' to this list.
- Transcript:** The central window shows a transcript of an interview with various segments labeled (e.g., B7C, D7A, B7E). A large red 'X' is drawn over the transcript, with the word 'Transcript' written across it.
- Memo:** A window titled 'My conc...' contains a memo with the text: 'My concern were what to do with repeated similar meaning codes although not phrased them same. Following the initial coding line-by-line, my q... concerned in this second coding line... cluster codes with similar meaning... though with varying codes. What codes to 'merge' together or 'delete' without an influence of bias as a researcher. Would second coding be appropriate to cluster per paragraph?'. A red arrow points from the text 'Memoing' to this window.
- Code Memos:** A window on the right titled 'Code Memos' shows a list of codes under the 'Name' column. The list includes 'BSC External Stakeholder', 'BSC External Stakeholder (customer)', 'BSC External Stakeholder (government)', and 'BSC External Stakeholders'. A red arrow points from the text 'Focused codes - Sub-category' to this list.

At the bottom of the interface, there is a status bar with the text: 'Loaded: My first ATLAS.ti project.hpr7 -> ...\Appendix M(b) Example of Transcript F...'.

APPENDIX N: EXAMPLE OF ATLAS.TI™ NETWORK MAP OF PARAGRAPHS FOCUSED CODING LINKED WITH SUB-CATEGORIES AND MEMOING WITH QUOTES (AFTER RE-ORGANISING 'THE CIRCLE')



APPENDIX O: FINAL ROUND CODING MERGING SUB-CATEGORIES TO CATEGORIES

The screenshot shows the ATLAS.ti software interface. The 'Code Manager' panel on the left lists various codes, including 'BSC External Stakeholder', 'BSC External Stakeholder (customer)', 'BSC External Stakeholder (government support to effect fin', 'BSC External Stakeholders', 'BSC External Stakeholders (customer)', 'BSC financial perspective', 'BSC Learning Growth and Innovation', 'BSC process', 'BSC process - Implementation (Communication and Review', 'Business activities', 'Communication', 'DT process', 'External stakeholders influencing Internal business processe', 'External stakeholders involvement on implementation', 'Family members and Friends', 'Framework used', 'Frequency of org organisation aspects measurement', 'Frequency of strategy review', 'Growth - global focused', 'Identification/Assessment', 'Implementation (Communication & Review', 'Information gathering (feedback and compliments from c', 'Leadership characteristics', and 'No formal system'. The 'Quotations' panel on the left shows a list of quotations with their IDs and start positions. The 'Redundant Coding Analyzer' dialog box is open, displaying the following data:

Codes with redundant codings:

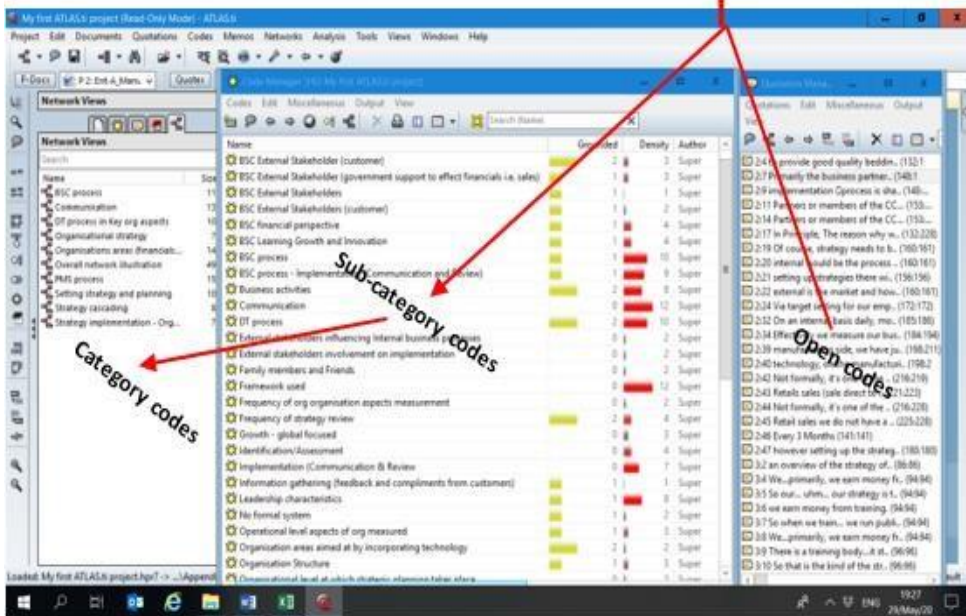
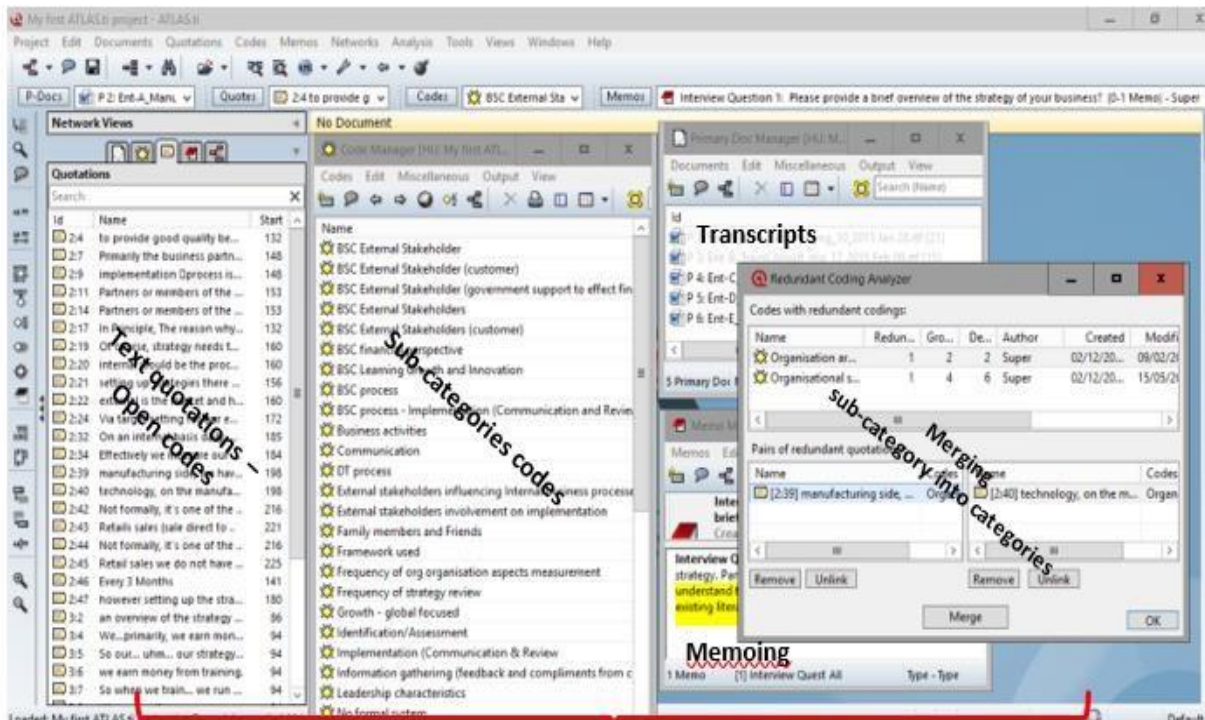
Name	Redun...	Gro...	De...	Author	Created	Modifi
Organisation ar...	1	2	2	Super	02/12/20...	09/02/20...
Organisational s...	1	4	6	Super	02/12/20...	15/05/20...

Pairs of redundant quotations:

Name	Codes	Name	Codes
[2:39] manufacturing side, ...	Organi	[2:40] technology, on the m...	Organ

The dialog box also includes 'Remove' and 'Unlink' buttons for each row, and a 'Merge' button at the bottom. The 'OK' button is also visible.

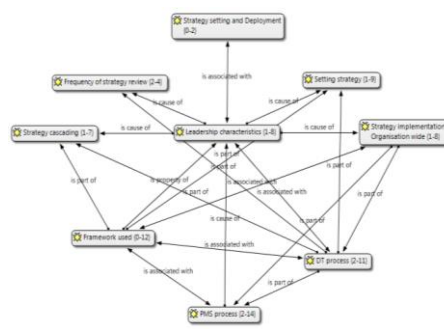
APPENDIX P: FINAL ROUND CODING SUB-CATEGORIES MERGED INTO CATEGORIES



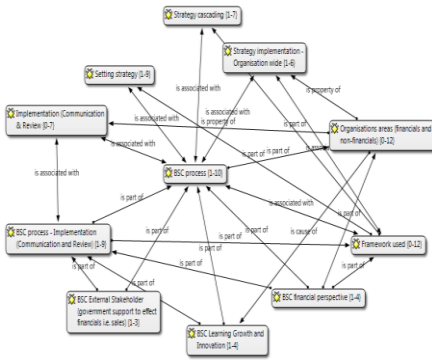
APPENDIX Q: FINAL ROUND EXAMPLES OF ATLAS.TI™ NETWORKS OF SOME MERGED CATEGORIES EXPANDED



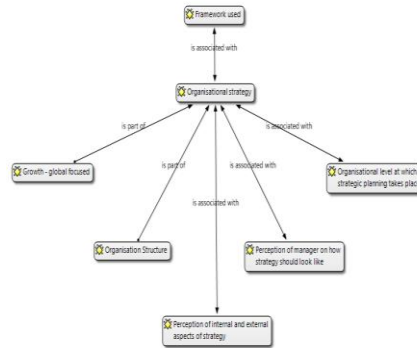
PM process links



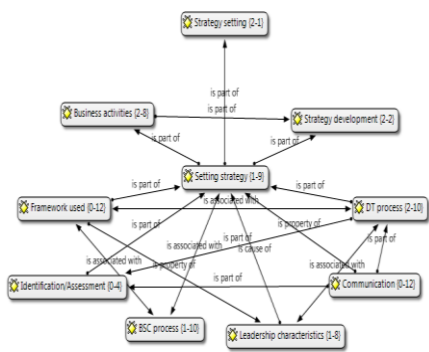
Leadership characteristics links



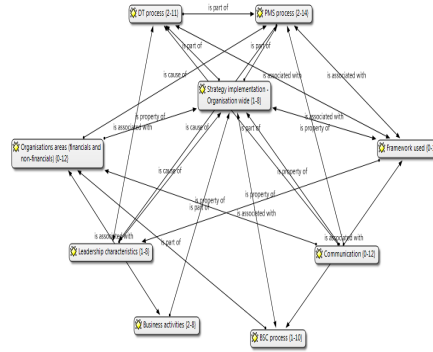
BSC process links



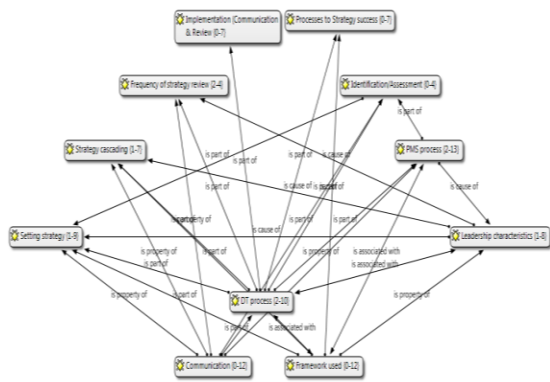
Organisational strategy links



Strategy setting links

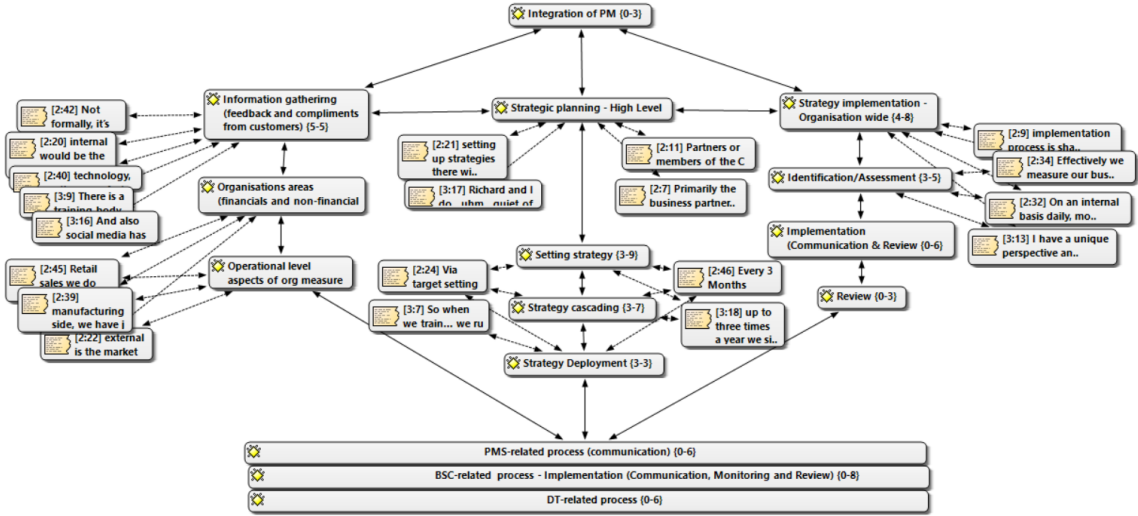


Strategy implementation – organisation wide links



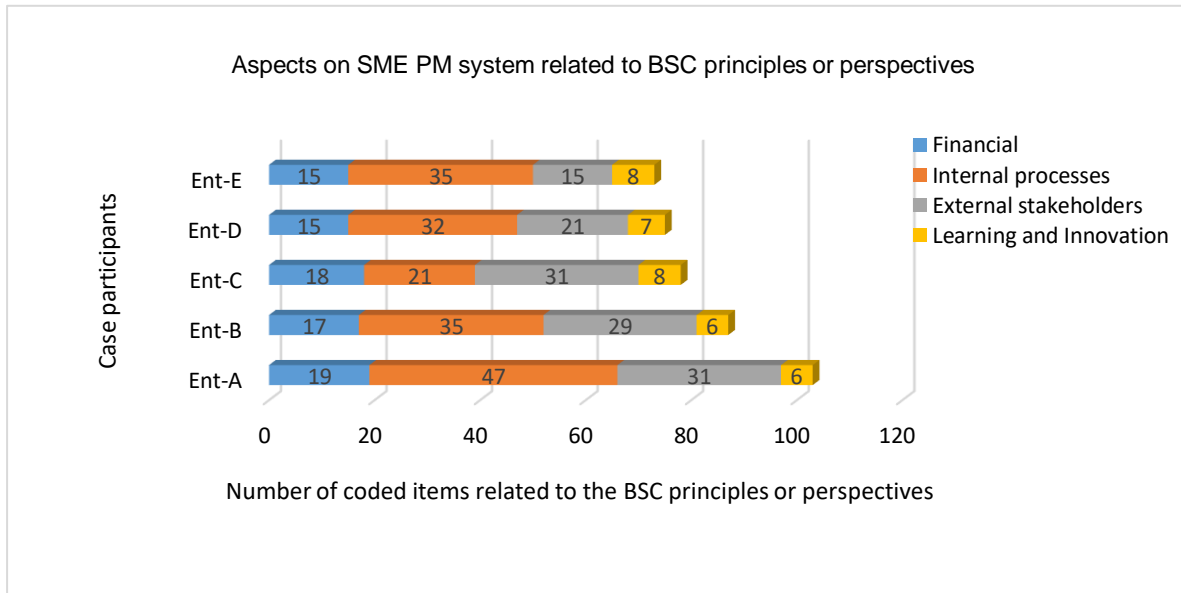
DT processes links

APPENDIX R: EXAMPLE OF A PRELIMINARY DEVELOPING INTEGRATED PM FRAMEWORK FROM CASE PARTICIPANT



APPENDIX S: PREVALENCE OF FINANCIAL AND NON-FINANCIAL FACTORS ON PM SYSTEMS RELATED TO BSC-PRINCIPLES

IMPORTANT: SPREADSHEET IS READILY AVAILABLE SHOULD IT BE REQUIRED



APPENDIX T: FOCUS GROUP INTERVIEW QUESTIONS

FOCUS GROUP DISCUSSION - QUESTIONS

Questions for Focus Groups	
<p>General PM & DT <i>Attributes, influences, Processes & experiences</i></p>	<p>GENERAL QUESTION: Briefly describe your most significant experience(s) with PM.</p> <p>Based on the developed integrated Performance Measurement (PM) framework,</p> <p>1. what characteristics, knowledge or skills do you agree with? If not, what characteristics, knowledge or skills need to be added?</p> <p><i>Probe: What PM related information do you consider important /critical for an SME? (nb: attributes & influences) Tell me about different types of commonly used PM models/frameworks you know of? How would you integrate PM models/frameworks with thinking strategies (e.g. Design Thinking) you know of? (nb: attributes & processes)</i></p>
<p>PM Framework Strengths <u>The Integrated PM Framework</u> <i>Attributes, influences, Processes & experiences PM&DT use in operations, PM process influence DT, PM influence enterprise performance, PM & DT merge</i></p>	<p>Based on the developed integrated PM framework:</p> <p>2. How would it perform in terms of identifying good or bad key performance indicators (KPIs) or key performance areas (KPAs) of an enterprise?</p> <p><i>Probe: What are some of the things you like it or key strengths that it possess? And should build upon?</i></p> <p>3. Describe how it would help an enterprise fulfil its mission or meet its objectives?</p> <p><i>Probe: Why (or provide example of influences) for an SME to use such an integrated PM framework? How would other stakeholders add value to such an integrated PM framework of an enterprise?</i></p>
<p>Areas for Improvement <u>The Integrated PM Framework</u> (gaps & improve) <i>Attributes, influences, Processes & experiences</i></p>	<p>Based on the developed integrated PM framework:</p> <p>4. Which gaps, if any, do you see in its structure or outcomes? Which two key areas for improvement (remove or add) would you suggest/propose if you were to redesign the PM framework? Why? <i>(or provide examples what influence your suggestion)</i></p>
<p>Final Reflection <u>Integrated PM Framework</u> <i>Attributes, influences, Processes & experiences (transferable)</i></p>	<p>5. Which areas/aspects of the developed integrated PM framework can be transferred to/benefit your own action, situation/work the most or the population of SMEs.</p> <p>CLOSING QUESTION: What is the most important thing you would like to tell me as I work to enhance the PM framework?</p>

Your participation in this study is highly appreciated

APPENDIX U: EXAMPLES OF FOCUS GROUPS TRANSCRIPTS FORMAT MICROSOFT WORD®

IMPORTANT: FULL TRANSCRIPT IS READILY AVAILABLE SHOULD IT BE REQUIRED

Focus Group 1

1st Focus group discussion: 12 th September 2018	
<p>PRESENT</p> <p>Moderator Researcher Note-taker 1 Note-taker 2</p> <p>VENUE & SET UP</p> <p>Venue: Library Conference Room (15:30 – 17:00) Cape Peninsula University of Technology Administration Building, Library</p> <p>The venue is set up with laptop and overhead projector, handouts of the framework, consent form and questions as previously emailed to participants and alphabetic tag allocated for sitting slots for each participant and sort out the audio recorder.</p> <p>Focus group member arrive and self-select sitting slots with alphabetic tag allocated with the handouts (Ent C did not arrive).</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="font-size: small;">Seating =</p> </div> <p>WELCOME</p> <p>Moderator: Okay, so I want to welcome you all and thank you for being here.</p> <p>You know the purpose of this is to assist researcher...with her doctorate and with her framework (that you are looking at this...right here). And...Thank you very much...this is a Friday afternoon and Thank you very much for being willing to spend your Friday afternoon here.</p>	<p>Ujya... [Moderator]: I work for the Centre of Post Grads studies...but I have also assisted (the Researcher) with her previous Focus Group. This is the second time that I am involved with this.</p> <p>This is [Note Taker]...she also assisted with the focus group. She is going to be a note taker she is also working at CPUJ and is also a researching student.</p> <p>So...Ujya (laughing)</p> <p>Thank you very much.</p> <p>[Laughing] Ujya...I will address each person by the alphabetical letter. We...anybody can speak but try and speak one at a time so that you don't interrupt, but anybody can speak and you can speak more than once on all the other questions...okay. And...Ujya...Remember there is not a right or wrong answer. I will ask the question...from the list of questions that was given to me. I do not know...this is not my subject. So I want to listen to your answers and maybe summarise it...but there is no right or wrong. It is views that we looking for...perceptions...opinions. So we are not testing anybody...okay.</p> <p>Okay...can we start with the first question.</p> <p>So this is called 'PM'. PM stands for Performance Measurement framework. And we want you to look at this framework and this is quiet broad question.</p> <p>(03:04)Ent A: Ma'am, you need to clarify what you mean by that?</p> <p>INTERVIEWER: GENERAL QUESTION Briefly describe your most significant experience(s) with Performance</p> <p>(03:13) [Researcher]: We trying to find your background. Are you familiar with performance measurements, are you hearing it for the first time, where you once –</p> <p>(03:20)Interviewer: Oh, In other words, how much do you know about it? How much experience do you have with it?</p> <p>(03:31)Ent A: Thought that be the same as MNE, sorry.</p>
<p>Measurements (PM)</p> <p>(03:33)Interviewer: Is that the same as MNE?</p> <p>(03:35)[Researcher]: Ja.</p> <p>(03:38)Ent A: Ok, Now we speaking the same language.</p> <p>(03:39)Interviewer: Let me right that down.</p> <p>(Laughing)</p> <p>(03:44)Someone: Our language hey.</p> <p>(Laughing)</p> <p>(03:47)Ent A: We've had that conversation.</p> <p>(03:49)[Researcher]: Anyways, should that actually disappear, it's actually the print out. So we speaking based on the-</p>	<p>(04:55)Ent D: No, I think also just to add on that I think it's, but also from the organization (inaudible) we provide services to clients, so we obviously have a mechanism within which you are measured in terms of the deliverables that you need to deliver, so we are able then to develop from our side a serving provider, a tool between which we can manage ourselves and see how performing against those targets (inaudible) clients so that's the understanding from my side.</p> <p>(05:36)Ent A: Ja, I've had a fair amount of experience in this space from working government, organisations in contracts, where there's a lot of this sort of stuff but also the MPO work I think is a lot that, so this is completely different.</p> <p>(05:52) Interviewer: Ja.</p> <p>(05:52)Ent A: And then in large corporates which is completely different as well and then the SME sector. So variety of different levels from very academic MNE down to, you know, thumb suck, how we doing? I think we re okay (inaudible).</p> <p>(08:09) Interviewer: Okay, Ja.</p> <p>(08:40)Ent E: MNE is from the acronym as well as the SME and even the acronym MPOI think it's</p>

Focus Group 2

2nd Focus group discussion 23rd JULY 2019

PRESENT
Moderator
Researcher
Note-taker 1
Note-taker 2

VENUE & SET UP
Venue: Mini Auditorium (15:30 – 17:00)
False Bay College Centre for Entrepreneurship Incubation

The venue is set up with laptop and overhead projector, handouts of the framework, the glossary of terms, consent form and questions as previously emailed to participants and alphabetic tag allocated for sitting slots for each participant and sort out the audio recorder.

Focus Group Two (FG2) member arrive and self-select sitting slots with alphabetic tag allocated with the handouts.

Sitting =

WELCOME
Moderator:
Okay, so I want to welcome you all and thank you for being here.
You know the purpose of this is to assist researcher...with her doctorate and with her framework (that you are looking at this...right here). And...Thank you very much...this is a Friday afternoon and Thank you very much for being willing to spend your Friday afternoon here.
Ujju, [Moderator] I work for the Centre of Post-Graduate studies...but I have also assisted Researcher with her previous Focus Group. This is the second time that I am involved with this.
This is [Note Taker], she also assisted with the focus group. She is going to be a note taker she is also working at [Researcher's Institution] and is also a researching student.
So...Ujju (laughing)
Thank you very much.

Laughing Ujju, I will address each person by the alphabetical letter. We...anybody can speak but try and speak one at a time so that you don't interrupt, but anybody can speak and you can speak more than once on all the other questions...okay. And...Ujju, Remember there is no right or wrong answer. I will ask the question...from the list of questions that was given to me. I do not know...this is not my subject. So I want to listen to your answers and maybe summarise it...but there is no right or wrong. It is views that we looking for...perceptions...opinions. So we are not testing anybody...okay.
Okay...can we start with the first question.
So this is called 'PM'. PM stands for Performance Measurement framework. And we want you to look at this framework and this is quite broad question.

GENERAL QUESTION
Briefly describe your most significant experiences with Performance Measurements (PM). **NOTE: SKIP THIS QUESTION**
INTERVIEWER
Based on the developed proposed Performance Measurement (PM) framework.
1. What characteristics, knowledge or skills do you agree with? If not, what characteristics, knowledge or skills need to be added?
Repeating:
I am going to ask just now five of the questions etc. but at the moment I want you to look at what is there and what do you agree with.

(Prolonged pause) Participants reading through the framework on handouts and Power point presentation projector.
Ent Construction: I do not understand...
Interviewer: Characteristics, knowledge or skills...
Ent Hospitality: We looking at the four different colours scheme...right? And choose which one is best for us...or is it...
Interviewer: I would say...whatever you see there...whatever you agree with.
Ent Construction: Can we just tick off anything?

Interviewer: We talk about it...because we need to hear your voice. Uh yes, you can tick it off for yourself just to remind you.
Ent Post (Ujju), May I ask...What is the question again?
Interviewer: What characteristics, knowledge or skills in this framework do you agree with?
Ent Hospitality: Could you elaborate a bit more on the DT explanation please.
Researcher: DT stand for Design Thinking. Design Thinking is about applying the designer's skills but to solve any other problem in business. So...designers normally they will sit and explore, can you change the product this colour...you know what I am saying...
(Participants seeking clarity on the terminology DT)
(Clarifying the terminology)

Ent Post (Ujju): Is this for existing or what you call start-up...Ujju...because I am checking here prototype would normally be on ideation if you want to see if something is going to work.
Interviewer or Researcher: Perfect...this is what it is all about...
Ent Construction: (Inaudible)...so also for someone who is also at a certain stage?
Interviewer: Anybody want to say something? I think to still studying the whole thing. Perhaps to help...let me add a question.
Ent Post: I would say...Ujju...I would say...Ujju...some of the issue is that some of the stuff that you want to utilize when you want to evaluate a person or measure or measure the stuff...entirely...stuff that...
Prob: What PM framework information do you consider

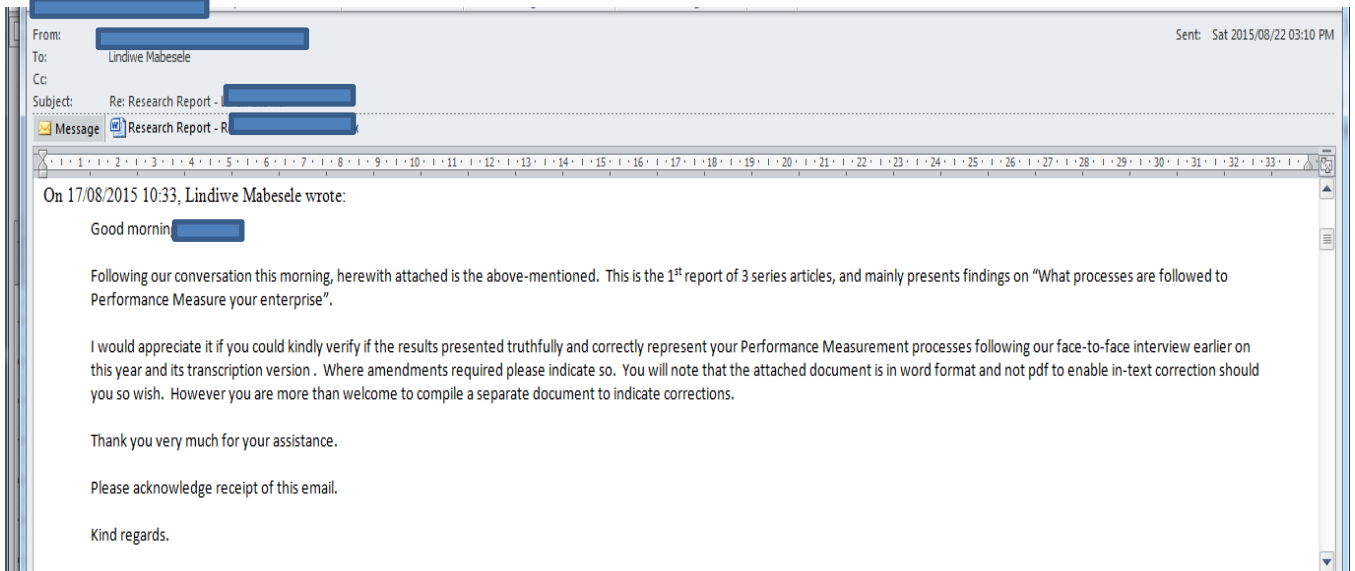
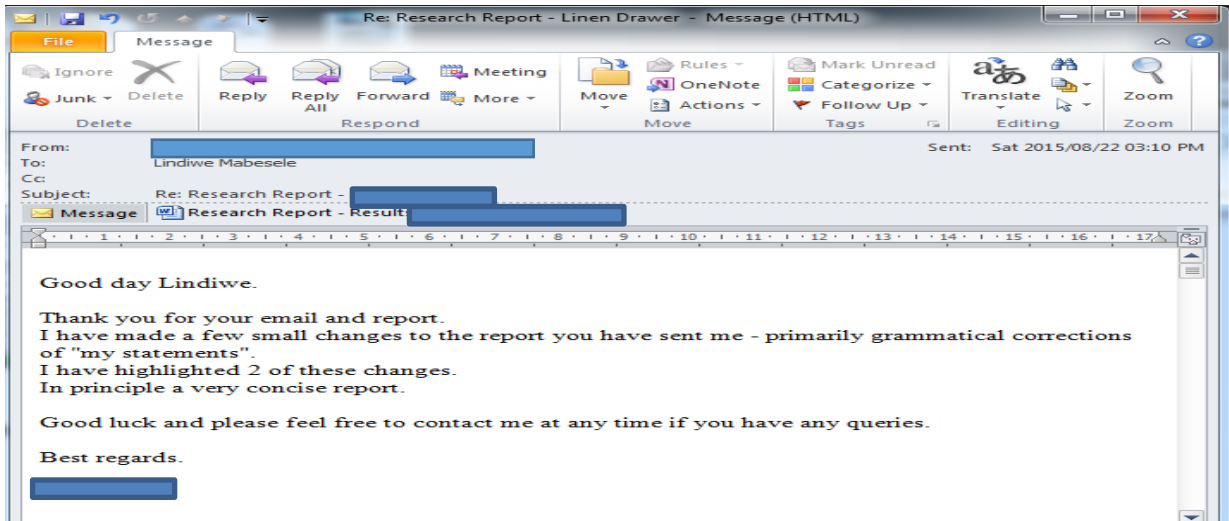
Page 2 of 18 6486 words English (United Kingdom) 13:18 25/Jun/20 53%

APPENDIX W: EXAMPLE OF FOCUS GROUP SUMMARY FINDINGS

IMPORTANT: FULL LIST IS READILY AVAILABLE SHOULD IT BE REQUIRED



0 Summary of findings focus group discussion 12 September 2018 - Excel															
Lindiwe Mabesele															
Based on the developed integrated performance measurement framework															
		Characteristic knowledge or skills - agreed with or to be added	PM related information considered important/critical for an SME	Different types of commonly used PM model/frameworks known	Integrating PM model/frameworks with Design Thinking (Known)	Identify good or bad key performance indicators (KPIs) or key performance areas (KPA)s of an	Key strengths it possess or should build upon	Why or influences for an SME to use such an integrated PM framework	Stakeholder's value addition to such an integrated PM framework of an enterprise	How it would help an enterprise fulfil its mission or meet its objectives	Gaps in its structure or outcomes	Two key areas for improvement (remove or add) proposed for its redesign and Why.	Areas/aspects of its transferability to benefit own action or population of SMEs.	The most important thing towards its enhancement	Additionally comments
2	Ent A	Used it for Corp & SME clients, my business and staff member has their own	For HR but if for budget is like and practicalities - but in practice there is never feedback	Profits	Looking at big picture is good but the steps and what are the measurable	It provides a good indication and guides with needs planning all the time	A lot of planning and areas to covered before you identify what to do	This is a theory of product dev but this is not how it actually happens. Eg the processes of product deve...SME do not have money, limited resources	Some processes could be done by the outsider (e.g. resources etc). Eg. Woolworths example	Orgs have diff levels it can work because of decision making. For SMEs many of the steps would not work		Join the first and second join together and the last together	It will be nice to add theory to a practical environment. Add education "business time education". Show them what the framework theoretically is all about...e.g a little bit of information for SMEs to learn.	It is amazing model. But practically behind it is what I query. Places of learning should try to educate people to be entrepreneur. It is well done.	(E.g. Woolworths (as a big corporate)...The simplified version...
4	Ent C	Clients will make use of PM	Happy with model Add: Stakeholders, Clients	Grants and sponsorships	Is all about corrective action, allowing independent thinking, passion and togetherness, it promotes unity happening at each step	Agrees with all	Agree but SME ito of budget and time. It will be a good tool but a challenge will be implementation. It depends on the belief of the SMEs.		Suggest use of colours for Small business OR different colour for Medium business				E.g. Type of model when SME participate fully...due to their failure and contributors is not asking. SMEs do not look at resources they have...without including what their surrounding. How do you change that	Policy members do not interact a grassroots level. Institution of HE do not work together...	
7	Ent D	Used it for Corp, SMEs, NPOs.	Happy with model Add: Stakeholders, Clients but there is a gap with what actually happens. Eg. if you look at the purple...but Add the Client perspective, Staff, Union etc	There is a brilliant model but will try to remember its name	DT is a buzz word currently and SMEs are using. Looking a block one and try, e.g. there should a finger in the pulse the big picture is great	It does not allow complete iterations circles (needs a rolling flows), there should be go and no go (if yes go but it no go back) but for simplicity	It covers a lot of things but it is too much to process for an SMEs (to of my budget) but will imply breaking it down into ...	Corp may be able to use and follow the basic. SMEs may apply 40% and iterate. SMEs are limited by resources. If heading said for Corp..at least is can have four	If you outsider as an owner of the SMEs then they could drive the process.	Supports use of colours for structure...NB: for fast track purposes		Add a block and put right across the top. To know what the main thing is. Start with a Mission and Vision, value and have a rope for all other activities. Yellow block perhaps	Due to my experience previous...yes the model is created from an academic perspective...but from SMEs practicality will be different for a working model. Simplify it by 60% to make it	Mine is a methodology of What if--what now etc	
7	Ent E	Services to clients, Projects, etc	Only when there is problems then there is feedback then they go back to step 1	Profits, Service Level agreements (for time-line)		The first step is conceptualising (theoretical view), also ito of quality		It SMEs do not see quicker results it may not fly.	It is more like an independent monitoring. In Business unit ito projects you need other stakeholders. E.g. a dept and individual	Processes need to be interactive. Consider the colouring for SMEs	The two blocks must be combined. Eg you plan and the implement	Challenges SMEs has is that aspect...they do not understand the business e.g doing a job efficiently. Educate SME to understand the value chain sothat they not only look at	It is good as a basic tool. Need to be streamlined to talk to more practicality of SMEs e.g. considering the control measures. Eg. I need to know what I need to	Design Thinking is part of planning and then bring the reflect section on what you have learned	
8		CORRIE SUMMARY	Agree theoretically but stakeholder section missing but in practice it might look			There need to be loop (of going back - did it happen etc)	It is extensive								If you show how and why your model is simplified.
9		Mary-Anne													This was passed with the focus group discussion However, going suggestion...
10															
11															
12															

APPENDIX X: MEMBER CHECKING – EXAMPLES OF CASE PARTICIPANTS FEEDBACK ON THE STUDY FINDINGS



APPENDIX Y: MEMBER CHECKING – EXAMPLES OF DATA RELATED FEEDBACK

RE: Focus group discussion - Lindiwe's research TRANSCRIBED DATA AND ANALYSIS!

 
Tue 2020/02/04 07:09 👍 ↶ ↷ →
Lindiwe Mabesele 

Dear Lindiwe



I am sorry I did not respond immediately.

But here I am now:

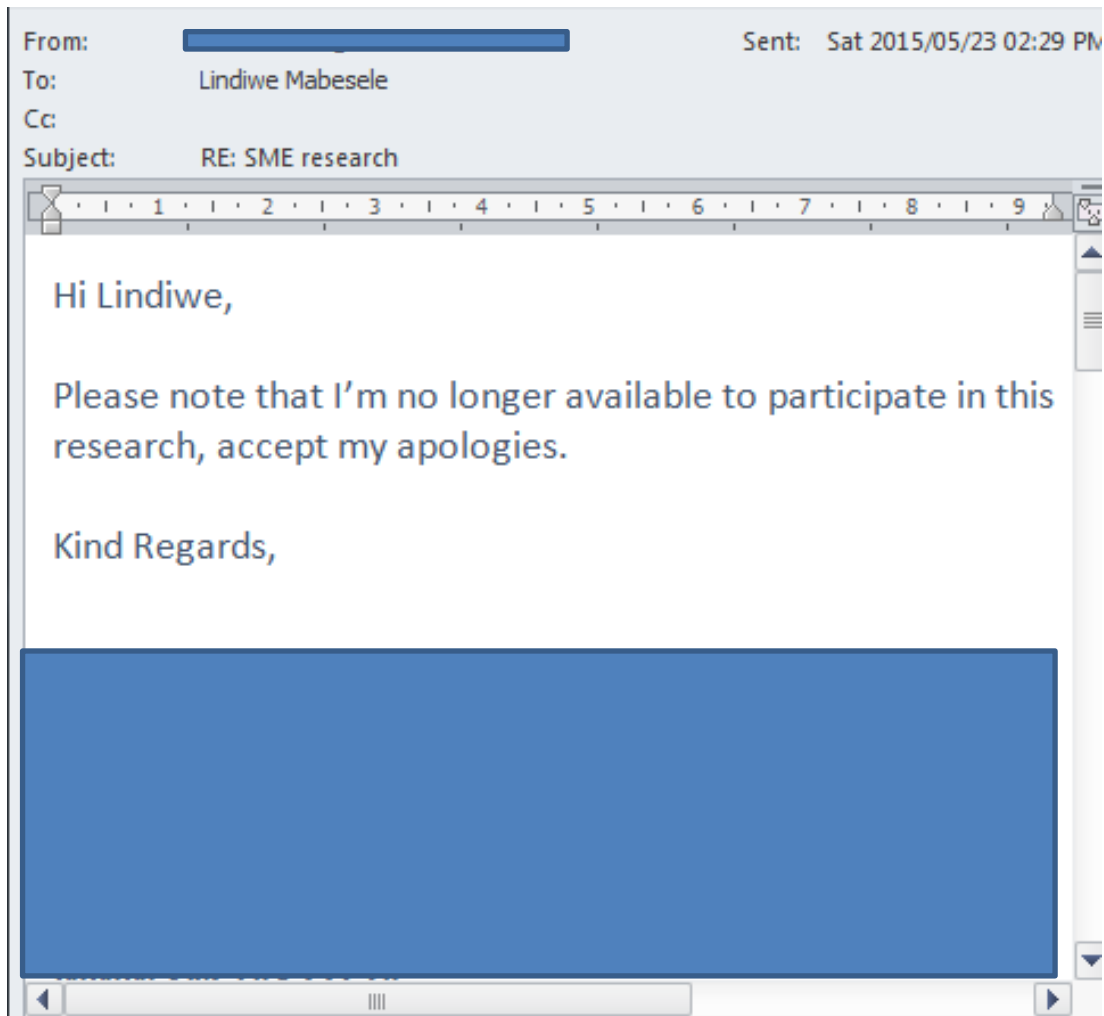
I agree with your representation of the second focus group. (I did read through it.) It was probably not as helpful as the first – but their comments were sometimes different – which probably added to your framework.

You can go ahead and conclude/finalise your analysis and write-up.

Sterkte!!

APPENDIX Z: EXAMPLE OF WITHDRAWALS FROM POTENTIAL PARTICIPANTS



APPENDIX AA: EDITOR'S CERTIFICATE

Bruce Conradie
66 Greenfield Rd
Greenside
Tel: 083 461-4130
bruce@theresearchfaculty.com

Attention: Lindiwe Mabesele
University of South Africa

1 Dec 2020

To whom it may concern

Confirmation of document editing

This letter is to confirm that I have edited the document (thesis, dissertation, article, or report) titled:

AN INTEGRATED FRAMEWORK FOR PERFORMANCE MEASUREMENT STRATEGIES IN
SMALL AND MEDIUM ENTERPRISES: THE CASE OF CAPE METROPOLE, SOUTH AFRICA

The document was the work of Lindiwe Mabesele.

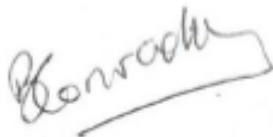
I may have involved the contributions of one or more subcontractor.

We have edited the document for errors of grammar, punctuation, and style. I have also provided the author with a list of aspects needing further attention or correction.

Excluded from the editing work were the annexures (if applicable), the spelling of authors' names and other proper nouns, and fact checking.

I am a registered member of the SA Institute of Translators.

Yours faithfully



Bruce Conradie
Research Support Specialist

APPENDIX AB: TURNITIN ORIGINALITY REPORT RECEIPT

Turnitin

Turnitin Originality Report

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 Word Count: 125163
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MABESELE Reply X

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AN INTEGRATED FRAMEWORK FOR PERFORMANCE MEASUREMENT STRATEGIES IN SMALL AND MEDIUM ENTERPRISES: THE CASE OF CAPE METROPOLIS, SOUTH AFRICA

by

LINDIWE ALEXANDRA MABESELE

submitted in accordance with the requirements for the degree of

DOCTOR OF PHILOSOPHY

in the subject

ACCOUNTING SCIENCES

of the

UNIVERSITY OF SOUTHERN AFRICA

SUPERVISOR: Professor HEB van der Poll

2020

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APPENDIX AC: SOURCES FOR LITERATURE REVIEW OVERALL PER SOURCE AND PER YEAR

(IMPORTANT: FULL LIST IS READILY AVAILABLE SHOULD IT BE REQUIRED)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
		References cited in this study	Source type	Year												
1	1	Maziriri, E.T. 2020. Green packaging and green advertising as precursors of competitive advantage and business performance among manufacturing	Journal	2020	1											
2	2	Dunne, C & Uttingdal, B.G. 2020. Successfully Managing the Literature Review and Write-up Process When Using Grounded Theory	Journal	2020	2											
3	3	Alraja, M.N., Khan, S.F., Khachab, B. & Aldasr, R. 2020. Does Facebook Commerce Enhance SMEs Performance? A Structural Equation Analysis of	Journal	2020	3											
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5	4	Seifried, J. & Wasserbaech, C. 2019. Design Thinking in Leading European Companies - Organisational and Spatial Issues, Journal of Innovation Management,	Book	2019	4											
6	5	World Bank. 2019. Global Economic Prospects, January 2019: Darkening Skies. Washington, DC: World Bank. doi: 10.1536/978-1-4648-1343-6	Journal	2019	5											
7	6	Poucher, Z.A., Tamminen, K. A., Caron, J.G. & Sweet, S.N. 2019. Thinking through and designing qualitative research studies: focused mapping	Journal	2019	6											
8	7	Creswell, J. W. & Guetterman, T.C. 2019. Educational research (8th ed.). Boston: Pearson Education, Inc.	Journal	2019	7											
9	8	Essel, Adams, & Amanhwaah. 2019. Effect of entrepreneur, firm, and institutional characteristics on small-scale firm performance in Ghana. Journal of	Journal	2019	8											
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11	10	South Africa. 2019. Department of Small Business Development, Revised Schedule 1 of the National Definition of Small Enterprise in South Africa.	Legislation Docum	2019	10											
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18																

APPENDIX AD: EXAMPLE OF QUALITATIVE STUDIES IN SOUTH AFRICA SMEs

IMPORTANT: FULL LIST IS READILY AVAILABLE SHOULD IT BE REQUIRED

SME studies in South Africa (Research methodology purposes) – Cape Metropole vs Other provinces (Sample)							
Author	Title	Type	Approach	Sample	Data collection	Limitations: area	Limitations experienced
1 Naidu, P. 2018	A case study on the critical success factors of two small businesses in Kwa-Zulu Natal.	Qualitative	Case study (Exploratory)	Two (2) entrepreneurs	Semi-structured interviews	Durban North (KwaZulu-Natal Province, South Africa) (Not generalised)	Limitations of this study were the small sample size and the limited time given to collect sufficient data. This study used a sample size of two. Using more than two respondents would have resulted in more time needed to gather and analyse data. If more respondents were used during this study, results may have been more accurate.
2 Sayed, Z & Sunjka, B.P. 2016	Investigating and evaluating the influence of supply chain structure on supply chain risk	Qualitative	Case study (Exploratory)	Four (4) Owners/Managers	Survey, Semi-structured interviews, maps	Gauteng Province (South Africa) (Not generalised)	This study was limited to only four cases
3 Rootman, C., Venter, E. & Mataboee, M.J., 2017	Non-relational conditions necessary for mentoring of black small business owner-managers in South Africa	Qualitative	Unknown (Exploratory)	Four (4) SMEs	Semi-structured interviews	Unknown (South Africa) (Not generalised)	Limitations of this study were that it focused only on black owner-managers and therefore limits the capacity to generalise research findings across all small business owner-managers in South Africa.
4 Thompson, C. 2016	The status of strategic planning in SMEs	Qualitative	Unknown	Twelve (12) SMEs	Semi-structured interviews	Gauteng Province	Limitation of the research was the likelihood of managers of SMEs revealing