# LEADERSHIP COMPETENCIES AND CAPABILITIES IN SOUTH AFRICAN BANKS FOR THE FOURTH INDUSTRIAL REVOLUTION

by

# **BENAZIR KAJEE-WADEE**

Student number: 33338779

Submitted in accordance with the requirements for the degree

# **MASTER OF COMMERCE**

in the subject

INDUSTRIAL AND ORGANISATIONAL PSYCHOLOGY

at the

**UNIVERSITY OF SOUTH AFRICA** 

SUPERVISOR: PROFESSOR NISHA HARRY

# **DECLARATION**

Name:	Benazir Kajee-Wadee	
Student number:	3333-877-9	
Degree:	MCom (Industrial Psychology) (Research	based)
Exact wording of the for examination:	e title of the dissertation as appearing on th	ne electronic copy submitted
	IPETENCIES AND CAPABILITIES IN SO JSTRIAL REVOLUTION	UTH AFRICAN BANKS FOR
	ove dissertation is my own work and that an indicated and acknowledged by means o	
I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.		
	t I have not previously submitted this work, qualification or at any other higher educat	•
(The dissertation wi	ll not be examined unless this statement h	as been submitted.)
BKajee		26 <sup>th</sup> July 2023
SIGNATURE		DATE

# **ACKNOWLEDGEMENTS**

This project would not have been possible without the support of many people. Many thanks to my supervisor, Prof. Harry, who read my numerous revisions. Thank you to UNISA for accepting my application and nurturing my talent.

Thank you to my son, my late dad, and the numerous friends and family who supported me during this long process, always offering support and love.

#### ABSTRACT

The study aimed to delve into the leadership competencies and capabilities within South African banks amidst the Fourth Industrial Revolution (4IR). The rapidly transforming landscape of 4IR - marked by rapid technological advancements, increasing global interconnectedness, and rising levels of complexity - shapes a unique set of challenges and opportunities for leadership in the banking sector.

In investigating the relevance of the existing leadership competency profiles in the face of 4IR and the necessity for a context-specific leadership approach, the research method was devised as a combination of literature review and empirical study. The sample size consisted of Banking Leaders and Learning and Development (L&D) managers from a variety of South African banks, providing a robust data set for the empirical investigation.

The research process began with a comprehensive literature review that helped in grounding the research in the established theories and latest findings about the impact of 4IR on leadership. The literature review underlined the demand for particular leadership competencies and capabilities such as adaptability, resilience, innovation, and strategic thinking in the era of 4IR.

Following the literature review, an empirical study was conducted using a questionnaire survey method to gather primary data. The questionnaires, aimed at Banking Leaders and L&D managers within the banking sector, comprised closed-ended questions that targeted key aspects of leadership competency profiles and their relevance to the 4IR environment. The responses provided first-hand insights into the current leadership development practices within the South African banking sector.

From the collected data, it was revealed that transformational leadership was predominant among the sampled in South African banks. The data showed a positive correlation between transformational leadership and variables such as job satisfaction and performance. This aligns with previous research indicating the effectiveness of transformational leadership in promoting employee engagement and performance, particularly in complex, rapidly changing environments like the 4IR.

However, the data also exposed a gap in the alignment of existing leadership competency profiles with the 4IR's demands. The current leadership competency profiles in South African banks appeared to inadequately address the unique challenges posed by 4IR, underscoring the need for a more tailored, context-specific approach to leadership development.

Based on the research findings, a VUCA (Volatility, Uncertainty, Complexity, Ambiguity) framework was proposed. This framework integrates the key leadership competencies and capabilities identified in the literature review and the study findings, tailored specifically to the challenges and opportunities of the 4IR.

The proposed VUCA framework emphasises competencies like adaptability, resilience, innovation, and strategic thinking, identified as critical for 4IR. It also includes elements like collaboration, emotional intelligence, and technological savviness, crucial for navigating the complexities of 4IR.

In conclusion, the study's findings indicate a need for continuous development and adaptation of leadership competencies to align with the rapidly evolving landscape of the 4IR. The VUCA framework offers a practical guide for the South African banking sector to reassess and enhance their leadership development initiatives, thereby equipping their leaders to better navigate the 4IR challenges. The research findings not only contribute to the broader understanding of leadership in the 4IR context but also underline the importance of context-specific leadership development strategies.

#### **KEY TERMS:**

Leadership competencies; capabilities; Fourth Industrial Revolution (4IR); technological advancements; complexity; transformational leadership; job satisfaction; continuous development.

#### **SAMEVATTING**

Die studie het beoog om verdiep te wees in die leierskapbevoegdheid en vermoëns binne Suid-Afrikaanse banke te midde van die Vierde Industriële Revolusie (4IR). Die landskap van 4IR – gekenmerk deur vinnige tegnologiese vooruitgang, toenemende wêreldwye onderlinge verbinding en stygende kompleksiteitsvlakke – skep 'n unieke stel uitdagings en geleenthede vir leierskap in die banksektor.

In 'n ondersoek na die toepaslikheid van die bestaande leierskapbevoegdheidsprofiele met die oog op 4IR en die nodigheid vir 'n konteksspesifieke leierskapbenadering, is die navorsingsmetode as 'n kombinasie van literatuuroorsig en empiriese studie ontwerp. Die steekproefgrootte het uit Leer- en Ontwikkelingsbestuurders (L&D-bestuurders) van 'n verskeidenheid Suid-Afrikaanse banke bestaan wat 'n sterk datastel vir die empiriese ondersoek voorsien.

Die navorsingsproses het met 'n uitgebreide literatuuroorsig begin wat gehelp het om die navorsing in die bestaande teorieë en nuutste bevindings oor die impak van 4IR op leierskap te grondves. Die literatuuroorsig het die behoefte aan spesiale leierskapbevoegdheid en vermoëns soos aanpasbaarheid, wilskrag, vernuwing en strategiese denke in die era van 4IR beklemtoon.

Na die literatuuroorsig, volg 'n empiriese studie wat gedoen is deur 'n vraelys-opname metode te gebruik om primêre data te versamel. Die vraelyste, gemik op L&D-bestuurders binne die banksektor, het bestaan uit ope en geslote vrae wat op sleutel-aspekte van leierskapbevoegdheidsprofiele en hul toepaslikheid op die 4IR-omgewing gerig was. Die L&D-bestuurders se antwoorde het eerstehandse insigte in die huidige leierskapontwikkelingspraktyk binne die Suid-Afrikaanse banksektor voorsien.

Die versamelde data het onthul dat transformasionele leierskap oorheersend is onder L&D-bestuurders in Suid-Afrikaanse banke. Die data het 'n positiewe korrelasie tussen transformasionele leierskap en veranderlikes soos werksbevrediging en prestasie getoon. Dit stem ooreen met vorige navorsing wat die doeltreffendheid van transformasionele leierskap om werknemerbetrokkenheid en -prestasie te bevorder, aandui – veral in komplekse, vinnig veranderende omgewings soos die 4IR.

Die data het nietemin ook 'n gaping in die opstelling van bestaande leierskapbevoegdheidsprofiele met die eise van 4IR aan die lig gebring. Dit lyk asof die huidige leierskapbevoegdheidsprofiele in Suid-Afrikaanse banke onvoldoende aandag aan die unieke uitdagings van 4IR gee wat die nodigheid vir 'n meer toegespitste, konteksspesifieke benadering tot leierskapsontwikkeling onderstreep.

Na aanleiding van die bevindings van die navorsing, is 'n VUCA-raamwerk (Veranderlikheid, Onsekerheid, Kompleksiteit, Dubbelsinnigheid) voorgestel. Hierdie raamwerk integreer die sleutelleierskapbevoegdheid en vermoëns wat in die literatuuroorsig vasgestel is en die studie se bevindings wat spesifiek op die uitdagings en geleenthede van die 4IR gefokus is.

Die voorgestelde VUCA-raamwerk beklemtoon vaardighede soos aanpasbaarheid, wilskrag, vernuwing en strategiese denke wat kritiek vir 4IR is. Dit behels ook beginsels soos samewerking, emosionele intelligensie en tegnologiese kundigheid, deurslaggewend om die kompleksiteit van 4IR te navigeer.

Ten slotte, dui die studie se bevindings op 'n behoefte aan volgehoue ontwikkeling en wysiging van leierskapbevoegdheid om met die vinnig ontwikkelende landskap van die 4IR ooreen te stem. Die VUCA-raamwerk bied 'n praktiese gids vir die Suid-Afrikaanse banksektor om hul leierskap-ontwikkelingsinsiatiewe te hersien en te versterk en op dié manier hul leiers toe te rus om die uitdagings van 4IR beter te navigeer. Die bevindings van die navorsing dra nie net by tot groter begrip van leierskap in die 4IR-konteks nie, maar onderstreep ook die belangrikheid van konteksspesifieke leierskap-ontwikkelingstrategieë.

#### **ISIFINYEZO**

Lolu cwaningo noma lesisifundo besihlose ukuhlolisisa amakhono obuholi namandla ngaphakathi kwamabhange aseNingizimu Afrika phakathi neNguquko Yezimboni Yesine (4IR). Isimo sezwe esishintsha ngokushesha se-4IR - esimakwa ngentuthuko esheshayo yezobuchwepheshe, ukwanda kokuxhumana emhlabeni wonke, kanye namazinga akhulayo okuba yinkimbinkimbi - kwakhela isethi eyingqayizivele yezinselelo namathuba obuholi emkhakheni wamabhange.

Ekuphenyeni ukufaneleka kwamaphrofayili akhona anekhono lobuholi phambi kwe4IR kanye nesidingo sendlela yobuholi egxile komongo, indlela yocwaningo yaklanywa njengenhlanganisela yokubuyekezwa kwezincwadi kanye nocwaningo olwenziwayo. Usayizi wesampula ubuhlanganisa abaphathi be-Learning and Development (L&D) abavela emabhange ahlukahlukene aseNingizimu Afrika, okuhlinzeka ngedatha eqinile yophenyo olusetshenziswayo.

Inqubo yocwaningo yaqala ngokubuyekezwa okuphelele kwezincwadi okwasiza ekusekeleni ucwaningo emibonweni esunguliwe kanye nokutholwe kwakamuva mayelana nomthelela we-4IR ebuholini. Ukubuyekezwa kwezincwadi kugcizelele isidingo samakhono athile obuholi namakhono afana nokuzivumelanisa nezimo, ukuqina, ukusungula izinto ezintsha, kanye nokucabanga kwamasu enkathini ye-4IR.

Ngemva kokubuyekezwa kwezincwadi, kwenziwa ucwaningo olungokomlando kusetshenziswa indlela yocwaningo lwemibuzo ukuze kuqoqwe idatha eyisisekelo. Uhlu lwemibuzo, oluqondiswe kubaphathi be-L&D emkhakheni wamabhange, beluhlanganisa imibuzo evulekile nevaliwe eqondise izici ezibalulekile zephrofayili yamakhono obuholi kanye nokuhlobana kwazo endaweni ye-4IR. Izimpendulo zabaphathi be-L&D zinikeze ukuqonda ngqo mayelana nezinqubo zamanje zokuthuthukiswa kobuholi ngaphakathi kwemboni yamabhange aseNingizimu Afrika.

Ngolwazi oluqoqiwe, kwavezwa ukuthi ubuholi bezinguquko bebugqame phakathi kwabaphathi be-L&D emabhange aseNingizimu Afrika. Imininingwane ikhombise ukuhlobana okuhle phakathi kobuholi bezinguquko kanye nezinto eziguquguqukayo ezifana nokwaneliseka komsebenzi kanye nokusebenza. Lokhu kuhambisana nocwaningo lwangaphambilini olubonisa ukusebenza kahle kobuholi boguquko ekukhuthazeni ukusebenzelana kwabasebenzi nokusebenza, ikakhulukazi ezindaweni eziyinkimbinkimbi, ezishintsha ngokushesha njenge4IR.

Kodwa-ke, imininingwane iphinde yadalula igebe ekuqondaneni kwamaphrofayili akhona obuholi nezimfuno ze-4IR. Iphrofayili yamanje yamakhono obuholi emabhange aseNingizimu Afrika ibonakale ingabhekananga ngokwanele nezinselelo ezihlukile ezilethwe yi-4IR, egcizelela isidingo sendlela ehambisanayo, egxile komongo ekuthuthukisweni kobuholi.

Ngokusekelwe emiphumeleni yocwaningo, kwahlongozwa uhlaka lwe-VUCA (Volatility, Uncertainity, Complexity, Ambiguity). Lolu hlaka luhlanganisa amakhono obuholi abalulekile namakhono ahlonzwe ekubuyekezweni kwezincwadi kanye nokutholwe ocwaningweni, okuqondiswe ngqo kuzinselelo namathuba e-4IR.

Uhlaka oluhlongozwayo lwe-VUCA lugcizelela amakhono afana nokuvumelana nezimo, ukuqina, ukusungula izinto ezintsha, nokucabanga kwamasu, okuhlonzwe njengokubalulekile ku-4IR. Iphinde ifake izinto ezifana nokusebenzisana, ubuhlakani bemizwa, kanye nobuhlakani bezobuchwepheshe, okubalulekile ekuzulazuleni okuyinkimbinkimbi kwe-4IR.

Sengiphetha, okutholwe ocwaningweni kukhombisa isidingo sokuqhubeka nokuthuthuka kanye nokujwayela amakhono obuholi ukuze kuhambisane nesimo sezwe esithuthukayo se-4IR. Uhlaka lwe-VUCA lunikeza umhlahlandlela osebenzayo womkhakha wamabhange waseNingizimu Afrika ukuze ubuyekeze futhi uthuthukise izinhlelo zabo zokuthuthukisa ubuholi, ngaleyo ndlela uhlomise abaholi bawo ukuze bazulazule kangcono izinselele ze-4IR. Okutholwe ocwaningweni akugcini nje ukufaka isandla ekuqondeni kabanzi ubuholi kumongo we-4IR kodwa futhi kugcizelela ukubaluleka kwamasu okuthuthukisa ubuholi obuqondene nomongo.

# **TABLE OF CONTENTS**

DECLARA	ATION	ii
ACKNOW	LEDGEMENTS	iii
ABSTRAC	CT	iv
KEY TERI	MS:	v
SAMEVA	rting	vi
ISIFINYEZ	<b>2</b> 0	. viii
TABLE O	F CONTENTS	X
LIST OF F	FIGURES	.xiv
LIST OF T	ABLES	XV
LIST OF A	ACRONYMS	.xvi
CHAPTER	R 1: SCIENTIFIC ORIENTATION TO THE RESEARCH	1
1.1.1	Introduction to the 4IR	1
1.1.2	Banking in South Africa	3
1.1.2.1	Transformation of Banks	3
1.1.2.2	Impact of Covid-19 on Banking	4
1.1.3	Introduction to the Concept of Competencies and Capabilities	5
1.1.4	Introduction to Leadership Competency Profiles	6
1.2	PROBLEM STATEMENT	8
1.3	AIMS OF RESEARCH	. 10
1.3.1	General Aim	. 10
1.3.2	Specific Aims	. 11
1.4	PARADIGM PERSPECTIVE	
1.4.1	Disciplinary Context	. 12
1.4.2	The Humanistic Paradigm (Empirical Paradigm)	. 12
1.4.3	Central Hypothesis	. 13
1.4.4	The Research Paradigm (Theoretical Paradigm)	. 13
1.5	RESEARCH DESIGN	. 13
1.5.1	Research Approach	. 14
1.5.2	Research Variables	. 14
1.5.3	Methods to Ensure Adherence to Ethical Principles	. 14
1.5.4	Unit of Study	. 15
1.6	RESEARCH METHODOLOGY	. 16
1.6.1	Sampling Strategy	. 16
1.6.1.1	Target population	. 16
1.6.1.2	Probability sampling	. 16

1.6.2	Data Collection Instruments	17
1.6.2.1	Reliability	19
1.6.2.2	Validity	19
1.6.3	Data Analysis	20
1.7	CHAPTER LAYOUT	20
1.8	CONCLUSION	20
CHAPTE	R 2: LITERATURE REVIEW: LEADERSHIP AND DEVELOPMENT	21
2.1	THE CONSTRUCT OF LEADERSHIP	21
2.2	EFFECTIVE LEADERSHIP	22
2.2.1	Defining Effective Leadership	22
2.2.2	Factors Predicting Effective Leadership	23
2.2.2.1	Individual Difference Variables	23
2.2.2.2	Contextual variables	23
2.3	TRANSITION IN LEADERSHIP PROFILES	24
2.3.1	Competency Profile	24
2.3.1.1	Cognitive abilities	25
2.3.1.2	Personality	26
2.3.1.3	Motivation	26
2.3.1.4	Social appraisal and interpersonal skills	27
2.3.1.5	Leader Problem-Solving Skills, Expertise and Tacit Knowledge	28
2.3.2	Capability and Behaviour Profile	29
2.3.2.1	Task behaviour	30
2.3.2.2	Relationship behaviour	31
2.4	LEADERSHIP PROFILES	33
2.4.1	Charismatic leadership	33
2.4.1.1	Envisioning	34
2.4.1.2	Empathy	35
2.4.1.3	Empowerment	35
2.4.2	Transactional leadership	36
2.4.3	Transformational leadership	37
2.4.4	Authentic leadership	
2.4.4.1	Self-awareness	39
2.4.4.2	Self-regulation	39
2.4.4.3	Personal courage	40
2.5	LEADERSHIP PROFILES IN THE NEW WAYS OF WORKING / ENVIRONMENT	
26	OVERVIEW OF THE LITERATURE	43

2.7	CONCLUSION	45
CHAPTER	3: RESEARCH DESIGN & METHODOLOGY	
3.1	INTRODUCTION	46
3.2	RESEARCH PHILOSOPHICAL APPROACH	46
3.3	RESEARCH DESIGN	48
3.4	DATA COLLECTION	51
3.5	DATA ANALYSIS	54
3.6	VALIDITY AND RELIABILITY	54
CHAPTER	24: PRESENTATION, INTERPRETATION AND DISCUSSION OF RESULTS.	57
4.1	THE SAMPLE	57
4.1.1	Section A: Biographical data	57
4.2	RELIABILITY STATISTICS	61
4.2.1	Multifactor Leadership Questionnaire	61
4.2.2	Job Satisfaction Survey	63
4.2.3	Individual Work Performance Questionnaire	63
4.3	FACTOR ANALYSIS	64
4.3.1	KMO and Bartlett's Test	64
4.3.2	Rotated Component Matrix	66
4.4	SECTION ANALYSIS	70
4.4.1	Multifactor Leadership Questionnaire	71
4.4.2	Job Satisfaction Survey	74
4.4.3	Individual Work Performance Questionnaire	77
4.5	CROSS TABULATIONS	78
4.5.1	Age and Individualised Influence	80
4.5.2	Age and communication	81
4.5.3	Implications of age-related differences	81
4.6	CORRELATIONS	82
4.7	STRUCTURAL EQUATION MODEL	84
4.7.1	SEM – IWPQ	85
4.7.1.1	Maximum Likelihood Estimates	86
4.7.1.2	Model Fit Summary	87
4.7.1.3	Regression Analysis	89
4.7.1.4	Discussion on findings	90
4.7.2	SEM - JSS	91
4.7.2.1	Model Fit Summary	94
4.7.2.2	Correlation Analysis	95
4.7.2.3	Discussion on findings	98

4.7.3	SEM - MLQ	. 99
4.7.3.1	Maximum Likelihood Estimates	100
4.7.3.2	Model Fit Summary	101
4.7.3.3	Correlation	102
4.7.3.4	Discussion on findings	102
4.8	CONCLUSION	103
CHAPTER	R 5: CONCLUSIONS AND RECOMMENDATIONS	104
5.1	SUMMARY/CONCLUSIONS OF THE STUDY	104
5.1.1	Appraisal of research objectives in light of the study findings	107
5.2	RECOMMENDATIONS	108
5.2.1	Reassess and Update Existing Leadership Competency Profiles	108
5.2.2	Foster a Balanced Approach to Leadership Development	108
5.2.3	Develop a Tailored 4IR Leadership Competency Profile	108
5.2.4	Incorporate VUCA Framework into Leadership Development Programs	109
5.2.5	Encourage Continuous Learning and Development	109
5.2.6	Foster a Culture of Innovation and Agility	109
5.2.7	Enhance Collaboration and Networking Opportunities	110
5.3	PROPOSED VUCA FRAMEWORK OR LEADERSHIP COMPETENC PROFILE	
5.3.1	Implementation of the Proposed VUCA Framework and Leaders	hip
	Competency Profile	111
5.3.2	The Role of the South African Banking Sector in Implementing the Propos	sed
	VUCA Framework and Leadership Competency Profile	114
5.3.3	Supporting Research and Development	115
5.3.4	Monitoring and Evaluation of the Proposed VUCA Framework	and
	Leadership Competency Profile	115
5.4	LIMITATIONS OF THE STUDY	116
5.5	FUTURE RESEARCH DIRECTIONS	117
5.6	CONCLUSION	117
REFEREN	ICE LIST	119
APPENDI	X A: GATEKEEPERS LETTER	137
APPENDI	X B: ETHICAL CLEARANCE	139
APPENDIX	X C: CORRELATIONS STATISTICS	141

# **LIST OF FIGURES**

Figure 1:	Proposed 4.0 Leadership Competency Profile for a VUCA e	a VUCA environment (Author,
	2021)	43
Figure 2:	Literature Overview (Author, 2021)	44
Figure 3:	The data collection process (Author, 2022)	54
Figure 4:	MLQ scoring pattern	74
Figure 5:	JSS scoring pattern	77
Figure 6:	IWPQ scoring patterns	78
Figure 7:	IWPQ structural equation model	86
Figure 8:	Chi-square statistics of the JSS structural equation model	92
Figure 9:	MLQ structural equation model	100

# **LIST OF TABLES**

Table 1:	The characteristics of Post-positivism	48
Table 2:	Biographical characteristics of the respondents	59
Table 3:	MLQ describing reliability statistics	62
Table 4:	JSS reliability statistics	64
Table 5:	MLQ reliability statistics	64
Table 6:	KMO and Bartlett's Test	66
Tables 7-9:	Rotated Component Matrix	68-70
Table 10:	MLQ scoring patter	73
Table 11:	JSS scoring pattern	76
Table 12:	IWPQ scoring patterns	78
Table 13:	Hypothesis test summary which summarises the results of the chi square	e tests
		80
Table 14:	Pairwise comparison between the age groups	81
Table 15:	Regression Weights: (Group number 1 - Default model)	87
Table 16:	Standardised Regression Weights: (Group number 1 - Default model)	88
Table 17:	CMIN (Chi-square statistic)	89
Table 18:	Baseline Comparisons	89
Table 19:	The Root Mean Square Error of Approximation	90
Table 20:	Covariances: (Group number 1 - Default model)	90
Table 21:	Correlations: (Group number 1 - Default model)	90
Table 22:	Regression Weights: (Group number 1 - Default model)	93
Table 23:	Standardised Regression Weights: (Group number 1 - Default model	94
Table 24:	CMIN	95
Table 25:	Baseline Comparisons	95
Table 26:	RMSEA	96
Table 27:	Covariances: (Group number 1 - Default model)	96
Table 28:	Correlations: (Group number 1 - Default model)	97
Table 29:	Regression Weights: (Group number 1 - Default model)	101
Table 30:	Standardised Regression Weights: (Group number 1 - Default model)	101
Table 31:	CMIN value	102
Table 32:	Baseline Comparisons	102
Table 33:	RMSEA	102
Table 34:	Covariances: (Group number 1 - Default model)	103
Table 35:	Correlations: (Group number 1 - Default model)	103

# **LIST OF ACRONYMS**

AI: Artificial Intelligence

L&D: Learning and Development

4IR: 4th Industrial Revolution

AAS: Agility and Adaptability Segment

SCS: Socio-cultural Segment

DS: Digital Segment

CIS: Creativity and innovative Segment

ES: Emotional Segment

#### **CHAPTER 1: SCIENTIFIC ORIENTATION TO THE RESEARCH**

This chapter establishes the study by examining different research perspectives. Starting with the broader study backdrop, it moves on to outline the research predicament. Following this, the research aims are laid out, and the research questions presented. Select foundational theories and knowledge, supporting the study's relevance come next the research methodology and design follow and finally a description of each chapter.

#### BACKGROUND AND MOTIVATION FOR THE RESEARCH

Complexity will accelerate change as the Fourth Industrial Revolution (4IR) fuses the physical, digital, and biological environments, making team leadership a non-negotiable competence. (Northouse, 2018). 4IR leadership teams are becoming the essential organisational paradigm for transformation.

4IR leadership and teams are categorised as: large, non-hierarchical teams; multifunctional, skilled leadership teams; teams in scattered, multi-agency workplaces; and teams as adherents (Kakabadse & Bank, 2018). We should not disregard how the revolution is transforming leaders' belief systems. This touches upon fundamental questions, not least values that shift the world towards reciprocal ethical views.

#### 1.1.1 Introduction to the 4IR

We are undergoing a fundamental transformation in how we work (Chatterjee & Mohanty, 2017). Automation and robotic 'thinking machines' are currently replacing human activities and occupations and shift the skills that corporations are searching for in their employees (Pintaric & Hunjet, 2016). Such momentous developments pose immense operational, personnel and human resources obstacles – at a time when business leaders are still grappling with unparalleled uncertainties, instability, and political and social upheavals (Grobler & Du Plessis, 2016).

At the same time the promise of learning and development in the 4IR and its undeniable benefit to society is uplifting. The 4IR is being driven by artificial intelligence with the integration of human intellect and technology. The implication is that the workforce will transition from task-based to human-centred characteristics, narrowing the gap between the humanities and social

sciences, as well as science and technology (Manyika, 2016). This means that more interdisciplinary teaching, research, and development be needed.

The universal finance sector is severely challenged by the uncertain economic environment, more rigorous regulatory monitoring and constant technological changes demanded by the 4IR (Chatterjee & Mohanty, 2017). In South Africa this is no different. The banking sector can no longer rely on conventional operational methods to safeguard the interests of all stakeholders (Kakabadse & Bank, 2018). To remain significant in a diversified, competitive market, new and creative approaches need to be implemented, making banks more than ever reliant on employees to provide key services (Asrar-ul-Haq & Kuchinke, 2016). Therefore, it is vital that South African banking leaders inspire their workforce and enhance their talents to keep them motivated and committed. This will enable them to sustainably maintain their competitive advantage in the market.

The changing context was discussed at Davos by world leaders in 2019 (WEF, 2020). The 4IR, enhancements to regulations, the changing workforce demographic, enhanced organisational structures (e.g. flatter structures), and changing performance management processes are fundamentally changing the world of South African Banking (Iqbal, Anwar & Haider, 2015).

Leaders today need to efficaciously steer their banks through prompt changes reinforced by new business models, growing client complexities, millennial and generation Z entering their workforce, and the 'internet of everything' within the 4IR.

Leaders and Learning and Development (L&D) managers in the banking sector need to collaborate, bringing disparate and complex sets of individuals, processes, and technology together. They need to transcend boundaries and change their configuration in real time to boost the probability of organisational success. They need to be adaptive, flexible, and agile. Recent changes in the banking sector attributed to 4IR (Nedbank Limited, 2019):

In 2016, First National Bank closed 34 branches, merged three branches and planned to retrench 600 people due to technological enhancements and clients using the digital channels (Kakabadse & Bank, 2018).

Standard Bank in November 2018 restructured their IT division resulting in 526 retrenchments with the majority in the managerial and executive sectors (Standard Bank Investor Relations: Annual Reports, 2020). The question to be asked is, were the managerial and executive

leaders holding on to legacy systems and not prepared to be innovative and take the business to the next level?

As a direct consequence of the transition from traditional to digital banking, Standard Bank stated in March 2019 that it will be closing 91 branches and retrenching approximately 1,200 employees.

Nedbank and ABSA Bank went through similar changes as they move from traditional legacy systems to digital banking. New processes need to be automated for banks to be sustainable in the long term (Kakabadse & Bank, 2018). Nedbank's business case for the retrenchments and learning and development plan for the impacted people is yet to be announced (Nedbank Limited, 2019).

# 1.1.2 Banking in South Africa

In the financial sector, banking regulations may yield impressive performance results, but they also position the industry as a perpetrator of social welfare wrongs. These include generating debt, overcharging fees, repossessing properties, and denying loans to less affluent customers (Applebaum et al 2016; Rahman & Dean, 2013; Hassan, 2014).

The current financial crisis, partially triggered by bank wrongdoing, has weakened the industry's reputation. Furthermore, South Africa's biggest banks are restructuring to decrease costs (Standard Bank Investor Relations: Annual Reports, 2020). In 2016, thousands of staff were laid off, as banks boosted technological spending to build replacement systems (Bonorchis, 2016). Communities are less likely to prioritise the environment during times of economic difficulty. Undoubtedly banks contribute to social and environmental disasters in their own settings.

#### 1.1.2.1 Transformation of Banks

Yet a successful sustainability strategy can be linked to improved reputation, cost savings, growth, and robust stakeholder relationships. These factors form a convincing financial argument for sustainability efforts (Wolf, 2014; Bettencourt et al, 2013; Fraj et al, 2013). The previous mentioned studies suggest a correlation between a clean environment, optimal social performance, and economic performance, implying that strategy should integrate sustainability as a crucial performance metric.

Our present-day economic structures have been destabilised by globalised business practices. This disruption has led to environmental and socio-economic crises in developing and emerging nations (Omrane, 2011, Ackers & Eccles, 2015, Locatelli, 2016). These crises include resource depletion, income disparities, high unemployment rates, criminal activities, corruption, and political instability, instigating societies to rise up and demand change.

Powerful societal leaders drive this change. Despite government's attempts to solve these instabilities for economic revival, businesses must acknowledge that simplistic solutions are insufficient for long-term success (Omrane, 2011). More substantial actions are necessary. In its 2012 call for corporate sustainability leadership, the United Nations highlighted the inadequacy of global corporate sustainability efforts in addressing grave global sustainability issues. A meagre fraction of the global business sector is leading in sustainability practices. Only a quarter of companies involved in sustainability initiatives consider themselves advanced in this area. The UN further noted that companies often confine sustainability efforts to public relations, showing minimal intent of integrating genuine sustainability practices into their corporate ethos and culture (UNCSD, 2012).

# 1.1.2.2 Impact of Covid-19 on Banking

The outbreak of the pandemic has brought drastic changes in the global scenario in economic and social terms. We have seen the onset of remote working trends with the need to physically and socially distance ourselves from one another. Digitisation has become even more important because of its capability to provide access to services from remote sources instead of physical structures. The 4IR is significant in terms of technological advancements and the impact of the next generation on leadership styles (Mfana, Hasan, & Ali, 2019). The next generation leadership style demands cognitive skills and the ability to think critically and analyse. It calls upon strategic management and social intelligence.

Banking services are indispensable for an economy, organisations and individuals. Without banking services nations and their economies will stagnate. After the outbreak of the pandemic this threat arose. Banks are crowded places and there was the need to avoid risks of contamination and to maintain social distancing norms (Mfana et al., 2019). The pandemic has been contained, but more so than ever, leaders in the banking sector are expected to have good social and people management skills.

Operational efficacy is crucial to the success of a banking institution to ensure seamless functioning and customer experience (Putrivi, 2020). The current situation demands more leaders who possess next-generation skills<sup>1</sup>. 4IR involves the application of cybersecurity, artificial intelligence and web-based systems in banking (Oke & Fernandes, 2020). Leaders who can apply their minds and adapt their skills to the needs of the organisation are required (Mfana et al., 2019).

Not all leaders have the ability to confront changes and manage teams accordingly. In the current situation, decisive leaders who have excellent problem-solving abilities are required (Putrivi, 2020). Many employees demand remote working, which is possible but varies according to locations and organisations. In third world countries banking has not been digitised entirely therefore people might still have to visit banks physically (Mfana, Hasan & Ali, 2020). Bankers cannot work remotely as banking is an essential service. More so than ever leaders need to motivate employees in these situations. Traditional leadership is inadequate in the present scenario because we require advanced approaches that are data-driven and employ the best of modern technology (Putrivi, 2020). Traditional leaders would not be able to adapt these approaches or handle teams efficiently.

# 1.1.3 Introduction to the Concept of Competencies and Capabilities

According to the Oxford English Dictionary's Second Edition (1989), 'competence' is defined as "A sufficient supply, a sufficiency of" and "sufficiency of qualification; the capacity to deal with a subject competently." The term originates from the French word 'competence' in 1632 and the Latin term 'competentia', meaning agreement or symmetry. Competence could encompass a blend of knowledge, skill, capability, conduct, and attitude.

McLelland and Boyatzis (1980) describe competencies as a confluence of intelligence, motivations, traits, egos, social roles, and skills that have a causal relation to excellent or effective job performance. Some describe competence as a mix of expertise, experience, positive attitudes/traits, and a balance of practical and professional skills to make things work (Campion et al. 2011; Yousoff & Armstrong, 2012). As per Prahalad and Hamel (1990), core competencies are the primary skills a company needs for success.

5

<sup>&</sup>lt;sup>1</sup> Next generational skills include critical thinking, problem solving, collaboration, agility and adaptability, accessing and analysing information.

Competence is a critical factor in capability, and competencies allow an individual to proficiently execute a task. Nagarajan and Prabhu (2015) define competency as possessing the skills, knowledge, and capability to meet current requirements.

According to Wikidiff (2020), the distinction between capability and competence as nouns is that capability is the power or ability to produce a result, whereas competency is the capability or state of being competent, which is able or suited for a broad function.

Capability is a combination of skills, personal qualities and knowledge utilised in response to wide-ranging acquainted and unacquainted situations. According to Stephenson (1994), Toby Weaver has a similar opinion with his six Cs of capability, namely comprehension, culture, competence, coping, communion, and creativity.

According to Nagarajan and Prabhu (2015), capability is the developable capacity, abilities, potential, and traits. While competence is concerned with the current situation, capability is concerned with the ability to adapt and evolve to meet future demands.

A capability is the ability to do things, perform or achieve a certain outcome in terms of the intersection of capacity and ability.

# 1.1.4 Introduction to Leadership Competency Profiles

Historically banks and progressive institutions in South Africa have based leadership development programmes on competency profiles (Yukl, 2013). The competency profiles are based on sound research, proven, tested, validated and usually developed by consulting firms over a period of time and at great expense, for example: Motional Competence Inventory (ECI), Lominger Assessment Instruments, and Development Dimensions International (DDI) assessment centres. The idea is that profiles of leadership skills will provide a standardised framework to identify and improve certain habits that lead to the success of an organisation. Competency profiles can be a blueprint for considerably higher efficiency in leadership governance.

According to Deloitte (2019), these conventional profiles of leadership skills are notorious for presenting unnecessary detail, with hundreds of categories, competencies, ability levels and skills identified in a single profile. A scrutiny of benchmarking and literature reviews suggests the lack of competency-based leadership development profiles appropriate for self-directed learning or simple enough to introduce in major banking institutions (UNCSD, 2012).

Therefore, the researcher intends to design a leadership competency and capability profile relevant to current trends as part of this research study.

A research company in the United States, Zenger Folkman the authority on strengths-based leadership development, suggests that too many Human Resources departments and Executives confuse competencies with performance outcomes (Kakabadse & Bank, 2018). Well researched and well-defined competency profiles provide a map for the "how" to reach performance goals. While effective performance management should hold people accountable for delivering results, it cannot be an assessment of a multitude of generic competencies (Yukl, 2013).

It is further argued by Clemmer and McNeil (1990) that one of the reasons the competency profiles fail is because there is no evidence that the organisation's competences count. A one size fits all solution that is usually created by the consultants may not be relevant to the specific business or industry or country.

BankSETA, an organisation that facilitates the production and enhancement of skills in the wider microfinance and banking sector, has identified the following key change drivers in their 2019/2020 Sector Skills Plan: the first driver is digitalisation and technology; the second driver is changing customer expectations; the third driver is regulatory changes, risk and cybercrime; the fourth driver is disruptors in banking, and the fifth driver is political, economic and societal shifts. Based on the change drivers and national priorities, Bankseta has identified five key skills issues for the 2019/2020 financial period:

- 1. technology, digitisation and innovation
- 2. regulation, compliance and risk management,
- 3. management and leadership development
- 4. markets, products and services
- 5. customer centricity (Bankseta.org.za, 2020).

BankSETA research illustrates that the management and leadership skills gap cuts across small, medium, and large firms. Furthermore, it is one of the bigger skills gaps in the large firm category at 5,3 percentage shares. This gap is higher than the gap related to programming (2,2%), technology design (3,4%), management of financial resources (2,0), and advanced IT software development (3,4%) (Bankseta.org.za, 2020).

The percentage gap of 5.3% is high considering the number of people that go through the National Certificate in Generic Management Level 5 each year and the fact that there were 2176 people studying the Certificate in Management Development in 2018 (Bankseta.org.za, 2020).

The study will question existing leadership competency profiles, profiles that are building traditional leaders or leaders of the future and competence or capability. It seeks to resolve whether we should be focusing on developing leadership competency or capability, or both. It also seeks to define a competency and/or capability framework that will enable leaders in the 4IR world to transform themselves, transform their teams and transform their organisations.

#### 1.2 PROBLEM STATEMENT

The commercial world of pre-Covid-19 and beyond will be quite different from the workplace of today. Leaders in governments and the corporate sector need to assess the massive upheavals brought about by <sup>2</sup>innovation. Innovation, with its risks and benefits, is upsetting professions globally and changing how we live and operate (Morgan, 2016). National government, business and other policymakers need to reconsider the skills policies that fail to equip the existing and potential workforce for the 4IR (Kakabadse & Bank, 2018). The minimum requirement for a financial institution to be competitive is to have competent, skilled staff. (Nagarajan & Prabhu, 2015). New digitally skilled entrants to the banking industry who deliver creative solutions to customers pose both new challenges and new opportunities for the conventional banking sector.

The Financial Services sector of the nation is its lifeblood. In the rapidly evolving environment and ever rising consumer demands driven by globalisation and technological advancements, organisations are forced to stay ahead of their competition. Banking organisations face increased domestic and foreign competition as market barriers are gradually weakened (Australian Chamber of Commerce and Industry, 2002). These have led many corporations to consider redefining themselves to meet the demands of the market. Johnson, Christensen, and Kagermann (2008) argue that the cornerstone to sustaining a prosperous enterprise is identifying when it needs radical change and then introducing the changes in a volatile market to move forward.

<sup>-</sup>

<sup>&</sup>lt;sup>2</sup> Innovations in banking include Digital wallets, Biometric verification and Personal Finance Management tools (PFM)

Banks spend millions of rands each year sending people on leadership development programmes (Nagarajan & Prabhu, 2015). The aim is to develop talent to take the business to the next level, to develop "next generation" leaders. It helps them attract and retain top talent, and become more competitive. It improves bottom line, stimulates organisational culture and return on investments. It increases organisational agility and improves productivity, and the list goes on (Morgan, 2016).

Over the past five years, banks have been ambitiously seeking to build their market share. They have targets and objectives (Nedbank Limited, 2019). The problem is that there is very little evidence to show return on investment on the purchase of leadership competency profiles and development programmes. Presently, there are very few studies that have been conducted on this subject as highlighted above. With high expectations and objectives, strong, principled leadership is needed to ensure a smooth transition into the 4IR and achieve these goals. Leader should have the ability to guide subordinates along an appropriate path to perform well for themselves and the institution in uncharted territories. The study aims to provide recommendations on how to achieve this.

Staff retention, budget constraints, ambitious expectations in an already struggling economy, marked by inflation, cost cuts, limited capital are the challenges. The dynamic job climate and other business competitiveness-inhibiting policies and procedures are some of the factors that banks must aggressively fight to remain significant in the 4IR (Kakabadse & Bank, 2018). With these prevailing circumstances, many bank employees feel deflated and lack the motivation to meet the ambitious goals to keep up with the trends of the 4IR. Consequently, they make no real effort to achieve these standards of efficiency. Having staff with a lacklustre attitude will not yield results and may result in an institution's demise. In the midst of these circumstances, it is crucial that banks recognise the most effective leadership development capabilities and competencies that fits the culture, vision and priorities of financial institutions. They need to identify the most effective leadership models that will lead to the empowerment of its employees in a soon to be digitised market.

Are the competencies sufficient to deal with the pace, uncertainty, intricacy, and confusion of this emerging operating environment? For example, managing a bot, helping with robotic process automation that uses artificial intelligence might result in certain roles disappearing, they still need to manage people impacted by the changes. They need to help them reskill for future roles within and outside the bank, become more innovative in order to compete with the new and existing competition.

#### **Research questions**

Considering the issue stated above and the broad research question posed, a number of more narrowly focused research questions pertinent to the aforementioned literature review are posed:

- Research question one: Have leadership competency profiles been implemented successfully from a leadership growth perspective? Will it keep leaders relevant in the 4IR?
- Research question two: Should the focus of leadership growth be on building competence or capability? Or both?
- Research question three: Create a simple capability/competency profile to capacitate leaders for the 4IR / in the new' way of working' / VUCA environment<sup>3</sup>.

The subsequent research questions are relevant to the empirical study:

- Research question one: What is the empirical relationship nature between 4IR leadership competency profiles and current leadership styles in a banking environment?
- Research question two: Are there differences in leadership growth development when building the competence or capacity of individuals of different gender, race, age and marital status as expressed in the sample of respondents?
- Research question three: What is the socio-demographic variables (age, race, gender, marital status, number of years in a position and tenure in private service) of the subgroup within this study?
- Research question four: What recommendations can be devised for the 4IR leadership capability/competence process and future research based on the findings from this study?

#### 1.3 AIMS OF RESEARCH

#### 1.3.1 General Aim

The general aim of this study is to improve leadership development in South African Banks to ensure their sustainability in the 4IR. It is important to ensure sustainability as Banks in South Africa employ thousands of people with the big four banks averaging 28 000 staff. Leadership plays a critical role in ensuring that business embraces, adapts and understands the impact

<sup>&</sup>lt;sup>3</sup> VUCA environment is Volatile, Uncertain, Complex, Ambiguous

of operating in the 4IR. It is against this backdrop that the researcher is looking to enhance leadership development within the banking industry.

#### 1.3.2 Specific Aims

When it comes to the review of the previous work in this field, the specific aims of this research are as follows:

- Assess whether our existing leadership competency profiles is relevant for the 4IR;
- Assess whether our focus should be to be build competencies or capabilities, or both;
   in 4IR (competency or capability is more relevant to the 4IR);
- Create a simple capability/competency profile to enable leaders for the 4IR / in the new' way of working' / VUCA environment.

As far as the empirical study is concerned, the specific aims of this research are:

- Empirically investigate the nature of the relationship between 4IR leadership competency profiles and current leadership styles in a banking environment.
- Empirically investigate whether differences exist in leadership growth development when building the competence or capacity of individuals of different gender, race, age and marital status as expressed in the sample of respondents.
- Empirically investigate the socio-demographic variables (age, race, gender, marital status, number of years in a position and tenure in private service) of the subgroup within this study.
- Devise recommendations for the 4IR leadership capability/competence process and future research based on findings from this study.

#### 1.4 PARADIGM PERSPECTIVE

The word paradigm exerts a theoretical impact on social sciences theory and methodology (Mouton & Marais, 1996). Terre Blanche, Durrheim, and Painter (2006) define paradigm as a framework that links the methodological, epistemological, and ontological assumptions. It replaces the point of view which stipulates rationale for the research process. This ensures that a paradigm obliges the researcher to use different methods to collect, observe and analyse the study findings and conclusions (Mouton & Marais, 1996).

# 1.4.1 Disciplinary Context

The research will be performed within the industrial and organisational psychology field, concentrating on organisational behaviour and growth as the sub disciplines.

- Industrial and organisational psychology examines the work setting mind and behaviour. This includes assessing how action has an effect on three levels, that is, the individual level, the group level that focuses on subordinates and teams, and the organisational level that explores the influence of mind on organisational performance (Leonard, 2002).
- Organisational behaviour is a subdiscipline that studies the behaviour which is
  expected in a workplace and that helps influence others. The study of organisational
  behaviour also aims to describe how these intended behaviours are implemented by
  executives and subordinates in accordance with the organisation's imperatives
  (Robins, Judge, Odendaal, & Roodt, 2009).
- The sub discipline of organisational development studies enhances the activities of individuals to better equip them for adaptability to a changing environment and to have the ability to alter the world in accordance with environmental shifts. The purpose of development is not only to adapt to change, but also to mould existing behavioural traits so that they can be used to influence others effectively (Aamodt, 2010).

# 1.4.2 The Humanistic Paradigm (Empirical Paradigm)

The humanistic paradigm is based on a set of philosophical tenets, but it may also be seen as a collection of different schools of thought within psychology (Woolfe, Dryden, & Strawbridge, 2003). According to the humanistic paradigm, there is a cognitive wall between a person's awareness and the individual themselves (Burrell & Morgan, 1979).

The humanistic perspective facilitates leadership process conceptualisation. The following statements about the humanist approach can be made according to Meyer, Moore, and Viljoen (1997):

- People are dignified and have characteristics that separate them from inert artefacts and animals.
- The whole is an integrated, special and structured entity.
- The person shows processes which are conscious.

- A person is a being who actively participates in determining his or her own behaviours and creative potential, and who does not just react to external environmental stimuli or inborn drives over which he or she has no control.
- The individual experiencing the transformation is in the process of conceptualisation.
- The individual is both self-referential and transcendental.
- When analysing human functions, the psychologically healthy person should be the outcome.

# 1.4.3 Central Hypothesis

There is a significant relationship between leadership skills, capacity development, and demographic variables in contributing to a smooth transition to 4IR leadership. The researcher posits that this could entail one or more leadership profiles that lead to the leadership and capacity development and return on investment of such initiatives, and that the impact would become apparent by determining the importance of such profiles.

#### 1.4.4 The Research Paradigm (Theoretical Paradigm)

A paradigm is a generalised way of looking at something, as described by Taylor, Kermode, and Roberts (2007). Weaver and Olson's (2006) definition of paradigm elucidates how a particular concept may influence and direct research by stating that frameworks are patterns of beliefs and practises that govern inquiry within a discipline by offering optics, frames, and processes for investigation to be carried out. The research would adopt the interpretivism paradigm using the interpretative model in which literature will be interpreted and used to clarify certain viewpoints and perspectives, and hence findings will be consistent with the topic at hand and validated by the literature.

#### 1.5 RESEARCH DESIGN

According to Zikmund and Babin (2015), a research design entails arranging the many stages and processes that pertain to the proposed research activities. According to Trochim (2017), a research design is a comprehensive outline of the methodologies and procedures for gathering and analysing data for the analysis. In other words, a research design helps determine what to examine, how to study it, why to study it, how to document and interpret the results and the reasons for studying it.

This section will also describe the type of research process, the measuring instruments, the study participants, the administration of the measuring instruments, and the data analysis.

#### 1.5.1 Research Approach

Vargas-Hernandez (2018) characterises quantitative analysis as a systematic scholarly exploration that amasses and quantifies all measurable data. Bryman (2016) highlights quantitative research as a methodology focused on data quantification during its processing and examination. Creswell (2014, p. 37) supplements this saying that "quantitative research enables the testing of objective theories by scrutinising the correlation between variables which can be measured, typically with instruments, so as to enable numerical data to undergo statistical analysis".

This study is quantitative and adopts a descriptive outlook. The research attempts to correlate data with determined components to draw suitable inferences from the findings (Bhattacharyya, 2013). The quantitative method uses information collection techniques suitable for addressing questions based on survey research. These techniques have high response rates and a standardised format that aids analysis and data summarisation.

#### 1.5.2 Research Variables

For the dependent variable, the independent variable is assumed to have a causal link. The dependent variable is the result or consequence of a single variable (Strüwig & Stead, 2010). The independent variable, in this study is the existing management development practice, which is not sufficient to develop leaders due to the constantly changing 4IR. The dependent variable is leadership skills and/or competencies. The purpose of this study is to quantify the degree and direction of the link between the dependent and independent variables.

A cross-sectional survey designed questionnaire will be utilised to collect information and to accomplish the research objectives.

# 1.5.3 Methods to Ensure Adherence to Ethical Principles

Ethical considerations are essential to a research design according to Cohen et al. (2011). Babbie (2013) considers research ethics as basic standards, which govern researcher's behaviour. Such values include regard for social sciences and ethical responsibilities when

communicating with participants in the study and participating organisations. The following legal standards would be adhered to as part of the measures to meet ethical requirements:

- Obtain the necessary clearances from Bankseta.
- Acquire ethical clearance from UNISA's Ethics Committee.
- Attain informed consent from respondents of the research sample. Volunteer
  responders should follow informed consent procedures. Participants in studies must
  be adequately informed about their risks and provided with a list of alternative options
  (Saunders et al, 2017). An informed consent form will be given with the questionnaire,
  which will help the respondent determine whether to participate in this study or not.
- Assure participants of anonymity and confidentiality. Respect for the respondent's
  privacy means that confidentiality must be accorded to all views. The researcher is
  accountable for the disclosure of what is investigated and what is not. There is a
  presumption of anonymity, such that researchers are supposed to assume the
  participants are anonymous unless they have given consent to be named. To protect
  the privacy of others, no participants' names may be used in or on the website without
  permission (Baines, 2018).
- The literature review and research sources of information are recognised by referencing.
- There will be an opportunity for the researchers and the organisation of this study to receive feedback on the research findings.
- The study's findings will be collated and published in accordance with the specified research principles and methodology.

#### 1.5.4 Unit of Study

The analytical unit is the primary variable being evaluated in a sample, and it represents the group in this analysis (Babbie, 1989). Within private sector financial institutes, the community refers to the leadership managers. The subgroup of this study regards socio-demographic factors (age, race, gender, marital status, number of years in a position and tenure in private service). It will be included in the final consideration to assess the relationship between the existing management development practices, which are not sufficient to develop leaders due to the constantly changing 4IR and leaders having a superficial understanding of the 4IR (Harry, 2014). The socio-demographic variables of this study are not explicitly known at this stage because the sample used is random. This gives every person an equal chance of being chosen from the target population.

#### 1.6 RESEARCH METHODOLOGY

Research methodology, according to Baker (2010), offers an outline of the research's aims, tasks, processes, implementations, and measurements. Greener and Martelli (2015) have described methodology of research as a highly cerebral method utilised in the study of matter and nature.

Emphasis of the research approach is placed on the collection, analysis, and interpretation of data. Saunders et al. (2016) address three types of research methodology, including the quantitative method, the qualitative method, and mixed methodologies. This research utilises the quantitative methodology.

#### 1.6.1 Sampling Strategy

Trochim (2017) describes sampling as the processes by which units, such as individuals or organisations, are selected from the interest population. The findings can be generalised back to the population from which the sample was collected by analysing the sample. Trochim (2010) highlighted two specific sampling techniques categories which are probability sampling and non-probability sampling.

#### 1.6.1.1 Target population

According to Burns and Bush (2016), a population is comprised of all the elements that match the traits being sought. The study population will consist of about 100 leaders with normal leadership responsibilities within a financial institution and one hundred Learning and Development Managers to gain an in-depth understanding of the research being conducted.

# 1.6.1.2 Probability sampling

Zikmund and Babin (2015) defined a probability sampling technique as any sampling approach that employs a random selection process. Random selection is accomplished by devising a technique or system that gives each unit of the population an equal probability of having its sample picked.

The sample for this study will be chosen using simple random sampling, which is a probability sampling approach, and will consist of 100 leaders and 100 Learning & Development Managers throughout South Africa, therefore not restricting it to a few banks or financial

institutions. Since the study will employ a quantitative methodology, probability sampling will be the suitable procedure for the selected sample.

#### 1.6.2 Data Collection Instruments

Population survey will be conducted for this study. The tool is a questionnaire that is self-administered. Questionnaires should have uniform questions which all respondents would perceive in the same way (Saunders et al., 2012). Therefore, questionnaires are typically employed for descriptive or explanatory research. The variables associated with the research project will inform the selection of data gathering tools. The research will employ these measurement tools:

- A demographic survey to identify the sample's personal information like race, gender, age, qualification, organisation role, and hierarchy level;
- The Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio (1990);
- The Job Satisfaction Survey (JSS) by Spector (1994); and
- The Individual Work Performance Questionnaire (IWPQ) by Koopmans et al. (2012).

The demographic survey aims to collect personal information such as race, gender, age, qualification, organisational role, and hierarchy level (Saunders et al., 2012). This tool, tailored to the research context, does not have a designated developer or item count.

The Multifactor Leadership Questionnaire, which comprises evaluations of transactional and transitional leadership attitudes, is presented as the instrument for measuring leadership proficiency (Bass & Avolio, 1990). Originally, the questionnaire had 142 questions; however, it was adjusted, and a 73-item questionnaire was established to improve the reliability of the questionnaire (Percy, 1994). This questionnaire utilises several characteristics to identify respondents according to a certain leadership paradigm. Within the framework of leadership styles, transactional leadership is embodied by elements of charismatic authority, personalised concern, and cognitive provocation. On the other hand, transformational leadership is identified by the use of conditional incentives and a managerial approach based on exceptions. These proportions align with the recommendations put forth by Luthans (2008). Given that the multifactorial methodology primarily determines the quantifiable aspects of transformational and transactional leadership styles, it is crucial to underscore that all other styles, such as the genuine leadership style, are predicated on a transformational leadership model and encompass similar dimensions of transformational leadership (Gardner, Avolio, &

Walumbwa, 2005). The multifactor leadership questionnaire, with its five-point response grading system, assesses a leader's leadership traits through a sequence of inquiries (Bass & Avolio, 1990).

In relation to job satisfaction, it will be evaluated using the Job Satisfaction Survey. The JSS interprets job satisfaction as a psychological or emotional response towards one's job (Spector, 1985). As indicated by Smith, Kendall, and Hulin (1969), various physical and psychological components determine job satisfaction, influencing individuals' responses and subsequently shaping their attitudes towards work, which in turn impacts on their job satisfaction (Locke, 1976). Given that the JSS employs several questionnaires to assess factors contributing to job contentment, the variable of interest in this study is supervisiom satisfaction or the leadership attitudes in the financial services sector towards their executives. To this end, a specific JSS, the Behaviour Description Questionnaire crafted by Stogdill, will be applied (1963). The aim of this survey is to gauge the participants' views on their leadership traits. The questionnaire consists of ten items which evaluate the extent of executive concern for the manager's feelings and welfare. The higher the score, the more considerate the leader's conduct (Stogdill, 1963).

Organisational assessments must place emphasis on job performance. In the financial services sector, performance is regularly scrutinised to ensure the achievement of goals. This data is subsequently used monthly to calculate incentive pay-outs derived from monthly successes. The work performance questionnaire, which associates performance with commitment, will be employed (Becker & Kernan, 2003). This tool distinguishes affective commitment, an individual's emotional connection to an organisation, from continuance commitment, which signifies an individual's ongoing engagement with an organisation due to potential ramifications of non-commitment (Allen & Meyer, 1990). These two dimensions of commitment correspond to in-role performance, which is performance tied to an individual's expectations based on their job description's key performance indicators (Williams & Anderson, 1991), and extra-role performance, which evaluates additional performance metrics that influence an organisation's effectiveness (Moorman, Niehoff, & Organ, 1993).

Since monitoring and performance improvement is an explicit supervisory responsibility, the work performance questionnaire tries to investigate the dimensions of involvement and success in accordance with the leaders' openness (Yukl, 1989). The measure of loyalty is the subordinates' allegiance to their leaders, whereas success is the leaders' comprehension of their subordinates' achievements.

The questionnaire will be created and consolidated on Microsoft Forms. The link to the questionnaire together with a cover message will be shared with Bankseta who will then share it with the L&D Community in the Big 4 Banks. The L&D Community will share the questionnaire with bank leaders.

#### 1.6.2.1 Reliability

On the items of the performance scale, an exploratory factor analysis was conducted (Hinkin, 1995). An initial data extraction was done to determine whether data abnormalities exist. This is to guarantee that when repeated, the same findings are obtained. The instrument would subsequently be deemed dependable, and the findings would be considered legitimate. For the instruments this study will use their Cronbach's alpha values reported in various research studies. Indications of their reliability are mentioned below:

**Multifactor Leadership Questionnaire:** Tejeda, Scandura, and Pillai's (2001) study reported Cronbach's alpha values for the MLQ subscales ranged between .74 and .94, suggesting commendable reliability.

**Job Satisfaction Survey:** Spector's (1985) reported a Cronbach's alpha value of .91 for the JSS, indicating high reliability of the instrument.

**Individual Work Performance Questionnaire:** In the research by Koopmans and colleagues (2012), the Cronbach's alpha values for the IWPQ scales varied from .77 to .89, suggesting notable reliability.

These Cronbach's alpha values, all exceeding .70, confirm the reliability of the instruments for research application.

#### 1.6.2.2 *Validity*

After the pilot study and the main study, the researcher will employ factor analysis of the instrument to assess construct validity.

To achieve theoretical validity, a comprehensive literature study will be conducted to investigate pertinent theories and models and to eliminate confounding factors by restricting it to the research at hand.

#### 1.6.3 Data Analysis

Quantitative data will be used in this study. According to Saunders et al, (2012), for this to be effective, quantitative data must be collected, evaluated, and explained. Since this research intends to compare and explain variables, it will use descriptive statistics, as well as regression, correlation, and inferential statistics. An overview follows a particular sequence. It starts with the data preparation, entry, and review. Then, the data should be analysed and exhibited. Thereafter the data should be represented using statistics and the relationships, variations and patterns should then be analysed. After data is collected via the questionnaire, it will be analysed using SPSS software to see if it supports the hypotheses that are produced.

#### 1.7 CHAPTER LAYOUT

The concluding report for this study will consist of five subsequent chapters. The following is a list with a short description of the contents of each chapter:

**Chapter One:** Scientific orientation to the research

**Chapter Two:** Literature review

**Chapter Three:** Research design and methodology

**Chapter Four:** Results, discussion, and interpretation of results

**Chapter Five:** Conclusions and recommendations

#### 1.8 CONCLUSION

The chapter covered the rationale for the study to be conducted, the research problem, objectives, and research methodology in detail. It laid out the chapter segments of what it will consist of. The second chapter would focus on leadership in a South African retail banking context.

#### CHAPTER 2: LITERATURE REVIEW: LEADERSHIP AND DEVELOPMENT

The objective of this chapter is to give a theoretical viewpoint on the leadership concept and various leadership skill profiles in the retail financial sector. Among the documented leadership competency profiles or styles are charismatic, transactional, transformational, and authentic leadership. The objective of this chapter is not only to give leadership-related theoretical constructs, but also to illustrate the type of leadership development that may be anticipated in the retail banking industry.

#### 2.1 THE CONSTRUCT OF LEADERSHIP

Leadership, as a concept, involves the interaction of two or more individuals, where a person in a leadership role exercises influence over others (Yukl, 2012; Northhouse, 2014). Lear (2012) proposes that the notion of 'leadership' extends beyond the realm of social influence and comprises distinct traits that could supplement behaviour. Various approaches are employed to explore the obligations or targets embedded within the role's comprehensive structure. Northhouse (2018) pinpoints four analogous features in the leadership concept: the process of leadership, the influential nature of leadership, leadership within a group context, and leadership oriented towards goal achievement. Additionally, leadership embodies certain traits and capabilities that complete the role of leading others. Bass (1990) proposes that leadership is a blend of skills that empowers an individual to guide others towards goal fulfillment.

In the retail banking sector, managers recognised as leaders enact leadership roles. Across diverse industries and organisations, a leadership role serves to oversee the subordinates' tasks, foster efficient teams, devise organisational and departmental strategies, and cater to the customers in the sector (Kanter, 1989). This suggests that leaders should possess the capacity to exercise influence without wielding authority or demonstrating control (Kanter, 1989).

Leadership, as a concept, emphasises two facets: the power to sway a specific group of individuals and the attainment of a designated goal or direction (Barnard, 1938). Fusing these two leadership dimensions and the context of this study, leadership can be defined as an individual's ability to manage a team or group of people, incorporating certain motivational factors favoured by both the followers and the leader, to realise a common goal or target established either by the leader or the specified context (Bennis, 1989).

#### 2.2 EFFECTIVE LEADERSHIP

Upon defining the construct of leadership, further scrutiny is needed. Organisations identify their prospective leaders as proficient leaders. Such leaders not only stimulate followers to achieve specific targets but also furnish the organisation with the capability to attain and maintain competitive prowess in a progressively challenging business environment teeming with threats and opportunities (Lear, 2012).

# 2.2.1 Defining Effective Leadership

Leaders' effectiveness can be evaluated by their presentation of their leadership role to staff, colleagues, and management (Antonakis, Cianciolo, & Sternberg, 2014). Further, within the workplace setting, individuals may assess a leader's efficacy by his or her progression in the organisational managerial hierarchy (Fleenor, 2016).

A description of efficacious leadership is the impact of leader behaviour on follower productivity and job contentment, particularly follower satisfaction with the leader (Engelbrecht, 2012).

The ideal leader-follower relationship and the leadership skill profile are correlated as predictors of leadership effectiveness (Chatman, 1991). It is postulated that a leader's efficacy depends on how appropriately their leadership style aligns with their operational circumstances, which lends credibility to this assertion (Bruno & Lay, 2016). Some researchers have advanced this idea by formulating leadership skill profiles conducive to efficacious leadership in the 4IR (Fleenor, 2016). It is suggested that efficacious leaders exhibit a transformational leadership profile rather than a transactional one (Palmer, Walls, Burgess & Stough, 2011). The correlation between leadership profiles and the leader-follower relationship encourages leaders to remodel their subordinates' value systems to coincide ultimately with their own and the organisation's core values, resulting in positive impacts on job satisfaction, commitment, performance outcomes, and employee tenure (Engelbrecht, 2002).

## 2.2.2 Factors Predicting Effective Leadership

Following the concept of effective leadership, there are two elements related to successful leadership that contribute to the varied leadership competence profiles and the present review study in the banking industry. These elements are individual differences and contextual variables.

#### 2.2.2.1 Individual Difference Variables

Under the umbrella of individual differences, various factors are subsumed, such as capabilities, deficiencies, behaviours, leadership styles, knowledge, experience, and maturity levels. Capabilities refer to a person's fundamental characteristics leading to successful performance (Klemp, 1980). These are the abilities and traits that enable a leader to efficiently execute his or her designated leadership duties. Deficiencies are attributes that could result in subpar performance, particularly those that can impede an efficacious leader's success (Antonakis, Cianciolo, & Sternberg, 2014). The behaviour of an efficacious leader encompasses their observable actions. A leader's leadership style is the methodology they adopt in leading subordinates, which can affect their performance.

Knowledge embodies a leader's expertise and understanding in leading others. Experience is presumed to forecast group performance, especially in high-stress situations (Fiedler, 1986). Past exposure to and handling of challenges equip leaders to better manage future crises, understanding how to react or which leadership style is apt. The notion is that leaders acquire necessary competencies, behaviours, and abilities through experience and by identifying the qualities that distinguish successful leaders from ineffective ones (Antonakis, Cianciolo, & Sternberg, 2014). Additionally, experience instructs leaders on their shortcomings and how to rectify them. Lastly, maturity levels are believed to contribute to effective leadership. Leaders with higher maturity levels have a more nuanced understanding of themselves and others (Drath, et al., 2008; Jacobs & Solomons, 1977). Maturity levels are linked to emotional intelligence. Emotional intelligence is regarded as a set of skills partially related to managing ones and others' emotions effectively (Salovey & Mayer, 1990). Furthermore, maturity can be attained through experience.

#### 2.2.2.2 Contextual variables

Contextual variables are those that ascertain the extent to which an individual's distinctions correlate with effectiveness (Antonakis, Cianciolo, & Sternberg, 2014). Contextual variables

encompass the nature of the team's task, the characteristics of the organisation's followers, and the resources provided and accessible to the leader. According to House's (1971) path-goal theory of leadership, the following are the most prevalent means by which contextual factors influence leadership effectiveness:

- Supportive: caring for subordinates' needs and well-being and creating a congenial work environment.
- Directive: providing clear expectations, instructions, rules, and procedures to subordinates and organising and scheduling tasks.
- Participative: involving subordinates in decision-making and considering their opinions and suggestions.
- Achievement-oriented: setting ambitious goals and performance expectations and displaying confidence in the employees' abilities to achieve them.

In the context of these variables, the leadership context — who the leader is, be it an individual, a team or group, or the entire organisation — also has a substantial effect (Antonakis, Cianciolo, & Sternberg, 2014). With the confines of this study, teams play the most significant role.

#### 2.3 TRANSITION IN LEADERSHIP PROFILES

A review of several leadership profiles illustrates the "school of thought" regarding how leaders should be depicted. In addition to focusing on the qualities and capabilities of successful and effective leaders, leadership profiles frequently address the role of followers and contextual leadership. The subsequent profiles are competency and capability profiles. Additional leadership profiles are found, yet it should be emphasised that all the described theories are incorporated in leadership profiles.

# 2.3.1 Competency Profile

The competency perspective has its roots in early psychological theories, which posited that individuals possess innate qualities that predispose them to be effective leaders (Yukl, 2016). Fleenor (2016) contends that the focus shifted towards identifying successful leaders and subsequently determining the characteristics that contribute to their success. The competency approach is based on the idea that certain individuals are born with unique traits that enable them to excel in leadership roles. Over time, the emphasis has evolved to concentrate on

pinpointing these effective leaders and understanding the specific attributes that drive their accomplishments. This perspective acknowledges that certain qualities are inherent in great leaders, and by studying these qualities, researchers can gain insights into what sets these leaders apart from others. Early competency researchers felt that these traits separated leaders from non-leaders, and that their presence was what made leaders effective (Fleenor, 2016). Several skills have been found in determining what makes a leader effective or successful.

Various leadership skills are recognised in the organisational setting, such as whether a leader is a hard worker, honest, fair, and able to empower others (Antonakis, Ciancolo, & Sternberg, 2014). To play a larger role in leadership, several talents are emphasised more than others. Galton (1869) maintained that remarkable intelligence is a crucial leadership characteristic as opposed to intelligence alone. The highlighted core qualities are extraversion, conscientiousness, creativity, adaptability, and emotional intelligence (Zaccaro, Kemp, & Bader, 2013).

Gardner (1989) stated in research involving a large number of leaders that "some traits appear to contribute to a leader's success." These traits were not categorised to describe distinct attributes; they were defined expressly. They were criticised on the grounds that attributes of effective leaders are frequently seen as "masculine competencies". (Fleenor, 2016). Antonakis, Cianciolo, and Sternberg (2014) identify the ideal skills as stable and coherent integrations of personal qualities that promote a regular trend of leadership effectiveness across a range of team and organisational structures. In the context of the retail banking business, the skills described below complement distinct leadership profiles or styles and classify diverse leadership qualities, as opposed to identifying and defining big characteristics that may have the same or comparable aim and/or meaning. These abilities are explored according to the five kinds of leadership qualities listed below: "(1) cognitive ability, (2) personality, (3) motivation, (4) social assessment and interpersonal skills, and (5) leader problem-solving expertise, talents, and tacit knowledge" (Mumford, Zaccaro, Harding, Fleishman, & Reiter-Palmon, 1993; Mumford, Zaccaro, Harding, Jacobs, & Fleishman, 2010).

# 2.3.1.1 Cognitive abilities

A primary element of leadership effectiveness is believed to be general intelligence (Zaccaro et al., 1997). There is a correlation between general intelligence, organisational hierarchy, and potential for executive roles. In scenarios necessitating problem-solving within an organisation, creativity and diverse thought processes prove to be indispensable (Mumford et

al., 2012). Baehr (1992) found in a study involving 1358 managers across four industries, that superior creative thought and resourcefulness correlated with higher organisational ranks. Further research explored the influence of cognitive complexity and metacognitive skills on transformational leadership (Bader et al., 2014). Gardner (1989) suggested that an attribute linked to cognitive abilities could be the capacity for action-oriented judgement.

The foundation of leadership abilities is firmly rooted in cognitive abilities, as they relate to core mental functions such as knowledge acquisition, processing, and dissemination (Lau & Pavett, 1980; Mintzberg, 1973; Zaccaro, 2011). Leaders' ability to learn, assimilate new skills, process new information, and convert this information into actionable knowledge, is primarily supported by their cognitive abilities (Mahoney et al., 1965). These leadership competencies include efficient oral communication and active listening, comprehension, and inquiry for a comprehensive understanding (Mumford et al., 2007). Cognitive abilities encompass the capability to assume a leadership role, learn, grow, innovate, assimilate information, and adapt to different roles. They are crucial for leaders to carry out their responsibilities (Isasen et al., 2013).

# 2.3.1.2 Personality

Personality studies have often focused on leadership in conjunction with the Big Five model and aspects of the Myers-Briggs Type Indicator (MBTI). Key variables, such as power locus, adaptability, optimism, and maladaptive personality traits, have been associated with personality. Gardner (1989) also acknowledged adaptability and reliability. Broadly, personality traits can be categorised into five domains: emotional stability, self-confidence, openness to experience, agreeableness, and conscientiousness (Digman, 1990; McCarae & Costa, 1991). Salgado (1997) determined that emotional stability, conscientiousness, assertiveness, and agreeableness, but not openness, were reliable predictors of managerial job performance within European contexts. Leadership traits like extroversion, intuition, thinking, and judgement can help differentiate leaders from non-leaders (McCauley, 1990; Zaccaro, 2011).

#### 2.3.1.3 Motivation

The motivation of a leader is influenced by several elements, such as desire for power, need for achievement, need for affiliation and social interaction, and requirement for accountability, as identified by Antonakis et al. (2014). Chan and Drasgow (2011) propose an examination of individual differences in leadership motivation, adding new perspectives to the empirical

research on leader motivations. They argue that personality differences influence a leader's commitment to leadership roles, their training efforts, and persistence. Furthermore, they suggest that this concept of individual distinctiveness mediates the impacts of general intelligence, Big Five personality traits, societal values, leadership effectiveness, and prior leadership experiences on other leadership criteria. A leader's motivations shape their self-presentation and the necessary traits. It has been observed that managerial motivation is linked to advancement and promotions (Miner, 1978). The need for responsibility has been associated with military officer career success (Convelly et al., 2010).

### 2.3.1.4 Social appraisal and interpersonal skills

Social appraisal is associated with social intelligence, which is defined as the capacity to comprehend the emotions, ideas, and behaviour of others, including ourselves, in interpersonal interactions and to respond appropriately (Martowe, 1986). This skill plays a significant part in good leadership because it equips the leader with attributes useful in every social setting. These attributes, as articulated by Martowe (1986), also enable the leader to respond to a specific social situation because he or she knows the emotions, ideas, and actions of the individuals in that setting (Zaccaro, 2012). With such an awareness, one is able to respond in a particular social setting without adversely affecting the emotions, thoughts, and actions of others.

Emotional intelligence has been recognised as one of the characteristics that contribute to social intelligence or social evaluation. It is the ability to notice emotions, access and produce emotions to aid cognition, comprehend emotions and emotional knowledge, and control emotions to foster psychological and intellectual development (Caruso Mayer, & Salovey, 2012). In support of emotional intelligence, Caruso, Mayer et al. (2012), Mayer and Salovey (1997), and Mayer (1990) have identified the following four emotional intelligence skills:

- Emotional recognition is the ability to recognise and evaluate one's own emotions as well as the emotional expressions of others. This also examines emotional expressiveness and the ability to recognise genuine emotional reactions.
- Emotional usage refers to the capacity to focus on crucial events and environmental stimuli. It also examines guiding the proper emotions during decision-making.
- Emotional comprehension refers to the capacity to comprehend emotions in the context of oneself and others, as well as their interrelationships.

• Emotional management is the ability to regulate one's emotions and respond to particular issues without unleashing unpleasant feelings.

Gardner (1989) categorised assertiveness and knowledge of followers and their needs as social ability-related characteristics.

## 2.3.1.5 Leader Problem-Solving Skills, Expertise and Tacit Knowledge

As stated earlier, leadership is all about engaging within a certain social context and influencing others inside the same social milieu. In every social context or situation involving two or more persons, there will definitely be challenges or an imbalance, and the leader will be accountable for resolving these issues. Mumford et al. (2010) reinforce this notion by hypothesising that a leader's career is enhanced by their capacity to identify a problem and illustrate how it can be resolved. By applying problem-solving and assessment skills to experience, tacit knowledge is obtained. Sternberg (2012) defines tacit knowledge as the essential, unspoken understanding one gains through personal growth and experience to excel in a particular context. This type of knowledge is not explicitly taught or communicated. In relation to leadership, Gardner (1989) highlights the importance of mastering specific tasks, exhibiting confidence, and demonstrating persistence. In other words, a leader's ability to succeed relies on their capacity to acquire and apply tacit knowledge in their specific domain, which is achieved through experiential learning and personal development.

The competence profile of leadership separates leaders from non-leaders by focusing on their human qualities and attributes (Anon., n.d.). It was believed that utilising this strategy, crucial leadership qualities could be discovered and persons having these features may be located to take existing leadership roles (Bolden, Gosling, Marturano, & Dennison, 2013). Personality, social, physical, or mental characteristics that distinguish leaders from followers in a given circumstance are examples of such attributes and features (Robbins, Judge, Odendaal, & Roodt, 2019). The fundamental issue with the competency profile was that several profiles were discovered, and it became evident after a number of years that the identified profiles demonstrated very little consistency (Bolden, Gosling, Marturano, and Dennison, 2013). Among the discovered common features were technical expertise, charisma, enthusiasm, boldness, task drive, and emotional control. Managers erroneously assumed they understood the qualities a good manager must possess (Luthans, 2018).

The rise of the Big Five personality conceptual framework and trait theory throughout the study of competence-based profiles made it apparent that many of the competencies emerging in

multiple leadership assessments could be soaked up within one of the Big Five competencies, and that this profile presented consistently strong support for characteristics as predictor variables of leadership (Robbins, Judge, Odendaal, and Roodt, 2019). The following factors are identified under the Big Five factor model:

- **Extroversion.** Extroversion is characterised by two characteristics: ambition and energy (Robbins, Judge, Odendaal, & Roodt, 2019). Extroverts are persons who are friendly, outgoing, chatty, aggressive, and gregarious (Luthans, 2018).
- Integrity and receptivity to experience. The association between these two traits and leadership is robust and constant. Conscientious leaders are disciplined and honour their commitments, while those who are receptive to new experiences tend to be innovative and adaptable. Both individuals have a significant edge in terms of leadership. Conscientiousness is characterised by dependability, persistence, and responsibility, but openness to experience is characterised by intellectual curiosity, creativity, culture, art, sensitivity, adaptability, and imagination (Luthans, 2018).
- Pleasantness and emotional steadiness. Agreeableness is the inclination of an individual to be trustworthy, caring, conforming, and accepting. Emotional stability is the capacity to recognise and show emotion, comprehend and reason with emotions, and effectively manage the emotions of others (Northhouse, 2014).

## 2.3.2 Capability and Behaviour Profile

Leadership theories traditionally concentrate on leader characteristics and qualities. However, the proficiency and conduct paradigm scrutinize leadership behaviour and their capacity to efficiently adapt to unforeseen circumstances (Northhouse, 2018). This concerns the way leaders comport themselves to interact within a social environment and influence others within that framework. This paradigm supplements leadership and different leadership strategies by indicating how an individual might conform to specific leadership styles. Various competencies and skills specific to retail banking are identified and interpreted within the context of the 4IR.

Proficiency and conduct paradigms pertain to the manner leaders perform in a leadership capacity, encompassing the visible responses of leaders and followers in given situations (Yukl, 2016). This framework distinguishes between task behaviours and relationship behaviours (Northhouse, 2014). Task behaviours encapsulate actions that facilitate the comprehension of operational procedures and accumulation of task-related information (Hirst & Mann, 2014).

Conversely, relationship behaviours include conduct that fosters behavioural interactions and cognitive conditions that need to be acquired for effective team performance. Additional profiles have been classified in four categories: task and relationship behaviour, transitional behaviour, and passive leadership (Burke et al., 2016).

Transitional leadership comprises activities that facilitate and promote collective change, differing from task and relationship behaviour by including actions such as articulating a vision for change, fostering innovative thought, and taking risks (Yukl, Gordon, & Taber, 2012).

Passive leadership reflects the absence of action until necessary. This involves a leader taking decisive action only when faced with a problem or specific challenge (Avolio, Bass, & Jung, 1999). These additional approaches are typically distinct and may fall under task and relationship profiles. As such, in a retail banking setting, task behaviours would necessitate leaders ensuring financial targets are achieved, whereas relationship behaviours would cultivate relationships among team members and staff as well as between the leader and subordinates to attain shared objectives and visions.

The ensuing subsections delve further into task behaviour and relationship behaviour.

#### 2.3.2.1 Task behaviour

To expound the overarching concept of task behaviour, the following three dimensions serve as categories for task behaviour:

#### (a) Transactional Behaviour

Transactional behaviour, further expounded under leadership styles, operates on dynamic interactions whereby a leader praises, rewards, or refrains from reprimanding a subordinate who meets the required criteria. This behaviour typifies an exchange relationship between significant achievements and rewards (Burns, 1978). The three constituents of transactional behaviour include contingent reward, active management by exception, and passive management by exception. As performance correlates closely with rewards, these latter elements positively affect subordinate satisfaction and performance (Hunt & Schuler, 1976; Klimoski & Hayes, 1980; Podsakoff & Schrishem, 1985). A subordinate understands the behaviour required for reward. In transactional behaviour, leaders may educate and develop team members through feedback incorporating contingent incentives (Burke et al., 2016, p.

369). Furthermore, comprehensive feedback is crucial from the leader as the outcome must be rewarded.

# (b) Initiating Structure

Initiating structure denotes a leadership conduct that facilitates task goal achievement by diminishing role ambiguity and conflict (Burke et al., 2016). This concept is bifurcated into directive and autocratic leadership by Pearce Sims, Cox, Ball, Schnell, Smith, and Trevino (2013). Directive leadership involves outlining all tasks and providing instructions to achieve set standards (Burke et al., 2016). Autocratic leadership, conversely, entails leaders making decisions without consulting team members or subordinates, relying solely on the leader's judgement (Schriesheim, House, & Kerr, 1976). These attributes and behaviours provide leaders with a tool to manage material and human resources through clear, compelling, and goal-oriented leadership (Burke et al., 2016). Everyone is cognisant of their responsibilities.

# (c) Boundary Spanning

Boundary-spanning communication, according to Brown and Eisenhardt (1995), incorporates politically minded communications, which enhance the team's resources, and networking communication, which increases the team's access to a broader array and diversity of information. Boundary bridging, associated with competitive intelligence, involves a team striving to acquire external knowledge to complete specific tasks and solve complex problems. This requires collaborating with those outside the team, monitoring the environment, and negotiating team resources, according to Hirst and Mann (2014). This enables the team to function more effectively in a global context. Given this behavioural characteristic, boundary spanning is more closely aligned with the director role than the facilitator role (Edmondsor, 2013). This behaviour is perceived as predominantly task oriented. This type of leadership behaviour lays the foundation for fulfilling the leadership role of information gathering and organisation.

# 2.3.2.2 Relationship behaviour

Similar to task behaviour, relationship behaviour has been divided into four categories underscoring the overall construct of relationship behaviour.

## (a) Transformational Behaviour

Transformational behaviour, further detailed under transformational leadership, is marked by a purposeful and innovative interchange between leaders and subordinates to achieve vision-oriented change in individuals and environments (Bass, 1985). This leadership style embodies a balanced approach, whereby leaders stimulate their followers' efforts to address complex problems while simultaneously preparing subordinates for future challenges (Bass, Avolio, Jung, & Berson, 2013). Furthermore, when task orientation is considered, this component seeks to incorporate subordinates to ensure specific tasks are completed. Essentially, subordinates are equipped with the necessary skills to perform complex tasks. This component has a direct correlation with team performance when such behaviours as the management of material and human resources are involved (Burke et al., 2016).

# (b) Consideration

Consideration represents a type of leadership behaviour that aspires to maintain close social bonds and group cohesion (Burke et al., 2016). Consideration is characterized by two-way open communication, mutual respect, trust, and a focus on meeting subordinate needs. The primary influence of consideration on team performance outcomes is the leader's application of these behaviours during expert coaching. It has been posited that the provision of expert coaching is a critical leadership characteristic that can significantly enhance team performance. It is often the mechanism through which team cohesion is created and sustained (Hackman & Wagemen, 2015; Kozlowski, Gully, McHugh et al., 1996; Kozlowski, Gully, Salas et al., 1996).

#### (c) Empowerment

Empowerment behaviour refers to leadership actions that prioritise the development of follower self-management or self-leadership skills (Pearce et al., 2013). This component relates to the leader enabling subordinates to perform complex tasks or address problem-related situations without close supervision and developing employees by delegating tasks that are challenging, promote growth, and encourage a person to make more effort. This is common in organisations with minimal supervision or micromanagement when employees can control how they complete their tasks without being given a specific procedure to follow but are provided with the resources and opportunity to accomplish tasks in their own way within certain procedural boundaries. Actual empowering actions and behaviours that serve to develop team members to the point where they are capable of self-management are included

in this category (Burke et al., 2016). It also encompasses coaching, monitoring, and validatory behaviours as well as those indicative of participatory, conciliatory, and consultative leadership styles. Given the link between empowerment and performance, it has been suggested that teams with the capacity to provide their own feedback may be better equipped to self-correct (Salas, Sims, & Burke, 2015).

# (d) Motivation

Motivational behaviours are those that inspire team members to exert continuous effort, especially during challenging situations (Burke et al., 2016). Behaviours characteristic of this category include reward and recognition of achievement as well as actions that ensure members' needs and values are fulfilled by providing support for individuals and their endeavours (Fleishman et al., 1991). Due to the connection between motivation and performance, Salas, Dickinson, Converse, and Tannenbaum (1992) argue that teams must possess both task-work and team-work skills to function well. The quantity and duration of effort expended on a task correlate with the group members' motivation level.

#### 2.4 LEADERSHIP PROFILES

The leadership archetypes under examination in this segment include charismatic, transactional, transformational, and authentic leadership as previously delineated in the introduction.

## 2.4.1 Charismatic leadership

Charismatic leadership typifies a leader capable of moulding the individual desires, attitudes, inclinations, and goals of their followers towards a unified interest (Shamir, House, & Arthur, 1993). These types of leaders inspire their followers towards profound commitment to the set goal, to willingly make personal sacrifices for the mission, and to exceed the stipulated requirements of specific tasks. The charismatic leadership effect is often seen as a strong emotional bond to the management, arousing group members' motivation and emotions, augmenting follower inclinations related to the mission as mirrored in leader-follower values, and inherent follower values (Shamir, House, & Arthur, 1993). Within the organisational contexts where leader-follower relationships are standard, such leaders demonstrate extraordinary capabilities and traits. In this leadership modality, it is frequently the follower who acknowledges the desired leader. This leadership approach might be fairly conspicuous

in an organisational context. Whilst team members may select who they wish to be led by, they do not have the final say and the leadership may be subtle.

Charismatic leadership thus far has been identified via leader characteristics. Conger and Kanungo (1998) point to five behavioural traits of charismatic leaders that may suggest a more transformational leadership perspective:

- Vision articulation,
- environmental sensitivity,
- attending to follower needs,
- willingness to bear personal risks, and
- displaying unconventional behaviours.

Musser (1987) opines that charismatic leaders aim to elicit both commitment to ideological goals and allegiance to their person. As charismatic leadership may share certain features with transformational leadership, to be discussed later, a charismatic leader may not necessarily be interested in transforming an organisation or its followers. Possibly, charismatic leaders might be more invested in their own interests than in the concerns of others. The three foundational elements of charismatic leadership are believed to be vision, empathy, and empowerment (Choi, 2016). A charismatic leader's envisioning conduct fosters subordinates' aspiration for success, empathetic behaviour heightens followers' need for affiliation, and empowerment methods boost followers' demand for power (Choi, 2016). Detailed breakdowns of the three components of charismatic leadership are given below.

# 2.4.1.1 Envisioning

Articulating a vision entail constructing an inclusive image of ideal standards and a future state that individuals can relate to and that can incite aspiration (Conger & Kanungo, 1998; Rafferty & Griffin, 2014; Strange & Mumford, 2012; 2015). As charismatic leaders are currently the sole constructors of a vision that describes and outlines the ultimate objectives for an organisation and its personnel, charismatic leaders earn more respect and admiration from their followers. Besides explicating the vision and infusing everyday tasks with an enhanced sense of meaning and intrinsic appeal, charismatic leaders utilise the methods required to achieve this (Conger, 1989). Given the perception that charismatic leaders are highly influential, such vision-oriented leaders are often encountered in situations where a leader is chosen or selected, rather than in a typical organisational setting.

# 2.4.1.2 Empathy

Understanding the emotions, values, and motivations of others is a key characteristic of empathy, as stated by Salovey & Mayer (1990). Empathy emphasises mutual respect, trust, and an appreciation of another's perspective, along with an understanding of their emotional state. Such empathetic understanding can be the bedrock of leadership behaviour that focuses on relationships, including traits like considerateness (Judge, Piccolo, & Ilies, 2014). Charismatic leaders, despite having a modus operandi that primarily serves their long-term benefits, are conscious of their followers' aspirations and needs. They exhibit comprehension about aspects that are important to their followers (Pillai, Williams, Lowe, & Jung, 2013). Even without directly communicating with their followers before deciding, they take their needs into account during the decision-making process (Choi, 2016). Empathy, being an essential attribute of leadership, has been described by Bass (1985) as a major behavioural characteristic of charismatic leadership through the concept of personalised concern.

### 2.4.1.3 Empowerment

The act of bolstering followers' perceptions of their own ability by identifying and removing factors that cause feelings of ineffectiveness is known as empowerment (Conger & Kanungo, 1988). Empowerment, in the context elucidated by Spreitzer (1996), however does not necessarily imply delegation of duties or teamwork. It involves managerial interventions designed to give followers a sense of choice in taking and controlling actions and influencing strategies, administration, or operational outcomes at work. Empowerment encourages followers to adopt an active rather than a passive role in their work (Spreitzer, 1996). Charismatic leaders utilise various strategies to motivate their followers (Conger, 1989), among which:

- Setting goals and tasks in such a way that followers can experience initial success before gradually facing more challenging tasks (Behling & McFilen, 1996; Burke, 1986).
- Using verbal persuasion and personal recognition to help followers gain confidence in their abilities, exert greater effort, and reaffirm their self-esteem (Conger, 1969; Spreitzer, 1995).

 Serving as role models by demonstrating their own proficiency in completing tasks that followers are expected to perform. This helps followers gain confidence in their own capabilities (Banduro, 1986).

## 2.4.2 Transactional leadership

Transactional leadership theory suggests that individuals are motivated primarily by rewards and punishments. A transactional leader concentrates on the task at hand, provides clear directives, and closely oversees productivity. The way subordinates complete tasks determines whether they are rewarded or penalised. Such leaders often appear to be highly task-oriented, in contrast with a people-oriented approach. Theory X leaders are defined as transactional leaders who structure their own tasks as well as those of their followers to meet the formal objectives of the organisation (Aamodt, 2010). Task-oriented leaders typically manage or lead by providing direction, setting goals, and making decisions without consulting their followers. Under stressful conditions, they may become overly anxious, defensive, and commanding (Bond, 1995). The literature suggests that a high rate of employee turnover and complaints can occur under transactional leadership, regardless of the levels of performance, because the leadership style primarily focuses on task completion (Aamodt, 2010).

Luthans (2018) describes transactional leadership as a reciprocal relationship between leaders and followers that often receives criticism. It is a foundational leadership style upon which most other leadership styles are built (Robbins, Judge, Odendaal, & Roodt, 2009). Bass (1990) breaks down transactional leadership into the following components:

- Conditional Reward: Leaders establish a reward exchange system for effort and performance, promising rewards for good performance and acknowledging accomplishments.
- Management by Exception (Active): Leaders monitor for deviations from rules and standards, taking corrective action when necessary.
- Management by Exception (Passive): Leaders intervene only when standards are not met.
- Laissez-faire: Leaders refrain from taking responsibility and making decisions.

The laissez-faire aspect is considered the most inactive and therefore least effective form of leadership (Robbins, Judge, Odendaal & Roodt, 2019). Transactional leadership operates on the premise that people are driven by rewards and punishments and that employees implicitly

consent to their manager's authority when accepting a role (Anon., n.d.). The principle behind this is that employees should understand what is expected of them and the associated rewards before they commence a particular task. They might not know the exact penalties but should have a general understanding. When transactional leaders assign tasks to their followers, they hold them fully accountable, regardless of whether they have the necessary resources or skills to complete the task (Anon., n.d.). The transactional leader often employs a management by exception approach, where situations that meet performance expectations are left alone, while deviations from expectations attract either rewards for exceeding expectations or corrective measures for underperformance (Anon., n.d.).

## 2.4.3 Transformational leadership

Robbins, Judge, Odendaal, and Roodt (2009) outline transactional leadership as the foundation upon which transformational leadership is formed. This kind of leadership results in increased levels of effort and performance from followers. This style of leadership is often contrasted with transactional leadership; however, it is important to clarify that it is not the polar opposite of transactional leadership. Burns (1978) defined "transformational leadership" as the ideal relationship between a leader and their followers, outlining the differences between transactional and transformational styles of leadership. To be a transformational leader, one must seek out and meet the higher-order needs of their followers and engage with them as entire people (Denhardt & Campbell, 2006). As Bass and Avolio (1994, p. 22) point out, transformational leadership is "an enlargement of leadership" that builds on transactional leadership by focusing on followers' beliefs, values, needs, and abilities rather than just their compliance or agreement. To go above and beyond what is expected, transformational leaders encourage and inspire their subordinates. In this kind of leadership style, employees are valued, given the tools they need to succeed, and encouraged to grow into future managers and team leaders (Bass & Avolio, 1994). Extra-role actions, such as those demonstrating corporate citizenship, might be prompted by transformational leaders (Pillai, Schriesheim, & Williams, 1999).

Bass (1990) notes that transformational leadership is characterised by:

- Idealised influence which gives people hope and direction, boosts morale and selfesteem, and earns the respect and trust of others.
- Inspiring inspiration which conveys a lofty standard, directs attention with the use of symbols, and simplifies complex ideas.

- Cognitive stimulation, because the mind is a powerful tool that, when used, leads to greater intellect, reasoning, and care in problem solving.
- Individualised care, including paying close attention to each employee and treating them as individuals while also providing them with tailored guidance and support.

When compared to other styles of leadership, transformational leadership is seen as more dynamic and productive (Robbins, Judge, Odendaal, & Roodt, 2019). The concept suggests that transformational leaders are those that inspire their subordinates to go above and beyond in their work for the greater good of the organisation (Robbins, et al., 2019). Leaders with this trait work to make their followers, whether they be co-workers, followers, customers, or constituents, more conscious of the importance of the challenges they face. This newfound information calls for a leader with the foresight, self-awareness, and confidence to stand up for what he or she thinks is right or good, regardless of whether it is considered conventional wisdom or popularly appealing (Bass, 1985). Transformative leaders believe that big things are possible for those who have a clear vision and are able to infuse their situations and their followers with their own excitement and energy (Anon., n.d.).

There are five stages in a transformational leader's procedure (Anon., n.d.) as discussed below:

- Creating a plan for the future. The first step of transformational leadership is to create a vision and a compelling future for followers.
- Selling the vision. Transformational leaders are cautious while building trust with their followers, and their own honesty and moral rectitude are essential selling points.
- Figuring out what to do next. Without a clear vision, the path ahead is neither evident nor can it be planned in depth. As a result, identifying the route ahead may be a continuous process of course correction. Transformational leaders acknowledge that there will be setbacks and blind canyons along the road, but are ultimately content so long as they believe progress is being made.

• Being at the forefront of the shift. They position themselves leader in the activity. Leaders that really make a difference do not hide in the shadows or try to get by on the strength of their followers; instead, they are always in the spotlight. Everybody else should model their behaviour on theirs, as they demonstrate. They are always going about encouraging and rallying their followers by talking to them, calming them down, and getting them excited. They persevere through the darkest moments, when others may doubt that the vision can ever be preserved, because of their unwavering devotion to it.

# 2.4.4 Authentic leadership

According to Avolio, Luthans, and Walumbwa (2014), authentic leaders are self-aware in terms of their thoughts and actions, as well as others' perceptions of their values/moral viewpoints, knowledge, and strengths, cognisant of the setting, optimistic, idealistic, adaptable, and of high ethical character. Luthans and Avolio (2013) provide a definition of authentic leadership in the workplace as a process that draws on both positive psychological capacities and a highly developed organisational context, resulting in greater self-awareness and self-regulated positive behaviours on the part of leaders and affiliates, thus promoting good self-development.

According to Zielinska (2012), there are distinguishing characteristics of genuine leadership that must be included in any definition or characterisation of the word.

## 2.4.4.1 Self-awareness

True leaders know who they are and what they stand for, and they understand how their actions and words affect others around them. Developing a healthy sense of self-awareness is an ongoing process through which leaders learn more about themselves and the environments in which they work (Anon., n.d.).

## 2.4.4.2 Self-regulation

A leader's self-regulation ability is the process through which they bring their thoughts, feelings, and behaviours into harmony with one another. When leaders are able to self-regulate, they are free to lead from their own values and beliefs (Shamir & Eilam, 2005). Ability to control one's own emotional and behavioural reactions means one can maintain the mental, emotional, perceptual, and behavioural norms with which one identifies (Baumeister, 1998;

Carver & Scheier, 1981). The ability to align oneself with desirable standards while avoiding those that might be a distraction to their leadership, is advocated by (Higgins, 1997).

# 2.4.4.3 Personal courage

Leaders who adopt an authentic stance must have the inner fortitude to face their own origins, upbringings, and experiences, both good and bad, head-on and without pretence.

Klenke (2014) proposed a model of authentic leadership that considers the interaction between the leader's surroundings, thoughts and emotions, and spirituality. It has been stated that self-respect, self-efficacy, self-awareness, and self-control are all essential qualities for authentic leadership (Mdluli & Makhupe, 2017). It has been stated that authentic leadership requires a spiritual component. According to a study by Avolio et al. (2014) spiritual and ethical concerns may be a component of what it means to be an authentic leader. Spiritually mature leaders are more likely to be genuine than their less mature counterparts, and a leader's spirituality may help him or her grow more real over time. This is an important question that can be answered by observation and study.

Increasingly, more leaders who can lead with integrity are required, making real leadership a growing interest in the discipline of leadership. It has been said that this leadership style embodies the 21st century (George, 2003). This style of leadership may seem similar to others previously mentioned, but it is distinguished by its emphasis on the leaders themselves and on spirituality. Cooper et al. emphasise distinctions between popular leadership approaches and real ones (2005). Bass (1985) and Burns (1978) contend that authentic leaders do not need to be transformational; that is, they do not need to change followers actively or purposefully into leaders, even if they have a positive impact on them via role modelling. Genuine leaders have a strong knowledge of their identities and positions on basic problems, attitudes, and values (Avolio & Gardner, 2005). From there, they chart a course and express it to others, outlining their principles, values, and code of conduct. Conger and Kanungo see the absence of leader and follower self-awareness/regulation as a significant distinction between authentic and charismatic leadership (1987; 1998). The self-concept-based theory of charismatic leadership emphasises leadership behaviours and motivational processes that drive followers to internalise the function of self-awareness/regulation because of their identification with the leader. However, this method's study is still in its infancy (Avolio & Gardner, 2005). In contrast to charismatic leaders, whose followers are more likely to be inspired by their words and deeds, genuine leaders really encourage their followers to reflect on the values and principles that govern their own lives (Gardner & Avolio, 1998). Due to the modern focus on the uniqueness of the leader in debates about authentic leadership, it is feasible that no two real leaders will ever be identical. According to Choi (2016, p. 181), a leader's approach to leading is "mainly focused on the leader's personal attributes and history and being real to self." In genuine leadership, ethical issues are emphasised, while they are questioned in charismatic leadership.

# 2.5 LEADERSHIP PROFILES IN THE NEW WAYS OF WORKING / VUCA ENVIRONMENT

Over the last seventy years, the concept of a "great man" has given way to more nuanced theories of leadership, such as trait theories, behaviourist theories, situational leadership, contingency theory, and finally transactional and transformational leadership. All of these theories have something to teach us about what it takes to be an effective leader, but there has been a change in emphasis away from a leader's inherent traits and behaviours and toward the leader's ability to adapt to new conditions and their position in relation to their followers.

The researcher delves into the current state of leadership and the pressing need for leadership development so that financial service organisations can keep up with the technological disruptions they are facing.

Ultimately the researcher recommends adopting the "4.0 Leadership Competency Profile for a VUCA environment" and the need to rethink leadership profiles in light of the increasing influence of digitalisation. Using old skills like intelligence quotient (IQ) as an example, this profile identifies new capabilities that must be part of the leadership spectrum and then reengineers these classic competencies so that they may be utilised effectively in the modern world. Leaders will be better equipped to meet the demands of the 4IR as a result of this research and the five new essential skills identified within, dubbed 4.0 Leadership Competencies.

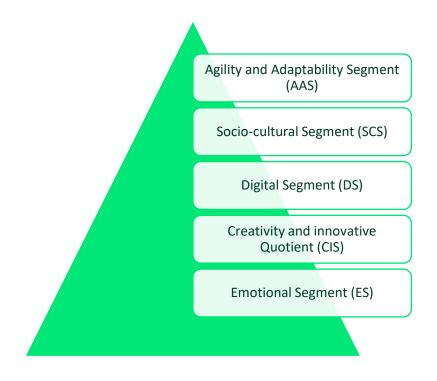
## They are:

- Agility and Adaptability Segment (AAS)
- Socio-cultural Segment (SCS)
- Digital Segment (DS)
- Creativity and innovative Segment (CIS)

## • Emotional Segment (ES)

Leadership in the financial services industry has to be less mechanical and more organic, methodical and fluid, in order to meet the sector's challenges and help it become more agile, resilient, responsive, and adaptive (Vial, 2019). A leader at each moment in history must have the skills and character traits appropriate to the circumstances (Loonam et al., 2018). Approaches must vary depending on the specific economic climate, technological environment, cultural context, and social values at play. Analytics, augmented worlds, blockchain, cloud environments, software services, machine learning, linked devices, the sharing economy, and digital ecosystems are just some of the digital tools, technologies, and business models that are fuelling the current wave of industrial upheaval (Mbama & Ezepue, 2018). These technological advancements are quickening the rate of change and making it easier for leaders to establish and maintain competitive advantages.

**Figure 1:**Proposed 4.0 Leadership Competency Profile for a VUCA environment (*Author, 2021*)



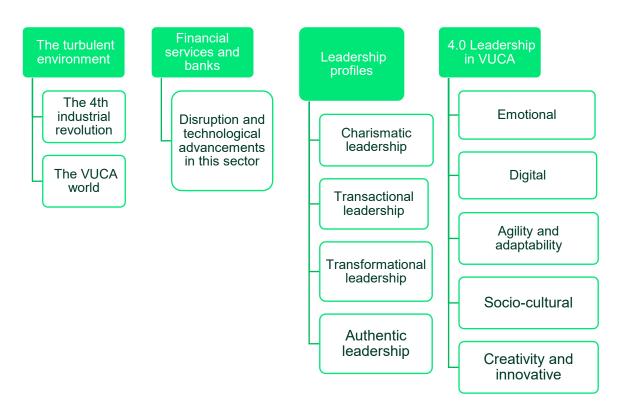
While traditional leadership competencies will always serve as the bedrock upon which effective leaders build their ability to steer their organisations through these perilous times, the way in which these skills are applied in light of the rapid transformations taking place in the

financial sector must be rethought (Nuyens, 2019). At the same time, executives must acquire new skills if they are to keep their organisations competitive.

New leadership capabilities have emerged to face the future, whether in financial services or another sectors. Leaders need to be nimble, adaptive, resilient, emotionally intelligent, and digitally savvy in order to deal with complicated change and guide their teams to success (Bednall et al., 2018). Leaders need to adapt to the ever-changing and fast-moving environment in which they operate (Croft & Seemiller, 2017). To survive the new normal of the turbulent and changing world, Alvin Toffler predicted that the illiterate of the 21st century would not be those who cannot read and write but those who "cannot learn, unlearn, and relearn" on the run (Mei Kin et al., 2018, pp. 13-15).

#### 2.6 OVERVIEW OF THE LITERATURE

Figure 2: Literature Overview (Author, 2021)



This review included a comprehensive overview of the literature on each variable. Diverse leadership profiles were investigated individually, and the leadership idea was expanded upon. Before analysing any of the leadership profiles, a broad overview of the notion of

leadership was presented. In the context of the financial services business, the influence and relevance of leadership inside organisations were examined.

The effect of proficient leadership on the totality of an organisation's function was explained. This was carried out irrespective of the existing leadership patterns within the entity. Given the enduring professional interest in leadership, the author found it crucial to clarify the fundamental concepts underpinning this subject. The multifaceted theories addressing the cognitive and behavioural aspects of leadership, from trait to behaviour profile, were closely studied (Shamir & Eilam, 2015). Upon establishing this basis, a plethora of cognitive and behavioural leadership profiles were set up including charismatic leadership, transactional leadership, transformational leadership, and authentic leadership. These four styles were evaluated to underscore the temporal progression of leadership, as well as perspectives from diverse sectors and leaders. These leadership styles might still persist in organisations, and the goal of this review was to pinpoint the influential leadership methodologies that are presently emerging or already in place within organisations.

In this study, the MLQ was utilised to assess leadership styles, albeit only transactional and transformational leadership were utilised. Given the prevalence of charismatic leadership traits within the other styles, only these two styles were recognised. Authentic leadership, an emerging concept, has ties with transformational leadership but differs slightly. Transactional and transformational leadership evaluations have undergone extensive research, and demonstrate both validity and reliability, and can be statistically analysed (Mbama & Ezepue, 2018).

The satisfaction of employees was underscored as another crucial aspect. This concept was elaborated to elucidate its precise definition. Numerous models exist that articulate employee satisfaction, including those proposed by Vilares and Coelho (2000), Fosam, Grimsley and Wisher (1998), Eskildsen and Dahlgaard (2000), Santos-Vijande (2007), and Alvares-Gonzalez (2001). Alongside the previously outlined models, the influences affecting employee satisfaction were explored. Employee dissatisfaction was also recognized, with consideration given to its potential impact on an organization. The Job Satisfaction Survey (JSS) developed by Spector (1994) is used to measure the contentment of employees. This approach seeks to identify factors that foster employee satisfaction. The goal of this evaluation is to pinpoint quantitative, cognitive, and behavioural contributions. The JSS highlights the most dominant attributes in the workplace leading to senior level positions, and was also employed to determine the most significant influences on happiness. This instrument is reliable and has withstood the test of time.

Leadership efficacy emerged as another variable. This element was delineated in the context of present-day organisations, which can be subdivided into three distinct tiers: individual, team, and organisational. The key factors for successful leadership were pinpointed and explained in relation to employee satisfaction. To gain a deeper comprehension of leadership performance, performance models were identified and expounded. The importance of continuously maintaining employee satisfaction through performance indicators was underscored.

For this purpose, Koopmans et al. (2012) devised the Individual Work Performance Questionnaire (IWPQ), a tool enabling leaders to self-evaluate their performance across multiple areas. Alongside determining performance levels across various work domains, this method identifies and quantifies additional tasks that leaders might undertake. It also evaluates emotional intelligence by considering leader reactions to unexpected performance-related stimuli. The IWPQ enables leaders to gauge their individual, team, and organisational productivity.

#### 2.7 CONCLUSION

This chapter examined and elaborated upon leadership profiles by linking competences, capabilities, and behaviours. The preceding explanation demonstrates how various techniques complement one another in identifying and then developing leaders in a particular manner. The leadership constructs outlined in this chapter enable the identification of competences and skills that may be classified under a particular leadership development profile. In concluding the literature study, the factors were connected identifying what had been examined in each leadership profile, employee happiness, and leadership performance. Before administering the selected measuring instruments, this information was analysed to evaluate the influence of each leadership profile and leadership as a whole on satisfaction and performance.

# **CHAPTER 3: RESEARCH DESIGN & METHODOLOGY**

#### 3.1 INTRODUCTION

This chapter describes the study's research methodology and design. The methodology examines the research process as well as the techniques and processes employed in the study (Abutabenjeh & Jaradat, 2018). Sileyew (2019) described research methodology and design as the process within which researchers use tools to achieve the study's purpose, and it would explain how the findings were obtained. According to Dudovskiy (2018), research methodology focuses on the process of formulating the research issue and goals and presenting the study's findings. In this chapter, the validity and dependability of the instrument are also described. If it addresses the research topic, the methodological approach should be determined by the research problem to be addressed (Saunders, Lewis, & Thornhill, 2016). The chapter concludes by discussing how the present study accomplished these standards.

#### 3.2 RESEARCH PHILOSOPHICAL APPROACH

In order to provide a structure for the research, post-positivism was chosen as the guiding paradigm. No one research philosophy can be deemed superior to the others since each one reflects the researcher's unique set of values and worldview (Saunders et al., 2016). The assumptions and ideas that inform a researcher's approach to a study problem shape the research philosophy adopted (Saunders et al., 2016). The researcher adopted a post-positivist (or post-empirical) stance in order to emphasise a multidimensional knowledge and viewpoint on the research study via the use of pre-existing theoretical frameworks (Parsons, 2017).

Leadership abilities appropriate for the financial services industry and their impact on performance at specific financial institutions were evaluated from the perspectives of both senior leadership. In the first chapter of this thesis, the developed hypotheses were addressed. Discovering the underlying assumptions that set each research philosophy apart is crucial for making sense of them. Ontology, epistemology, and axiology are three examples of such presumptions. The researcher's viewpoint is informed by ontology, which determined how the researcher sees the world of industrial psychology and leadership. Epistemology considers the researcher's assumptions about knowledge and what counts as valid, acceptable evidence. Axiology examines the importance of values and ethics in the research process, taking into account the researcher's own values as well as those of the people who participate in the study (Robson and McCartan, 2016). When doing research, one's guiding philosophy should represent one's ideals.

In light of the assumptions presented in Table 3.1 below, we may now examine the post-positivist traits that have been mentioned so far.

Table 1:
The characteristics of post-positivism

Post-positivism			
Ontology	Epistemology	Axiology	Typical methods
Real, external,	Scientific methods	Value-free research	Typical deductive,
independent			highly structured,
One true reality	Observable and	Researcher is	large samples,
(universalism)	measurable facts	detached, neutral	typically quantitative
		and independent	methods of analysis
Granular (things)	Law-like	Researcher	
	generalisations	maintains objective	
	Numbers	stance	
Ordered	Casual explanation		
	and prediction as		
	contribution		

Source: Saunders et al., (2016, p.136)

There are several research philosophies, and each assumption may be used within any of them (Moses, 2019). The researcher has some leeway in deciding which philosophy to follow, given the nature of the research subject being investigated (Saunders & Townsend, 2016).

# The research explored:

- The empirical relationship nature between 4IR leadership competency profiles and current leadership styles in a banking environment.
- Whether there are differences in leadership growth development when building the competence or capacity of individuals of different gender, race, age and marital status as expressed in the sample of respondents.
- The socio-demographic variables (age, race, gender, marital status, number of years in a position and tenure in private service) of the subgroup within this study
- Lastly, to create a simple competency or capability framework to develop leaders for the 4IR and VUCA world.

#### 3.3 RESEARCH DESIGN

Research design may be thought of as the road map or blueprint that guides researchers as they collect and organise data to answer their objectives (Shet, Patil, & Chandawarkar, 2017). Research design is used to answer research questions and achieve research aims in the most systematic, thorough, and cost-effective manner possible. The research design should include the conditions that will guide the selection of the data collecting technique and, ultimately, the analysis of the data. It is crucial for the researcher to put in the time and effort necessary to carefully plan out the study design so that the research goals, hypotheses, analyses, interpretations, and descriptions may be realised (Saunders et al., 2016). Exploratory, descriptive, and explanatory research are the three primary kinds or approaches used in the research process (Sileyew, 2019). In order to better define and comprehend a problem, issue, or phenomenon one does not fully understand, exploratory research involves the use of openended questions to acquire insights into the subject of interest. It can morph and adapt to new conditions. Descriptive studies may be seen as an extension of exploratory research. It also seeks to get an accurate picture of events, people, or circumstances by gathering descriptions of such things. Finally, explanatory studies concentrate on the link between two or more variables in an effort to demonstrate a causal relationship between them.

According to Christiansen and Chandan (2017), descriptive research may be further subdivided into a number of other types of research designs, including correlational, case study, and observational. Descriptive research was employed in this study, especially a correlational research design, to discover, analyse, and characterise the connection between current management development processes, leadership competency profiles, and abilities needed for the 4IR. Quantitative studies often use a method known as "correlational study design" (Arkkelin, 2014). Since the study's overarching goal is to strengthen leadership development in South African banks so that they can persevere in the 4IR, a correlational research methodology was used. The primary purpose of this correlational study was to characterise and explain how leadership abilities for the modern digital era (or lack thereof) impact on the performance and satisfaction of bank employees in South Africa.

# 3.3.1 Correlational Research Design

The link or association between two variables is measured using a correlational study methodology, which does not involve the researcher influencing either of the variables (Sileyew, 2019). Something having a quantity or quality that may change is referred to as a variable (Sharma, 2019). Typically, there are two variables: an independent variable that

represents the source of an event and a dependent variable that is anticipated to change in response to the results of modifying the independent variable (Saunders et al., 2016). In this study, the rapid change dynamic of the 4IR makes the independent variable management development approaches, which are insufficient for developing leaders. Leadership abilities and/or talents are the dependent variable. Quantifying the strength and direction of the relationship between the dependent and independent variables is the aim of this research. When there is a positive correlation, the variables move in the same direction; when there is a negative correlation, the variables shift in the opposite ways; and when there is no connection at all, the variables do not interact (Kumar, 2019). This study sets out to determine whether our leadership profiles are prepared for the 4IR and to establish which skills sets competency or capacity are more crucial for the 4IR. Finally, it aims to develop a capacity and competence profile to prepare leaders for the variety of work styles in the volatile work environment known as VUCA. As the researcher sought to link and ascertain the relationship between two variables, namely, digital age leadership competences and futureproof skill sets, the study was a correlational one. The research looked at the leadership skills, asking whether they were compatible with the new digital workplace and how that affected worker performance (Anderson & Adams, 2019).

#### 3.3.2 Quantitative Research

Given the study's correlational research design, a quantitative methodology was chosen as the most relevant for achieving the study's aims. In order to comprehend a phenomenon and explain its relationships, researchers have traditionally relied on quantitative methods (Sileyew, 2019). Quantitative methods are all-encompassing because of their emphasis on numerical data and on divergent reasoning to characterise the topic under study (Saunders et al., 2016; Sekaran & Bougie, 2016). The concept of post-positivism, the use of logical reasoning, and highly organised data gathering technologies are often linked with quantitative research. The data utilised to verify the hypotheses and validate the theory was collected using a well-designed questionnaire. Methods of collecting and analysing numerical data (such as surveys and statistical analyses) are commonplace in quantitative research. Results using quantitative approaches, while they may not provide the whole picture of an organisation, may be regarded as objective and generalisable. (Saunders et al., 2016).

#### 3.3.3 Study population and sample size

According to Sileyew (2019), a sample is a selection of people or things from a larger population that is used to gather information about the population as a whole. It is important

to have a large enough sample to be able to extrapolate from the participants in the research to the whole population, hence this is accomplished using a sample size (Kumar, 2019).

The participants in this research were bank managers and L&D leaders. Insufficient time and materials prevented data collection from the full population. According to Burns & Bush (2016), the population includes everything that has the qualities that prompted the study in the first place. The study population is composed of approximately 100 leaders and 100 L&D managers.

Bank leaders may be leaders of self, leaders of others or leaders of function. Leaders are also classified as junior, mid, senior level in ranks in line with the Employment Equity Act classification (Yukl, 2012). The rationale for selecting leaders is that the leader is the recipient of the leadership development programmes (Northhouse, 2014).

The WEF (2018) report outlined the value add of having a Millennial Board. A millennial Board appoints millennials into advisory roles to drive strategy and impact. Banks have adopted the millennial board concept to varying degrees of success. The age demographic of leaders who completed the survey varied.

# 3.3.4 Sampling

Dudovskiy (2018) argues that in order to prevent producing biased observations, the sampling approach has to guarantee that the sample size is representative of the population. It is important for a researcher to make informed conclusions based on their sample data. Sampling is the method through which a representative subset of a larger population is selected for study (Abutabenjeh & Jaradat, 2018). The sample needs to be representative of the stated target group. Choosing a sample frame, or the persons or items in a target population from whom data may be gathered, is another important stage in choosing a sample (Kumar, 2019).

The two most common methods of sampling are probability sampling and non-probability sampling (Saunders et.al, 2016). In contrast to non-probability sampling, which selects individuals at random, probability sampling offers each member of the target population an equal chance of being included in the sample (Elfil & Negida, 2019). Probability sampling was used here. Random selection (also known as probability sampling) was used to pick the sample for this research, which comprised 100 leaders and 100 L&D managers from various organisations throughout the world (not only banks and financial institutions), thus a

combination of a 200 sample. According to Theofanidis and Fountouki (2018), statistical tests are negatively affected when either the sample size is too little to make generalisations, or the sample size is too large to draw any conclusions. Since this research used a quantitative approach, it was only fitting that the researcher utilise a sampling method that takes this into account: probability sampling.

#### 3.4 DATA COLLECTION

Data collection is the systematic collecting of information about persons or items and their settings (Shet et al., 2017). According to Kumar (2019), data collection should use equipment to methodically collect primary or secondary data pertinent to the aims of a research.

#### 3.4.1 Research instrument/tool

The data collection instrument is the instrument used for data collection. For this study, standardised questionnaires were used to collect information. Saunders et al. (2016) defined surveys as an umbrella word for all techniques of data gathering in which homogeneous sets of questions are given in a pre-set sequence. As a result, surveys are more often used for descriptive or explanatory research.

The following survey was sent using a Microsoft Forms link:

- a biographical questionnaire to collect personal information about the sample, such as race, gender, age, qualification, function in the organisation, and organisational hierarchy level;
- the Multifactor Leadership Questionnaire (MLQ) established by Bass and Avolio (1990);
- Spector's Job Satisfaction Survey (JSS) produced by Spector (1994); and
- Koopmans et al. (2012)'s Individual's Work Performance Questionnaire (IWPQ).

## 3.4.2 Survey characteristics and advantages

According to Kumar and Singh (2012), a survey is a research tool in which responses are acquired from a sample using instruments or in which the behaviours of respondents are observed and documented. In research studies, surveys are a frequent method of data gathering; researchers distribute questionnaires to a random sample of people, collate the

results, and do statistical analysis (Saunders et al., 2016). Surveys often collect quantitative data from respondents in order to analyse, explore, interpret, and generalise the findings. Badu and Appiah (2017) observed that surveys have evolved into a scientific and dependable method of data collection for evaluating collected information. Creswell (2013) notes further that surveys often capture the perspectives of respondents on their ideas, attitudes, and beliefs, and that doing so is an efficient and cost-effective method for acquiring the required information regarding the target population or a sample of it. Ensure that surveys make sense and are structured in a manner that makes it simple for respondents to record the information, views, and attitudes you need (Bell, Bryman & Harle, 2019). It is standard practice to assemble survey replies using Likert scales.

Behaviours and attitudes are evaluated using Likert scales, which require respondents to choose from a number of items. Typically, you may choose a degree of agreement ranging from "strongly disagree" to "strongly agree" for comments of this sort (Bell et al., 2019). According to Badu and Appiah (2017), respondents often choose one of five assertions with varying weights, enabling researchers to do statistical analysis. Respondents' selections are indicative of their agreement with the allegations and naturally allow them to express their opinions (Creswell, 2013). The questions on the questionnaire should be organised such that comparable ones are grouped together, making the procedure easier for respondents (Saunders et al., 2016). The researcher opted to use a five-point scale on the Likert survey instrument rather than the more common seven-point scale since it eases respondents' minds and promotes more detailed and frequent responses (Creswell & Plano Clark, 2011).

For this study, a structured questionnaire was crafted to measure various critical aspects through a concise format. The questionnaire is sectioned into multiple parts, starting with Section A, which captures essential demographic data through three key items: the respondent's age, their department, and their managerial status, using a checkbox method for responses. Following this, the core sections from B to F focus on different perceptual metrics relevant to workplace dynamics. For example, Section B investigates job satisfaction through carefully chosen questions, Section C examines perceptions of employee empowerment, Section D explores communication patterns, and Section E and F assess management reporting and organisational commitment, respectively. Each question in these sections is measured on a 5-point Likert scale, providing a clear and uniform method for respondents to express their level of agreement or disagreement with the statements posed.

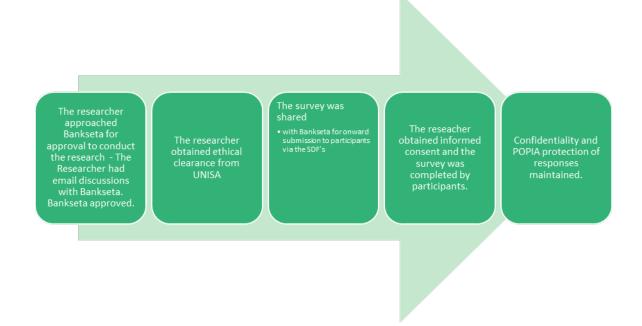
## 3.4.3 The process of collecting data

This survey was made using Microsoft Forms. Bankseta received the survey link and cover message, and then sent it to the Banking Seta's Skills Development Facilitators (SDFs). SDFs disseminated the poll to Bank-level executives and L&D managers. In addition, eligible individuals were selected and sent an email with a link to the questionnaire and a covering note.

An SDF is designated inside the company to compile the Workplace Skills Plan and Annual Training report required by Bankseta and the Skills Development Act (No. 97 of 1998, as amended). The Skills Development Levy is a tax of one percent of an employer's salary bill in South Africa that is meant to fund training and education programmes. The money is for training and education purposes for the staff. The SDF is responsible for coordinating training and development efforts to implement the Workplace Skills Plan, and for providing input on the Annual Training Report (Anderson & Adams, 2019). As a result, the bank has received a return on some of the skills development charge it originally collected.

Finding relevant executives and L&D managers using social networking sites like LinkedIn and emailing them directly was another method of data collecting.

Figure 3:
The data collection process (Author, 2022)



The method of collecting data was consistent with random sampling principles. Participants were required to (a) be of any age, race, or gender, and (b) be currently working as a leader or L&D manager at a bank. This study's sample size and technique of sampling were consistent with other previous research of a similar kind.

## 3.5 DATA ANALYSIS

Data analysis, as argued by Arkkelin (2014), is crucial in a study since it provides context to the numbers collected by a measuring device. The wider populace has little use for numbers without context. Raw quantitative data doesn't mean anything to people, which is why it must be transformed into digestible, actionable insights (Saunders et al., 2016). IBM (SPSS), a statistical software package version 27.0 for Windows and, Microsoft excel sheets were used to analyse all the data acquired from Microsoft Forms in this research. The data was analysed using descriptive statistics, which provided descriptions of the population in the form of summary charts, figures, and tables. Furthermore, inferential statistics, including chi-square test analysis, were utilised to examine the sample data and draw conclusions about the population (Arkkelin, 2014). In the discussion, we compared the study results to the literature. Descriptive statistics were employed to provide overviews of the population in the form of tables and charts, while inferential statistics were utilised to establish any associations between the study's two main variables. Statistical analysis based on the chi-squared distribution was performed to look for patterns of dependency and association between the variables of interest. All inferential statistics were calculated using SPSS software, and the replies were classified and grouped based on their commonalities.

#### 3.6 VALIDITY AND RELIABILITY

Consistency, or reliability, is a principle measure defined by the persistent and unvarying results generated by an instrument of measurement when the subject under scrutiny remains unchanged (Saunders et al., 2016). Assurance of the questionnaire's validity was achieved through collaboration with the overseeing academic and the execution of pre-experimental testing. Potential influences such as the participants' level of leadership acumen might potentially impact the responses received, potentially undermining the reliability of the survey results if participants misunderstand or misinterpret the questions posed. A group of ten corporate executives and Learning & Development (L&D) managers from banks, unaffiliated with the primary research, were invited to partake in the questionnaire as a preliminary trial; their feedback was instrumental in refining and enhancing the survey's validity. Cronbach's alpha value was utilised to determine the reliability of the instrument. The internal consistency

of the scale, or the uniformity of its elements, contributes to the reliability of the instrument (Taherdoost, 2018). Cronbach's alpha coefficient is the most frequently applied indicator of consistency.

The validity of an instrument is an assessment of its accuracy in representing the researcher's construct(s) of interest. Four types of validity evaluations exist: conceptual, internal, content, and criterion-related (Saunders et al., 2018). The content validity of the instrument was established through the supervisor's thorough examination and response to the questionnaire. The aim was to ensure that the researcher's personal biases and assumptions did not skew the questions within the instrument. Content validity relates to the comprehensiveness of the questionnaire's items in addressing the research topics (Taherdoost, 2018).

#### 3.7 ASSUMPTIONS, LIMITATIONS AND DELIMITATIONS

The process of data collection involves the systematic aggregation of relevant information about individuals, objects, and their respective environments (Shet et al., 2017). As stated by Kumar (2019), data collection should employ suitable tools to meticulously assemble primary or secondary data relevant to the research objectives.

#### 3.7.1 Assumptions

Assumptions, according to Bhandari (2020), are facts about the world that cannot be directly verified but are still accepted on faith. If a researcher, for instance, distributes a survey and expects participants to respond honestly, they are assuming. This research is predicated on two presumptions. The first was that participants would answer honestly and thoroughly in the survey. The second presumption was that everyone who filled out the surveys did so with an adequate level of comprehension.

# 3.7.2 Limitations

According to Elfil and Negida (2019), a constraint is a possible shortcoming in the study that is outside the control of the researcher. Researchers can identify shortcomings in anything that humans attempt to achieve. If a study is conducted using a convenience sample instead of a random sample, the findings cannot be extrapolated to the whole population (Diamantidis & Chatzoglou, 2019). Take accomplishment tests as an example; the data are only as reliable as the tests themselves. Time might also be a constraint. It's possible that a study of a certain historical period would only be representative of that time and would be affected by its specific

characteristics (Salthouse, 2011). The researcher has the responsibility to explain the study's limitations without influencing the results.

#### 3.7.3 Delimitations

Delimitations, as described by Northouse (2014), are the features that establish the limits and borders of a research. Delimitations are inside the researcher's sphere of influence. The scope of a study might be constrained by the researcher's questions, aims, theoretical framework, variables of interest, and sample population. The problem's scope was the first limiting factor. The researcher may have overlooked relevant alternatives during issue screening and selection. In addition to explaining the objectives of the study and what it hopes to achieve, the purpose statement clarifies what the research will not address.

In a nutshell, this research relied on participants' honesty in answering survey questions and the reliability of the data they gave. Participant availability and openness to participate throughout the study's allotted time frame were two of the study's constraints. The assumptions, restrictions, and limitations that were considered in the course of this research provided clarity on the subject matter covered.

#### 3.8 CONCLUSION

The chapter elaborated on the methods of data collection, including protocols, tools, analytic techniques, and concerns of data validity. This descriptive study followed the concept of post-positivism with a quantitative research approach. The chapter outlined the demographic, sampling methodology, and process through which the instrument was created, pretested, and distributed. Also examined were the data's validity and reliability. The subsequent chapter will present the study's results by presenting the data, describing the statistics, and explaining the rating scales that will be used to convert the study's findings into recommendations.

### CHAPTER 4: PRESENTATION, INTERPRETATION AND DISCUSSION OF RESULTS

This chapter presents the results of the data analysis and discusses the findings of the study. Data was gathered using a variety of questionnaires, including the Multifactor Leadership Questionnaire, Job Satisfaction Survey, Individual Work Performance Questionnaire, and others containing biographical components. Data analysis was carried out using several statistical techniques, such as descriptive statistics, binomial tests, cross-tabulations, and correlations. The principal objective of this chapter is to scrutinise, interpret, and discuss the outcomes derived from the data assembled through the questionnaires disseminated among banking executive members and L&D managers. SPSS version 28.0 software was utilised to conduct data analysis, facilitating the computation of descriptive and inferential statistics to discern trends, associations, and patterns within the data.

### 4.1 THE SAMPLE

In total, 200 questionnaires were issued, with 158 returned, resulting in a response rate of 79%. This section provides an extensive analysis of the sample, including the demographic characteristics of the respondents, such as age, gender, and years of experience in their current roles. Comprehending the structure of the sample is crucial for interpreting the results and assessing the applicability of the outcomes to the larger population.

### 4.1.1 Section A: Biographical data

The demographic data included in the study reveals the demographic composition of the respondents, vital for contextualizing the research findings.

This section encapsulates the demographic profiles of the respondents.

**Table 2:**Biographical characteristics of the respondents.

		Count	Percent	p-value	
Age (years)					
	20 - 30	14	8.9		
	31 - 40	58	36.7	< 0.001	
	41 - 50	52	32.9	< 0.001	
	51 - 60	34	21.5		
Gender					
	Male	55	34.8	10.004	
	Female	103	65.2	< 0.001	
Race					
	African	58	36.7		
	Coloured	34	21.5	0.004	
	Indian	24	15.2	0.001	
	White	42	26.6		
Marital Status					
	Single	43	27.2		
	Married	100	63.3	< 0.001	
	Divorced	15	9.5		
Sector					
	Banking	148	93.7	4 0 004	
	Other (financial sector)	10	6.3	< 0.001	
Number of years of					
experience	1 - 2	4	2.9		
	3 - 5	9	6.6		
	5 - 10	36	26.3		
	10 - 15	25	18.2	< 0.001	
	15 - 20	28	20.4		
	> 20	26 35	25.5		
Highest Qualification	- 20	33	20.0		
i iignesi Qualilication	Matria	40	6.0		
	Matric	10	6.3		
	Certificate or Diploma	71 26	44.9		
	Degree	36	22.8	< 0.001	
	Postgraduate Diploma or Honours	18	11.4		
	Masters	22 1	13.9 0.6		
Docition	Doctorate	I	0.0		
Position	l and a set to set	4=	0.5		
	Leader of function	15	9.5		
	Leader of others	55	34.8	< 0.001	
	Leader of self /professional specialist	83	52.5		
	Executive / Director	5	3.2		

		Count	Percent	p-value
Level				
	Learning & Development	59	37.3	
	Junior Leadership / Management	34	21.5	
	Mid-Level Management/ Leadership	40	25.3	< 0.001
	Senior Leadership / Management	18	11.4	
	Executive Leadership	7	4.4	

*Note.* The p-value in the context of this study is an indication of the statistical significance of the observed distributions across the various biographical categories (such as age, gender, race, marital status, etc.). A lower p-value (typically below 0.05) denotes that the observed distribution across these categories is statistically significant and not likely a result of random variation. The p-value of < 0.001 is deemed highly statistically significant. This conveys a confidence level exceeding 99.9% that the obtained results are not random, and a genuine effect or difference is present.

The p-value reported for each of these demographic characteristics suggests a significant representation across the categories. Here below each characteristic is discussed in detail.

**Age:** The significant p-value (<0.001) for age distribution indicates a genuine variance in the ages of respondents, supporting the finding that leadership roles in the banking sector are predominantly occupied by those aged 30 and above. The age distribution of the respondents is skewed towards those older than 30 years, with the majority (68.6%) of participants falling within the 31-50 age range. This is consistent with the trend observed in the banking industry, where employees tend to have more experience and are older (Ashforth & Saks, 2019). Moreover, the age distribution may reflect the fact that leadership roles often require more experience and maturity (Harrison & Bazzy, 2019).

**Gender:** The p-value for gender is also less than 0.001, signifying a statistically significant difference in the gender representation among the respondents. The gender distribution in the sample reveals a higher proportion of female respondents (65.2%) compared to male respondents (34.8%). This finding is consistent with the increasing representation of women in the banking sector and leadership roles (Dixon-Fowler et al., 2013). However, it is important to note that gender disparities still exist in senior leadership positions, and further research is needed to understand the factors contributing to this imbalance (Catalyst, 2021).

**Race:** With a p-value of 0.001, the racial distribution in the study reflects the diverse racial representation within the South African banking sector sample utilised. The racial distribution of respondents in the study is diverse, with the highest percentage of respondents identifying as African (36.7%), followed by White (26.6%), Coloured (21.5%), and Indian (15.2%). This diversity is reflective of South Africa's multicultural society and is in line with the transformation efforts in the country's corporate sector to promote racial equality (Thomas & Ely, 1996; Booysen, 2007).

**Marital Status:** The statistically significant p-values (<0.001) in these categories support the fact that the marital status and the sector of work are not evenly distributed among the respondents. The majority of respondents (63.3%) were married, followed by single (27.2%) and divorced (9.5%) individuals. This finding is similar to previous studies that have examined the demographic characteristics of professionals in various industries (Kossek et al., 2014).

**Sector:** As expected, the majority of respondents (93.7%) were from the banking sector, given the focus of the study. A small percentage (6.3%) of respondents were from other financial services sectors, which could provide additional insights into leadership competencies and capabilities in different financial services industries.

**Years of Experience:** The p-value (<0.001) for years of experience substantiates the study's findings regarding the respondents' significant industry experience. Most respondents (70.2%) had more than five years of experience, indicating a sample with significant industry experience. This is essential for understanding the leadership competencies and capabilities relevant in the 4IR context (DeRue et al., 2012).

**Highest Qualification:** The highly significant p-value (<0.001) corroborates the finding that respondents are highly educated, reflecting the importance of formal education in leadership roles in the 4IR context with 48.1% holding at least a bachelor's degree, and a further 26.1% having postgraduate qualifications. This finding highlights the importance of formal education in leadership roles. (Bell et al., 2014).

**Position and Level:** The respondents held a variety of leadership positions, ranging from leaders of self/professional specialists (52.5%) to executive/director roles (3.2%). The most representative category of participants were involved in learning and development (37.3%), followed by mid-level management/leadership (25.3%) and junior leadership/management (21.5%). This diversity in leadership positions and levels ensures a comprehensive

understanding of leadership competencies and capabilities in the 4IR context (Avolio et al., 2009).

Overall, these statistically significant p-values endorse the observed distributions in the demographic data and inform the inferred insights.

### 4.2 RELIABILITY STATISTICS

The accuracy and reproducibility of any research is dependent on two crucial elements: reliability and validity. The integrity and reliability of the research instrument were confirmed by calculating Cronbach's alpha coefficients for each scale incorporated in the survey (Hair et al., 2010). For any new construct, an alpha coefficient of 0.60 or above signifies satisfactory reliability (Nunnally, 1978). All the scales demonstrated a gratifying reliability level, with the Cronbach's alpha coefficients lying between 0.70 and 0.90. The Cronbach's alpha values for each item in the questionnaires utilised in this study are displayed in the subsequent tables.

### 4.2.1 Multifactor Leadership Questionnaire

**Table 3:** *MLQ describing reliability statistics.* 

Section	Number of Items	Cronbach's Alpha		
	Of Itemis	Aipiia		
Idealised influence	3	0.905		
Inspirational influence	3	0.895		
Intellectual influence	3	0.879		
Individualised influence	3	0.863		
Reward influence	3	0.799		
Affective commitment	2	0.381		
Continuance commitment	2	0.320		
Normative commitment	2	0.702		
Overall commitment	6	0.637		

*Note.* The MLQ measures various leadership behaviours and styles, and leadership outcomes. Cronbach's alpha scores for most of the sections in the MLQ were above the acceptable threshold of 0.60. However, the Affective commitment (0.381) and Continuance commitment (0.320) sections had relatively low scores. These relatively low scores indicate that the items in these sections may not be consistently measuring the same construct or that there might be a low correlation between the items. In other words, respondents might have

interpreted the items differently or inconsistently, resulting in lower internal consistency and, hence, lower reliability scores (Pallant, 2007). Several factors could contribute to this low reliability, many of which might be grounded in the complexities of measuring affective and continuance commitment:

Affective commitment refers to an employee's emotional attachment to, identification with, and involvement in the organisation (Allen & Meyer, 1990). This type of commitment might vary greatly between individuals due to personal experiences, personal values, and emotional states that are often challenging to capture through standardised questionnaires.

Continuance commitment, on the other hand, represents an employee's perceived cost associated with leaving the organisation (Allen & Meyer, 1990). The variance in this construct might be influenced by factors such as job market conditions, individual's employability, and alternative job prospects, which can change over time and can be subject to individual interpretation.

Another potential reason could be the cultural context. Research has shown that cultural norms and values can significantly influence the interpretation and manifestation of commitment (Ritzer, 2011). In a culturally diverse setting, like South Africa, it is plausible that different cultural understandings of affective and continuance commitment could have contributed to the low reliability scores.

Finally, it is also important to note the relatively small number of items (two) for both of these sections in the questionnaire. With fewer items, the chance of obtaining a high Cronbach's alpha is reduced because this statistic is sensitive to the number of items in the scale (Tavakol & Dennick, 2011).

Given these factors, researchers should consider refining these sections or using additional measures to improve the reliability of the scales (Bass & Avolio, 1995; Vandenberg & Lance, 2000).

## 4.2.2 Job Satisfaction Survey

**Table 4:** *JSS reliability statistics* 

Section	Number of	Cronbach's
Section	Items	Alpha
Pay	4	0.702
Promotion	4	0.784
Supervision	4	0.818
Fringe Benefits	4	0.656
Contingent rewards	4	0.764
Operating conditions	2	0.681
Coworkers	4	0.692
Nature of work	4	0.791
Communication	4	0.722
Total Satisfaction	36	0.921

*Note.* The JSS measures different aspects of job satisfaction, and all sections in the JSS had acceptable Cronbach's alpha scores, ranging from 0.656 (Fringe Benefits) to 0.818 (Supervision). The Total Satisfaction score had a high reliability (0.921), indicating that the overall measure of job satisfaction is consistent across the different sections (Spector, 1985; Sousa-Poza & Sousa-Poza, 2000).

## 4.2.3 Individual Work Performance Questionnaire

Table 5: MLQ reliability statistics

Section	Number	Cronbach's		
Section	of Items	Alpha		
Task performance	5	0.882		
Contextual performance	8	0.902		
Counterproductive work behaviour	5	0.862		

*Note.* The IWPQ evaluates diverse aspects of work performance. Each section showed high Cronbach's alpha values, with the range extending from 0.862 (Counterproductive work behaviour) to 0.902 (Contextual Performance). This range suggests that the IWPQ offers a

reliable method for assessing individual work performance in this research (Koopmans et al., 2013).

The reliability figures for most of the sections in the MLQ, JSS, and IWPQ exceeded the suggested Cronbach's alpha score of 0.60, pointing towards a satisfactory degree of scoring consistency within the research. However, the sections dealing with Affective Commitment and Continuance Commitment in the MLQ scored lower on reliability. Researchers should contemplate refining these sections or introducing supplementary measures to boost the reliability of these scales.

## 4.3 FACTOR ANALYSIS

Factor analysis serves as a vital statistical approach predominantly used for the condensation of data. The central objective is to detect and quantify the latent variables or underlying factors within a dataset. This method proves particularly beneficial in survey-based research, allowing for the representation of multiple questions via a small number of theoretical factors (Hair et al., 2019). Factor analysis is versatile and helps researchers to discover concealed patterns in data (Abdi & Williams, 2010). It also aids in identifying the underlying structure of the data, contributing to hypothesis testing and data interpretation (Child, 2006). It is crucial to understand that even if factors are typically interpreted, named, and discussed as tangible entities, one does not have to believe in the existence of factors to conduct a factor analysis. In this context, factor analysis assists in identifying whether various measures are indeed evaluating the same underlying construct. If this is confirmed, these measures can be consolidated to form a new variable—a factor score—consisting of a score for each participant based on the factor.

### 4.3.1 KMO and Bartlett's Test

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity are two statistical tests deployed to gauge data suitability for factor analysis (Dziuban & Shirkey, 1974). The KMO statistic signifies the proportion of variance in the variables potentially attributable to underlying factors. Values nearing 1.0 suggest the usefulness of a factor analysis for the data. If the KMO value drops below 0.50, the results generated from the factor analysis may lack informative value (Kaiser, 1974). Conversely, Bartlett's Test of Sphericity assesses the hypothesis that the correlation matrix is an identity matrix, which would suggest that the variables are unrelated and unsuitable for structure

detection. Small significance levels (less than 0.05) propose the usefulness of factor analysis for the data (Bartlett, 1954).

Table 6:

KMO and Bartlett's Test

### **Multifactor Leadership Questionnaire**

Kaiser-Meyer-Olkin Measure Adequacy.	0.932	
	Approx. Chi-Square	3075.658
Bartlett's Test of Sphericity	df	210
	Sig.	< 0.001

## **Job Satisfaction Survey**

Kaiser-Meyer-Olkin Measure Adequacy.	0.840	
	Approx. Chi-Square	2789.100
Bartlett's Test of Sphericity	df	496
	Sig.	< 0.001

### **Individual Work Performance Questionnaire**

Kaiser-Meyer-Olkin Measure Adequacy.	0.837	
	Approx. Chi-Square	1757.148
Bartlett's Test of Sphericity	df	153
	Sig.	< 0.001

Note. KMO and Bartlett's Test play an integral role in assessing the applicability of data for factor analysis (Field, 2018). High KMO values (near 1.0) suggest that the data may benefit from factor analysis, while values below 0.50 imply that the output of the factor analysis may not be particularly enlightening (Kaiser, 1974). Bartlett's Test of Sphericity evaluates the hypothesis that the correlation matrix is an identity matrix, which would suggest that the variables are unrelated and thus unsuitable for structure detection (Bartlett, 1954). Small significance level values (less than 0.05) suggest that the data might benefit from factor analysis.

In this study, all the necessary conditions for factor analysis were met. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy value exceeded 0.500, and the Bartlett's Test of Sphericity significance value was less than 0.05 for all questionnaires (Multifactor Leadership Questionnaire, Job Satisfaction Survey, and Individual Work Performance Questionnaire). This outcome suggests that factor analysis is suitable for these data sets.

## 4.3.2 Rotated Component Matrix

The rotated component matrix is a crucial outcome of factor analysis as it displays the factor loadings for each variable on the extracted factors following rotation (Hair et al., 2019). Rotation techniques, such as Varimax with Kaiser Normalisation, are used to simplify the interpretation of factors by maximising the variance of factor loadings within factors (Kaiser, 1958). High factor loadings (typically above 0.5) suggest a strong association between a particular variable and the underlying factor, while low loadings indicate a weak or non-existent relationship (Hair et al., 2019). By analysing the content of items with high loadings on each factor, researchers can identify the underlying constructs measured by these items and consequently label the factors (Abdi & Williams, 2010). This concept is further elucidated in the subsequent rotated component matrix.

**Tables 7-9** *Rotated Component Matrix* 

## **Multifactor Leadership Questionnaire**

				Comp	onent			
	1	2	3	4	5	6	7	8
My leader makes others feel good to be around him/her.	0.594							
I and others have complete faith in my leader.	0.693							
Others are proud to be associated with my leader.	0.630							
My leader says in a few simple words what we could and should do.			0.590					
My leader provides appealing images about what the organisation can do.	0.633							
My leader helps us find meaning in our work.	0.728							
My leader helps others to think about old problems in new ways	0.874							
My leader provides others with new ways of looking at difficult and puzzling things.	0.823							
My leader calls attention to what benefits we can get for what we accomplish.	0.609							
My leader helps us his/her members to develop ourselves.	0.689							
My leader lets us know his thoughts about what we are doing.	0.823							
My leader gives personal attention to us his/her members when we seem dejected.						0.720		
My leader tells us what to do if we want to be rewarded for our work.				0.786				
My leader provides recognition/rewards when we reach our goals.	0.687							
My leader gets us to rethink ideas we had never questioned before.	0.773							
It would be very hard for me to leave my organisation right now, even if I wanted to.		0.810						
Affective commitment_19_R					0.945			
I really feel as if my organisation's goals and missions are my own.								0.726
Right now, staying with my organisation is a matter of necessity as much as desire.							0.976	
Even if it were to my advantage, I do not feel it would be right to leave my organisation now.		0.845						
I would be very happy to spend the rest of my life with the organisation he/she leads.			0.496					

Idealizedinfluence 1 Idealizedinfluence 6 Idealizedinfluence\_11 Inspirationalinfluence 2 Inspirationalinfluence\_7 Inspirationalinfluence 12 Intellectualinfluence\_3 Intellectualinfluence\_8 Intellectualinfluence\_13 Individualizedinfluence\_4 Individualizedinfluence 9 Individualizedinfluence\_14 Rewardinfluence 5 Rewardinfluence\_10 Rewardinfluence\_15 AffectiveCommitment\_16 AffectiveCommitment 19 R ContinuanceCommitment\_17 ContinuanceCommitment 20 NormativeCommitment\_18 NormativeCommitment 21

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 16 iterations.

## **Job Satisfaction Survey**

				Co	mponent				
	1	2	3	4	5	6	7	8	9
I feel I am being paid a fair amount for the work I do.	0.782								
Raises are too few and far between.									0.621
I feel unappreciated by the organisation when I think about what they pay me.	0.563								
I feel satisfied with my chances for salary increases.	0.731								
There is really too little chance for promotion on my job.							0.818		
Those who do well on the job stand a fair chance of being promoted.	0.698								
People get ahead as fast here as they do in other places.							0.561		
I am satisfied with my chances for promotion.	0.671								
My supervisor is quite competent in doing his/her job.		0.793							
My supervisor is unfair to me		0.686							
My supervisor shows too little interest in the feelings of subordinates.		0.530							
I like my supervisor (line manager).		0.774							
I am not satisfied with the benefits I receive.								0.665	
The benefits we receive are as good as the ones most other organisations offer.						0.713			
The benefit package we have is equitable.	0.657								
There are benefits we do not have which we should have.						0.766			
When I do a good job, I receive the recognition that I should receive.	0.726								
There are few rewards for those who work here.									0.543
I don't feel my efforts are rewarded the way they should be.	0.609								
I have too much to do at work.					0.801				
I have too much paperwork.					0.804				
I like the people I work with.			0.514						
I find I have to work harder at my job because of the incompetence of people I					0.550				
work with.			0.040						
I enjoy my coworkers.			0.610		0.505		1		
There is too much bickering and fighting at work.			0.704		0.525				
I like doing the things I do at work.			0.764						
I feel a sense of pride in doing my job.			0.779						
My job is enjoyable.		0.444	0.677						
Communications seem good within this organization.		0.444		0.004					<del>                                     </del>
The goals of this organization are not clear to me.				0.621					
I often feel that I do not know what is going on with the organisation.				0.610					
Work assignments are not fully explained.				0.792			<u> </u>		

JSS\_Pay\_1 JSS\_Pay\_10\_R JSS\_Pay\_19\_R JSS\_Pay\_28 JSS\_Promotion\_2\_R JSS\_Promotion\_11 JSS\_Promotion\_20 JSS\_Promotion\_33 JSS\_Supervision\_3 JSS\_Supervision\_12\_R JSS\_Supervision\_21\_R JSS\_Supervision\_30 JSS\_FringeBenefits\_4\_R JSS\_FringeBenefits\_13 JSS\_FringeBenefits\_22 JSS\_FringeBenefits\_29\_R JSS\_Contingentrewards\_5 JSS\_Contingentrewards\_23\_R JSS\_Contingentrewards\_32\_R JSS\_Operatingconditions\_24\_R JSS\_Operatingconditions\_31\_R JSS\_Coworkers\_7 JSS\_Coworkers\_16\_R JSS\_Coworkers\_25 JSS\_Coworkers\_34\_R JSS\_Natureofwork\_17

JSS\_Natureofwork\_27 JSS\_Natureofwork\_35 JSS\_Communication\_9 JSS\_Communication\_18\_R JSS\_Communication\_26\_R JSS\_Communication\_36\_R

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 20 iterations.

# **Individual Work Performance Questionnaire**

		Component		
	1	2	3	
I was able to plan my work so that I finished it on time.		0.835		
I managed my time well.		0.831		
I kept in mind the work result I needed to achieve.		0.580		
I was able to set priorities.		0.808		
I was able to carry out my work efficiently.		0.864		
I took on extra responsibilities.	0.829			
On my own initiative, I started new tasks when my old tasks were completed.	0.725			
I took on challenging tasks when they were available.	0.780			
I worked on keeping my job-related knowledge up to date.	0.721			
I worked on keeping my work skills up to date.	0.716			
I came up with creative solutions for new problems.	0.800			
I continually sought new challenges in my work.	0.807			
I actively participated in meetings and/or consultations.	0.562			
I complained about minor work-related issues at work.			0.772	
I made problems at work bigger than they were.			0.867	
I focused on the negative aspects of situations at work instead of the positive aspects.			0.855	
I talked to colleagues about the negative aspects of my work.			0.729	
I talked to people outside the organization about the negative aspects of my work.			0.765	

TP1 TP2 TP3 TP4 TP5 CP1 CP2 CP3 CP4 CP5 CP6 CP7 CP8 CWB1 CWB2 CWB3 CWB4 CWB5

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation Method: Varimax with Kaiser Normaliz

Note. The decomposed component matrix stemming from the Multifactor Leadership Questionnaire elucidates the commendable distribution of leadership items across a spectrum of eight distinct components. This suggests that the questionnaire has been devised to measure an array of leadership facets with proficiency. Such facets encompass idealised influence, inspirational influence, intellectual influence, individualised influence, and reward influence. Likewise, the items from the Job Satisfaction Survey are mapped into nine components, each component signifying a different facet of job satisfaction. These include aspects such as remuneration, career advancement opportunities, supervisory roles, fringe benefits, conditional rewards, operational conditions, work colleagues, job nature, and communication modalities.

For this investigation, the extraction method of choice was the principal component analysis, and the rotation method implemented was Varimax augmented by Kaiser Normalization. The constituents in the Individual Work Performance Questionnaire demonstrated a perfect load along a singular component. This indicates that the items have been meticulously curated to accurately measure the desired construct. In parallel, the items within the Multifactor Leadership Questionnaire and Job Satisfaction Survey are dispersed over multiple components, signifying their capacity to measure an array of latent factors.

In summary, factor analysis stands as an indispensable statistical tool within survey research, primarily for data reduction and the discernment of the intrinsic data structure. The KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy and Bartlett's Test of Sphericity ascertain the appropriateness of data for factor analysis. Furthermore, the decomposed component matrix uncovers how items are distributed among different components, revealing the questionnaires' efficacy in accurately gauging the intended factors. On the whole, factor analysis, KMO, and Bartlett's Test emerge as critical tools for researchers to investigate their data's inherent structure and shrink the dimensionality of complicated datasets. Through the identification and interpretation of hidden factors, researchers can yield invaluable insights about the interrelations between variables and the constructs they symbolise.

### 4.4 SECTION ANALYSIS

The following section goes into a comprehensive analysis of the scoring patterns demonstrated by the participants for three distinct instruments. The findings are relayed via mean values that embody the dimensions forming each instrument. The computation of these mean values adhered to the standard regulations for each instrument, including the reverse

coding of certain statements. The results are then subject to additional analysis based on the salience of the dimensions.

## 4.4.1 Multifactor Leadership Questionnaire

The following segment pertains to the analysis of the Multifactor Leadership Questionnaire, aiming to elucidate the distribution and relevance of the diverse leadership dimensions appraised by the questionnaire. Table 10 shows the scoring patterns.

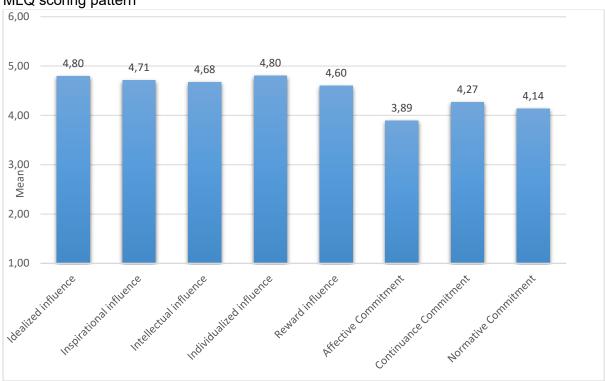
Table 10:

MLQ scoring pattern

	Count	Mean	Standard Deviation	Median	Percentile 25	Percentile 75	95.0% Lower CL for Mean	95.0% Upper CL for Mean	Minimum	Maximum	Binomial Test p-value
Idealised influence	158	4.80	1.11	5.00	4.00	6.00	4.62	4.97	1.00	6.00	< 0.001
Inspirational influence	158	4.71	1.05	4.84	4.00	5.67	4.55	4.88	1.33	6.00	< 0.001
Intellectual influence	158	4.68	1.05	5.00	4.00	5.33	4.51	4.84	1.00	6.00	< 0.001
Individualised influence	158	4.80	0.98	5.00	4.00	5.67	4.64	4.95	1.00	6.00	< 0.001
Reward influence	158	4.60	1.02	4.67	4.00	5.33	4.44	4.76	1.33	6.00	< 0.001
Affective Commitment	158	3.89	1.08	4.00	3.50	4.50	3.72	4.06	1.00	6.00	0.691
Continuance Commitment	158	4.27	0.91	4.00	4.00	5.00	4.13	4.41	1.50	6.00	< 0.001
Normative Commitment	158	4.14	1.34	4.00	3.00	5.50	3.93	4.35	1.00	6.00	0.002

Binomial Test cut-off test value = 3.50.

Figure 4: MLQ scoring pattern



The following patterns are observed:

- The mean values of all dimensions are significantly greater than the cut-off value, except for Affective Commitment.
- The higher mean values correspond to higher levels of agreement.
- The significance of the differences is tested and shown in the table.

It is observed that the first five dimensions have similar and higher means than the last three. These are all related to influence factors. The high level of agreement in these dimensions could be attributed to the prevalence of transformational leadership styles in the surveyed population. Transformational leaders tend to exhibit strong idealised influence, inspirational influence, intellectual influence, individualised influence, and reward influence, which are essential for motivating and engaging their subordinates (Bass, 1990).

The last three dimensions relate to commitment. There is no significant difference between the mean score and the cut-off score for Affective Commitment, indicating an equal distribution of agreement and disagreement among respondents. This may suggest that leaders in the sample may not be effectively fostering affective commitment in their subordinates. Continuance Commitment and Normative Commitment, on the other hand, show higher levels

of agreement, though lower than those observed for influence dimensions. This could be due to the nature of the work environment, wherein employees feel obligated to stay with their organisations due to perceived lack of alternatives or a sense of duty.

In general, the trend indicates that leaders in the surveyed population exhibit strong influence factors but have room for improvement in fostering affective commitment in their subordinates.

## 4.4.2 Job Satisfaction Survey

This section deals with the analysis of the Job Satisfaction Survey, aiming to understand the distribution and significance of the various dimensions of job satisfaction assessed through the questionnaire.

**Table 11: JSS Scoring Pattern** 

	Count	Mean	Standard Deviation	Median	Percentile 25	Percentile 75	95.0% Lower CL for Mean	95.0% Upper CL for Mean	Minimum	Maximum	Binomial Test p-value
Pay	158	3.76	1.18	4.00	3.25	4.50	3.57	3.94	1.00	6.00	0.176
Promotion	158	3.43	1.26	3.50	2.50	4.25	3.23	3.63	1.00	6.00	0.691
Supervision	158	4.96	1.00	5.25	4.25	6.00	4.80	5.12	1.25	6.00	< 0.001
Fringe Benefits	158	3.77	1.03	3.75	3.25	4.50	3.61	3.93	1.75	6.00	0.233
Contingent rewards	158	4.05	1.17	4.25	3.25	5.00	3.86	4.23	1.00	6.00	0.001
Operating conditions	158	3.17	0.90	3.00	2.50	3.75	3.02	3.31	1.00	5.75	< 0.001
Coworkers	158	4.55	0.97	4.50	3.75	5.25	4.40	4.70	2.25	6.00	< 0.001
Nature of work	158	4.89	0.96	5.00	4.25	5.75	4.74	5.04	2.25	6.00	< 0.001
Communication	158	4.42	1.07	4.50	3.75	5.25	4.25	4.59	1.25	6.00	< 0.001
Total Satisfaction	158	4.11	0.75	4.17	3.58	4.64	3.99	4.23	2.17	5.81	< 0.001

Binomial Test cut-off test value = 3.50

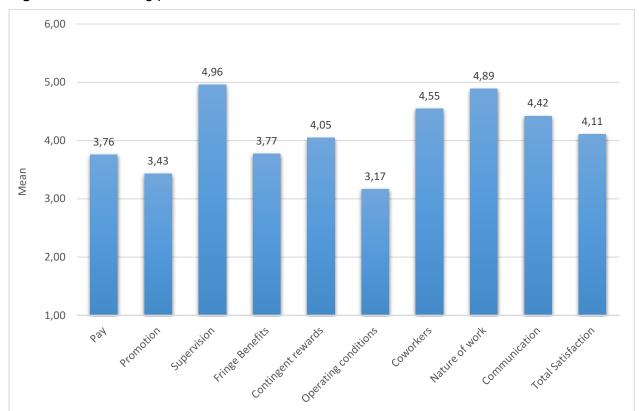


Figure 5: JSS scoring pattern

*Note.* There is no significant difference from the cut-off value for pay, promotion, and fringe benefits, implying an equal distribution of agreement and disagreement among respondents. This suggests that the surveyed organisations might need to revaluate their pay structures, promotion policies, and fringe benefits to enhance employee satisfaction in these areas.

The mean value for Operating conditions is significantly lower than the cut-off value, meaning that more respondents disagreed with the statements in this dimension. This indicates that employees may be dissatisfied with their working conditions, which could negatively impact their overall job satisfaction and performance (Spector, 1997).

All other dimensions had significantly higher mean scores compared to the cut-off value, implying a higher level of agreement with the statements in these dimensions. This suggests that respondents are generally satisfied with supervision, contingent rewards, coworkers, nature of work, and communication. Organisations should capitalise on these areas of satisfaction to retain and motivate their employees.

### 4.4.3 Individual Work Performance Questionnaire

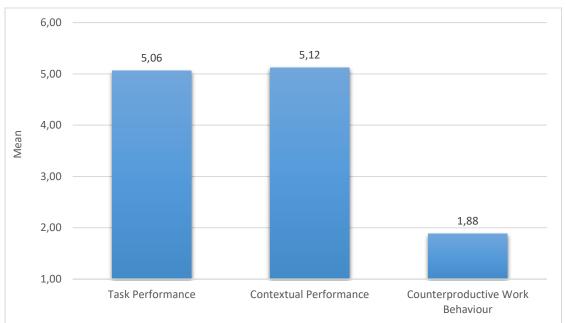
This section deals with the analysis of the Individual Work Performance Questionnaire, aiming to understand the distribution and significance of the various dimensions of work performance assessed by the questionnaire. The table below summarises the scoring patterns.

Table 12: IWPQ scoring patterns.

	Count	Mean	Standard Deviation	Median	Percentile 25	Percentile 75	95.0% Lower CL for Mean	95.0% Upper CL for Mean	Minimum	Maximum	Binomial Test p-value
Task Performance	158	5.06	0.79	5.00	4.40	5.80	4.93	5.18	3.00	6.00	< 0.001
Contextual Performance	158	5.12	0.71	5.13	4.75	5.75	5.01	5.23	3.00	6.00	< 0.001
Counterproductiv e Work Behaviour	158	1.88	0.74	1.80	1.20	2.20	1.77	2.00	1.00	4.80	< 0.001

Binomial Test cut-off test value = 3.50

Figure 6: IWPQ scoring patterns.



Note. Task Performance and Contextual Performance have means significantly higher than the cut-off value, indicating that respondents generally agree with the statements in these dimensions. This suggests that employees are performing well in both task-related and contextual aspects, contributing positively to the overall performance of their organisations (Koopmans et al., 2011).

Counterproductive Work Behaviour has a significantly lower mean score, meaning that more respondents disagreed with the statements in the dimension. This implies that employees in the surveyed population are less likely to engage in counterproductive work behaviours, such as absenteeism, workplace deviance, or other actions that might harm the organisation or its employees (Spector et al., 2006).

The observed patterns in the Individual Work Performance Questionnaire could be related to the overall levels of job satisfaction and leadership styles identified in the previous sections. High levels of satisfaction in certain areas, coupled with strong influence factors exhibited by leaders, may contribute to better task and contextual performance among employees. At the same time, the lower prevalence of counterproductive work behaviours may be linked to the presence of strong leadership and the positive aspects of job satisfaction that mitigate the potential negative impact of dissatisfaction in other areas.

In conclusion, the analysis of the three instruments reveals some areas where organisations and leaders can improve, such as fostering affective commitment, revaluating pay structures, promotion policies, and fringe benefits, and enhancing operating conditions. By addressing these areas, organisations may further enhance employee satisfaction, performance, and commitment, ultimately leading to better overall outcomes for the organisation.

## 4.5 CROSS TABULATIONS

The crosstabulation results provide insights into the relationships between the biographical options (age categories) and the means for each variable under study. The Independent-Samples Kruskal-Wallis Test with ANOVA correction was performed to determine whether there were statistically significant differences between the age groups in terms of the variables being investigated. In general, the results show that most of the null hypotheses were retained, meaning that there were no significant differences in the central scores of the variables across age categories.

 Table 13: Hypothesis test summary which summarises the results of the chi square tests.

Hyp	oothesis Test Summary			
,,	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
1	The distribution of Idealised influence is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,493	Retain the null hypothesis.
2	The distribution of Inspirational influence is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,069	Retain the null hypothesis.
3	The distribution of Intellectual influence is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,342	Retain the null hypothesis.
4	The distribution of Individualised influence is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,045	Reject the null hypothesis.
5	The distribution of Reward influence is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,212	Retain the null hypothesis.
6	The distribution of Affective Commitment is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,662	Retain the null hypothesis.
7	The distribution of Continuance Commitment is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,831	Retain the null hypothesis.
8	The distribution of Normative Commitment is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,331	Retain the null hypothesis.
9	The distribution of Pay is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,607	Retain the null hypothesis.
10	The distribution of Promotion is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,065	Retain the null hypothesis.
11	The distribution of Supervision is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,089	Retain the null hypothesis.
12	The distribution of Fringe Benefits is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,220	Retain the null hypothesis.
13	The distribution of Contingent rewards is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,321	Retain the null hypothesis.
14	The distribution of Operating conditions is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,193	Retain the null hypothesis.
15	The distribution of Coworkers is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,235	Retain the null hypothesis.
16	The distribution of Nature of work is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,106	Retain the null hypothesis.
17	The distribution of Communication is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,024	Reject the null hypothesis.
18	The distribution of Total Satisfaction is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,668	Retain the null hypothesis.

Ну	Hypothesis Test Summary							
	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision				
19	The distribution of Task Performance is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,141	Retain the null hypothesis.				
20	The distribution of Contextual Performance is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,580	Retain the null hypothesis.				
21	The distribution of Counterproductive Work Behaviour is the same across categories of Age (years).	Independent-Samples Kruskal-Wallis Test	0,110	Retain the null hypothesis.				

Note. a. The significance level is .050.

However, a few exceptions were observed.

## 4.5.1 Age and Individualised Influence

The results showed a significant difference between the age groups and the means for Individualised Influence (p = 0.045). Pairwise comparison between the age groups revealed significant differences between the 51-60 age group (mean = 4.39) and the 41-50 age group (mean = 4.97) (p = 0.037), as well as between the 51-60 age group (mean = 4.39) and the 31-40 age group (mean = 4.96) (p = 0.031). These findings suggest that respondents younger than 50 years perceive a higher degree of individualised influence from their leaders than those aged 51-60.

**Table 14:** Pairwise comparison between the age groups

Pairwise Comparisons of Age (years)						
Sample 1-Sample 2	Test Statistic	Std. Error				
20 - 30-51 - 60	-3,857	14,352				
20 - 30-41 - 50	-24,684	13,608				
20 - 30-31 - 40	-24,935	13,458				
51 - 60-41 - 50	20,827	9,968				
51 - 60-31 - 40	21,078	9,762				
41 - 50-31 - 40	0,251	8,631				

Note. Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

### 4.5.2 Age and communication

The null hypothesis for the relationship between age and communication was rejected, with a p-value of 0.024, indicating a significant difference between the age groups and the means for communication. Further analysis is needed to understand the specific age group differences and their implications for organisational communication practices.

## 4.5.3 Implications of age-related differences

The findings of the crosstabulation analysis suggest that age may play a role in shaping employees' perceptions of certain aspects of their work environment, such as leadership behaviours (specifically individualised influence) and communication. These age-related differences could be attributed to generational differences in work values, expectations, and preferences (Twenge et al., 2010).

Organisations should be mindful of these potential age-related differences when designing leadership development programs and communication strategies. Tailoring interventions to the needs and preferences of different age groups may help to enhance employee satisfaction, commitment, and performance across the entire workforce (Hernaus & Vokic, 2014).

Based on the crosstabulation results, we can infer that there are significant differences in the means of certain variables across age groups. For example, the mean scores for "Individualised Influence" (p = 0.045) and "Communication" (p = 0.024) indicate that there are significant differences between age categories. This supports the alternate hypothesis that there is a difference in the central scores for these variables.

The empirical findings suggests that different age groups may have different expectations and preferences when it comes to leadership styles and communication within the organization (Zemke et al., 2000). For instance, younger employees might be more receptive to individualised leadership styles that focus on personal growth and development, while older employees may prefer a more traditional, hierarchical approach (Twenge et al., 2010).

In terms of communication, younger employees might value open and transparent communication channels and be more adept at utilising technology to facilitate communication, while older employees may prefer more traditional, face-to-face communication methods (Chen & Choi, 2008). These differences in preferences could explain the significant differences observed in the means of these variables across age groups.

In contrast, variables with p-values higher than 0.05, such as "Idealized Influence," "Inspirational Influence," "Intellectual Influence," and "Reward Influence," do not show a significant relationship across different age categories. This suggests that employees across various age groups generally agree on the prevalence of these leadership styles, regardless of their age. This finding is supported by the literature, which indicates that transformational leadership styles, characterized by idealized, inspirational, intellectual, and reward influence dimensions, can have a positive impact on employee satisfaction and commitment across different age groups (Bass & Riggio, 2006).

In conclusion, the section's findings offer valuable insights into the relationship between age, leadership styles, communication, and other variables. The significant differences observed for "Individualised Influence" and "Communication" suggest that organisations should consider age-specific preferences when designing leadership development programs and communication strategies to enhance employee satisfaction and commitment. Furthermore, the lack of significant differences for other variables indicates that certain leadership styles and practices are universally valued across age groups, emphasising the importance of adopting transformational leadership approaches to foster a positive work environment for all employees.

#### 4.6 CORRELATIONS

Refer to appendix C which depicts the results that demonstrate the interrelationships among the investigated variables, specifically through the lens of the Pearson correlation coefficients. This numerical representation aids in discerning the magnitude and directionality of the linear associations between each pair of variables. A positive correlation reflects a simultaneous movement in the same direction for two variables, whereas a negative correlation signifies that the variables exhibit inverse movements. Alongside these coefficients, the statistical significance level of each correlation is also stipulated, indicating the statistical relevance of the observed correlation.

Notable correlations have been identified as follows:

- 1. There is a profound and positive correlation between inspirational influence and idealised influence (r = .905, p < 0.001).
- 2. Intellectual influence exhibits a positive correlation with individualized influence (r = .866, p < 0.001).

- 3. Normative commitment reveals a positive correlation with idealized influence (r = .653, p < 0.001) and with inspirational influence (r = .677, p < 0.001).
- 4. Compensation exhibits a positive correlation with advancement opportunities (r = .661, p < 0.001) and with contingent rewards (r = .735, p < 0.001).
- 5. Overall satisfaction shows a profound and positive correlation with contingent rewards (r = .868, p < 0.001) and with communication (r = .755, p < 0.001).
- 6. Task execution is positively correlated with continuance commitment (r = .248, p = 0.002) and operating conditions (r = .218, p = 0.006).
- 7. Detrimental workplace behaviours exhibit a negative correlation with inspirational influence (r = -.320, p < 0.001), intellectual influence (r = -.285, p < 0.001), and individualised influence (r = -.270, p = 0.001).

These interrelationships imply the diverse associations existing between distinct leadership influence dimensions and employee outcomes such as commitment, satisfaction, and performance. Furthermore, the analysis unveils associations between various facets of job satisfaction (e.g., pay, promotion, and contingent rewards) and employee outcomes.

Based on the correlation table provided in the appendix, several noteworthy observations can be drawn:

- 1. All four categories of transformational leadership styles (Idealised influence, Inspirational influence, Intellectual influence, and Individualised influence) exhibit strong and positive correlations with one another. This indicates that the presence of one style is often accompanied by the presence of the other styles.
- 2. Transformational leadership styles display a positive correlation with a variety of job satisfaction elements, such as pay, promotion, supervision, fringe benefits, and contingent rewards. This suggests that employees guided by transformational leaders are likely to express greater satisfaction with these job aspects.
- 3. Transformational leadership styles also reveal a positive correlation with organisational commitment (Affective, Continuance, and Normative). This suggests that employees under the guidance of transformational leaders are more likely to display stronger commitment to their organisation.
- 4. Task execution displays a positive correlation with Total Satisfaction, suggesting that greater job satisfaction among employees is likely associated with enhanced task performance.

- 5. Contextual performance is positively correlated with several transformational leadership styles, suggesting that transformational leadership positively impacts employees' contextual performance.
- 6. Counterproductive work behaviour exhibits a negative correlation with transformational leadership styles and several job satisfaction factors, indicating that the presence of transformational leadership styles and elevated job satisfaction might contribute to the reduction in the incidence of counterproductive work behaviour.

In conclusion, the correlation analysis demonstrates that transformational leadership styles are linked with positive outcomes in terms of job satisfaction, organisational commitment, and employee performance. In addition, these leadership styles are negatively correlated with counterproductive work behaviour. This reinforces the idea that transformational leadership can yield benefits for both employees and organisations.

### 4.7 STRUCTURAL EQUATION MODEL

Structural Equation Modelling is an advanced multivariate statistical approach used to investigate the interrelationships between observed variables and underlying constructs while compensating for measurement errors. It amalgamates factor analysis and multiple regression analysis techniques for a comprehensive simultaneous examination of the interrelationships among variables. SEM offers distinct advantages when researching complex models as it facilitates the exploration of both direct and indirect effects among variables and the interrelationships among multiple independent and dependent variables.

In the subsequent segment, SEM was harnessed to examine the interrelationships between three underlying variables of interest: Task Performance (A), Contextual Performance (B), and Counterproductive Work Behaviour (C), as gauged by the IWPQ. The aim was to scrutinize the direct and indirect interrelationships among these variables and their observed indicators, in addition to exploring potential associations among the underlying variables themselves.

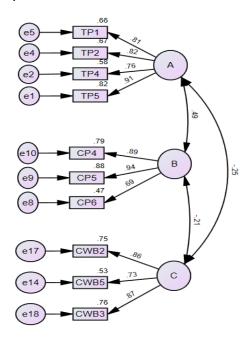
In order to fulfil this objective, an exploratory factor analysis (EFA) was carried out to identify the factor structure of the observed variables. Subsequently, a confirmatory factor analysis (CFA) was performed to evaluate the fit of the factor model. Following this, the path coefficients were estimated, thereby testing the significance of the interrelationships among the underlying variables using the maximum likelihood (ML) estimation technique.

In the analysis that follows, several fit indices were utilised to assess the adequacy of the model, including the chi-square statistic, the Comparative Fit Index (CFI), the Tucker-Lewis

Index (TLI), the Normed Fit Index (NFI), the Incremental Fit Index (IFI), and the Root Mean Square Error of Approximation (RMSEA). The results derived from these indices suggested a good model fit, indicating that the researcher's hypothesised model was appropriate for capturing the interrelationships between the underlying variables and their observed indicators.

### 4.7.1 SEM - IWPQ

Figure 7: IWPQ structural equation model



Note. Refer to Figure 7 for an illustrative representation of the adapted structural equation model. The graphical depiction represents a multivariate statistical outcome, derived by deploying a blend of factor analysis and multiple regression analysis methodologies. This approach facilitates an in-depth exploration of the structural relationship that exists between the observed variables and the hidden constructs. The measurements are categorised according to their reliability.

#### **Default Model Results:**

- Achievement of minimum condition.
- Value of Chi-square = 33.326
- Degrees of Freedom = 32
- Probability Level = .403

The employed Chi-square test assesses the null hypothesis that presumes the overidentified (or the reduced) model to be as well-fitting to the data as a fully identified (or saturated) model. In a fully identified model, every variable is directly linked to each other variable without the need for an intervening variable. This type of model will always have a zero value for the Chi-square, as the fit is invariably perfect. A statistically insignificant probability level is anticipated. In this model, with a Chi-square p-value of 0.403, this stipulation is met.

### 4.7.1.1 Maximum Likelihood Estimates

**Table 15:** Regression Weights: (Group number 1 - Default model)

			Estimate	Estimate S.E.		Р	Label
TP5	<	Α	1.000				
TP4	<	Α	.733	.062	11.765	***	par_1
TP2	<	Α	1.038	.078	13.236	***	par_2
TP1	<	Α	1.044	.080	13.006	***	par_3
CP6	<	В	.748	.074	10.154	***	par_4
CP5	<	В	1.000				
CP4	<	В	.889	.061	14.628	***	par_5
CWB5	<	С	1.000				
CWB2	<	С	1.177	.119	9.870	***	par_6
CWB3	<	С	1.264	.128	9.888	***	par_10

Note. The variables demonstrate robust loadings along their respective factors (significant p-values represented by \*\*\* p < 0.001). This confirms the Exploratory Factor Analysis (EFA) results obtained through factor analysis.

 Table 16: Standardised Regression Weights: (Group number 1 - Default model)

			Estimate
TP5	<	Α	.905
TP4	<	Α	.763
TP2	<	Α	.819
TP1	<	Α	.811
CP6	<	В	.688
CP5	<	В	.939
CP4	<	В	.889
CWB5	<	С	.726
CWB2	<	С	.864
CWB3	<	С	.874

*Note.* The parameters are estimated using Maximum Likelihood (ML) methods. This iterative procedure strives to maximise the probability that the acquired values of the criterion variable will be accurately predicted. All the coefficients exceeded the suggested benchmark of 0.600.

## 4.7.1.2 Model Fit Summary

The proposed acceptable threshold for the relative Chi-square, or CMIN/DF, should ideally not exceed 5 to mitigate the influence of sample size. The acceptable range for Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Normed Fit Index (NFI) and Incremental Fit Index (IFI) lies between zero and one. An RMSEA value of less than or equal to 0.05 typically signifies a well-fitting model.

**Table 17:** CMIN (Chi-square statistic)

Model	NPAF	RCMIN	DF	Р	CMIN/DF
Default model	23	33.326	32	.403	1.041
Saturated model	55	.000	0		
Independence mode	<b>I</b> 10	955.120	45	.000	21.225

Note. CMIN, a Chi-square statistic, is used to compare the model under investigation with the independence model and the saturated model. The ratio, CMIN/DF, or the relative Chi-square, gauges the extent to which the fit of data to the model is compromised by eliminating one or more paths. The observed CMIN/DF is under the acceptable limit of 5 (1.041), satisfying the CMIN condition.

Table 18 Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI	
Wodel	Delta1	rho1	Delta2	rho2	CII	
Default model	.965	.951	.999	.998	.999	
Saturated model	1.000		1.000		1.000	
Independence model	.000	.000	.000	.000	.000	

The goodness of fit indices is designed to contrast the model with the independence model, as opposed to the saturated model. The NFI, derived by dividing the difference between the two models' Chi-square values by the Chi-square value for the independence model, was 0.965 for the present data. This surpasses the minimum good fit threshold of 0.90. CFI, which operates in a similar fashion using a noncentral Chi-square, is considered a reliable index even when dealing with small samples. Like the NFI, its value ranges from 0 to 1, with 0.90 denoting a good fit. The observed CFI was 0.999, suggesting an excellent model fit.

Table 19: The Root Mean Square Error of Approximation

Model	RMSE	A LO 90	HI 90	PCLOSE
Default model	.016	.000	.062	.858
Independence model	.359	.339	.379	.000

The Root Mean Square Error of Approximation (RMSEA) is a measure of the lack of fit relative to the saturated model. A good fit is indicated by an RMSEA of 0.050 or less, while a value between .05 and .08 denotes an acceptable fit. LO 90 and HI 90 are the lower and upper bounds, respectively, of a 90% confidence interval for this estimate. The model was found to be well-fitting, with the PCLOSE value (0.858) being statistically insignificant. This meets the recommended criterion (greater than 0.050).

## 4.7.1.3 Regression Analysis

The significance level reflects the intensity of the relationships. The correlations are examined below.

**Table 20:** Covariances: (Group number 1 - Default model)

			Estimat	eS.E.	C.R.	Р	Label
Α	<>	В	.369	.074	5.004	***	par_7
Α	<>	С	136	.052	-2.623	.009	par_8
В	<>	С	119	.052	-2.282	.022	par_9

**Table 21:** Correlations: (Group number 1 - Default model)

			Estimate
Α	<>	В	.487
Α	<>	С	246
В	<>	С	209

Note. A = Task Performance, B = Contextual Performance and C = Counterproductive Work Behaviour

- Null hypothesis: There is no correlation between each of the dimensions.
- Alternate hypothesis: There is a significant correlation.

In principle, if the covariance between two constructs is significant, then their correlation should also be significant as correlation is a standardised version of covariance, and both illustrate the strength and direction of the relationship. All relationships are found to be significant (p < 0.050). The result between A and B points to a strong, directly proportional relationship between the latent variables, with the r (0.487) estimate being positive. The relationships between A and C, and between B and C, exhibit negative correlation, implying an inverse relationship. That is, an increase in one variable is associated with a decrease in the other, and vice versa.

### 4.7.1.4 Discussion on findings

In summary, the Structural Equation Model (SEM) for IWPQ was analysed to determine the relationships between Task Performance (A), Contextual Performance (B), and Counterproductive Work Behaviour (C). The model was found to be a good fit, based on various fit indices, such as CMIN/DF, NFI, CFI, and RMSEA. The significant standardized regression weights for each variable indicate strong factor loadings. The correlations between the latent variables were found to be significant as well.

The results reveal the following relationships between the latent variables:

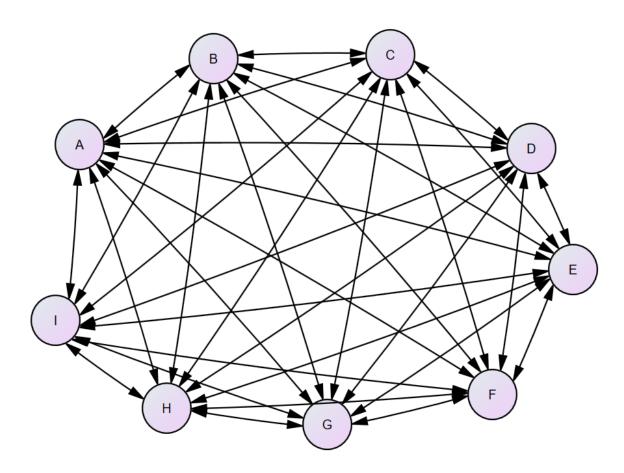
- A positive correlation between Task Performance (A) and Contextual Performance (B), with a correlation coefficient of 0.487. This implies that when task performance increases, contextual performance also increases, and vice versa.
- A negative correlation between Task Performance (A) and Counterproductive Work
  Behaviour (C), with a correlation coefficient of -0.246. This suggests an inverse
  relationship, meaning that when task performance increases, counterproductive work
  behaviour decreases, and vice versa.
- A negative correlation between Contextual Performance (B) and Counterproductive Work Behaviour (C), with a correlation coefficient of -0.209. This also implies an inverse relationship, meaning that when contextual performance increases, counterproductive work behaviour decreases, and vice versa.

Overall, the SEM analysis of the IWPQ data supports the idea that task performance and contextual performance are positively related, while both are negatively related to counterproductive work behaviour. These findings can help organisations develop strategies to improve employee performance and reduce counterproductive work behaviours.

### 4.7.2 SEM - JSS

Figure 8:

Chi-square statistics



*Note.* The Chi-square statistic in this analysis is employed to evaluate the null hypothesis which asserts that the overidentified (or reduced) model is as congruent with the observed data as the just identified (or fully saturated) model. The just-identified model provides a direct relationship, excluding the intervention of other variables, between every variable and each other. This model results in a Chi-square value of zero due to the perfect alignment between the model and the data. The associated probability value should ideally be non-significant. However, in this case, the Chi-square p-value is significantly less than 0.001 (p = 0.000), indicating that this criterion has not been fulfilled.

- Outcomes from the standard model:
- Minimum optimisation was attained.
- Chi-square quantifies 203.283.
- Number of degrees of freedom equals 100.
- Level of probability equals .000.

One crucial point to consider is that although the Chi-Square value should ideally be non-significant when examining the model fit, obtaining such a result is often challenging due to the typically large sample size necessary for such analyses. Consequently, the presence of a significant Chi-Square value is acceptable, given that the other indices of model fit are satisfactory.

## **Maximum Likelihood Estimates**

 Table 22: Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	Р	Label
JSS_Promotion_11	<	В	1.000				
JSS_Promotion_33	<	В	1.115	.111	10.013	***	par_1
JSS_Pay_1	<	Α	1.000				
JSS_Pay_28	<	Α	1.100	.111	9.910	***	par_2
JSS_Communication_26_R	<	I	1.000				
JSS_Communication_18_R	<	I	1.086	.148	7.355	***	par_3
JSS_Coworkers_25	<	G	1.233	.117	10.540	***	par_4
JSS_Coworkers_7	<	G	1.000				
JSS_Operatingconditions_31_R	<	F	1.000				
JSS_Operatingconditions_24_R	<	F	1.000				
JSS_FringeBenefits_13	<	D	1.000				
JSS_FringeBenefits_22	<	D	1.279	.163	7.866	***	par_5
JSS_Supervision_3	<	С	1.000				
JSS_Supervision_30	<	С	.959	.117	8.219	***	par_6

		Esti	mate S.E.	C.R.	Р	Label
JSS_Natureofwork_17	<	H .589	.087	6.765	***	par_7
JSS_Natureofwork_8_R	<	H 1.00	0			
JSS_Contingentrewards_5	<	E 1.00	0			
JSS_Contingentrewards_32_R	<	E 1.08	6 .108	10.070	) ***	par_8

*Note.* The variables manifest a robust load across the respective factors, as evidenced by significant p-values denoted by \*\*\* p < 0.001. This result corroborates the Exploratory Factor Analysis (EFA) previously conducted.

 Table 23: Standardised Regression Weights: (Group number 1 - Default model)

			Estimate
JSS_Promotion_11	<	В	.777
JSS_Promotion_33	<	В	.789
JSS_Pay_1	<	Α	.740
JSS_Pay_28	<	Α	.759
JSS_Communication_26_R	<	I	.746
JSS_Communication_18_R	<	I	.764
JSS_Coworkers_25	<	G	.884
JSS_Coworkers_7	<	G	.852
JSS_Operatingconditions_31_R	<	F	.665
JSS_Operatingconditions_24_R	<	F	.775
JSS_FringeBenefits_13	<	D	.645
JSS_FringeBenefits_22	<	D	.912
JSS_Supervision_3	<	С	.801
JSS_Supervision_30	<	С	.799
JSS_Natureofwork_17	<	Н	.591
JSS_Natureofwork_8_R	<	Н	.731
JSS_Contingentrewards_5	<	Ε	.789
JSS_Contingentrewards_32_R	<	Е	.755

Note. Parameter estimation was performed using the Maximum Likelihood (ML) procedure, an iterative process that optimises the likelihood of accurate prediction for the criterion

variable's observed values. Excluding one, all the coefficients exceeded the recommended value of 0.600. Statements with low loadings were excluded from the model.

# 4.7.2.1 Model Fit Summary

Table 24: CMIN

Model	NPAR CMIN		DF	Р	CMIN/DF
Default model	89	203.283	100	.000	2.033
Saturated model	189	.000	0		
Independence model	36	1460.921	153	.000	9.549

The CMIN/DF ratio was found to be lower than the tolerable threshold of 5, standing at 2.033. This complies with the CMIN criterion.

**Table 25:** Baseline Comparisons

Model	NFI	RFI	IFI	TLI	CFI	
Wodel	Delta1	rho1	Delta2	rho2	CII	
Default model	.861	.787	.924	.879	.921	
Saturated model	1.000		1.000		1.000	
Independence model	.000	.000	.000	.000	.000	

While the Normed Fit Index (NFI) falls slightly below the acceptable benchmark of 0.90, the Comparative Fit Index (CFI) fulfills the condition of surpassing 0.90.

Table 26: RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.081	.065	.097	.001
Independence model	.233	.223	.244	.000

Although the model displays satisfactory fit, the PCLOSE value registers at 0.001, which is significant. The condition of the PCLOSE value exceeding 0.050 is not met.

# 4.7.2.2 Correlation Analysis

 Table 27: Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	Р	Label
Α	<>	I	.455	.141	3.220	.001	par_9
Α	<>	Н	.937	.183	5.123	***	par_10
Α	<>	G	.405	.107	3.798	***	par_11
Α	<>	F	.157	.143	1.100	.271	par_12
Е	<>	Α	1.315	.200	6.575	***	par_13
В	<>	Α	1.381	.217	6.377	***	par_14
Α	<>	С	.644	.137	4.690	***	par_15
Α	<>	D	.951	.179	5.317	***	par_16
В	<>	С	.565	.135	4.181	***	par_17
В	<>	D	.773	.161	4.804	***	par_18
Ε	<>	В	1.281	.199	6.423	***	par_19
В	<>	F	.180	.147	1.229	.219	par_20
В	<>	G	.234	.102	2.284	.022	par_21
В	<>	Н	.915	.185	4.960	***	par_22
В	<>	1	.410	.142	2.881	.004	par_23
D	<>	С	.426	.107	3.991	***	par_24
Ε	<>	С	.674	.133	5.078	***	par_25
F	<>	С	.014	.109	.131	.895	par_26
G	<>	С	.446	.090	4.959	***	par_27
С	<>	Н	.634	.137	4.635	***	par_28
I	<>	С	.460	.115	4.004	***	par_29
E	<>	D	.778	.154	5.051	***	par_30

			Estimate	S.E.	C.R.	Р	Label
F	<>	D	.083	.105	.787	.431	par_31
G	<>	D	.289	.083	3.488	***	par_32
D	<>	Н	.369	.125	2.959	.003	par_33
I	<>	D	.402	.114	3.516	***	par_34
Ε	<>	F	.169	.135	1.245	.213	par_35
Е	<>	G	.453	.104	4.372	***	par_36
Ε	<>	Н	.850	.169	5.022	***	par_37
Е	<>	I	.640	.144	4.442	***	par_38
G	<>	F	.153	.092	1.664	.096	par_39
F	<>	Н	.355	.147	2.416	.016	par_40
1	<>	F	.382	.129	2.971	.003	par_41
G	<>	Н	.595	.117	5.098	***	par_42
I	<>	G	.433	.098	4.413	***	par_43
1	<>	Н	.786	.161	4.898	***	par_44

 Table 28: Correlations: (Group number 1 - Default model)

			Estimate
Α	<>	I	.385
Α	<>	Н	.727
Α	<>	G	.424
Α	<>	F	.125
Е	<>	Α	.994
В	<>	Α	.958
Α	<>	С	.590
Α	<>	D	.869
В	<>	С	.491
В	<>	D	.670
Е	<>	В	.920
В	<>	F	.136

			Estimate
В	<>	G	.233
В	<>	Н	.674
В	<>	I	.329
D	<>	С	.488
E	<>	С	.638
F	<>	С	.014
G	<>	С	.585
С	<>	Н	.616
1	<>	С	.488
E	<>	D	.736
F	<>	D	.082
G	<>	D	.379
D	<>	Н	.358
1	<>	D	.425
E	<>	F	.138
E	<>	G	.491
Е	<>	Н	.682
Е	<>	I	.561
G	<>	F	.174
F	<>	Н	.299
I	<>	F	.352
G	<>	Н	.661
I	<>	G	.525
<u> </u>	<>	Н	.707

*Note*. A= Pay, B= Promotion, C= Supervision, D= Fringe Benefits, E= Contingent rewards, F= Operating conditions, G= Co-workers, H= Nature of work and I= Communication.

All of the correlations are positive (directly proportional), but not all are significant. This Chisquare tests the null hypothesis that the overidentified (reduced) model fits the data as well as justified.

#### 4.7.2.3 Discussion on findings

The Structural Equation Modelling results for the JSS reveal an intricate network of relationships between various factors affecting job satisfaction. The results indicate that the model is an adequate fit, albeit not perfect, with some fit indices not meeting the recommended thresholds. It is important to note that achieving a perfect fit is challenging due to large sample sizes typically required in SEM analysis, and thus the results should still be considered meaningful as long as other fit indices are satisfactory.

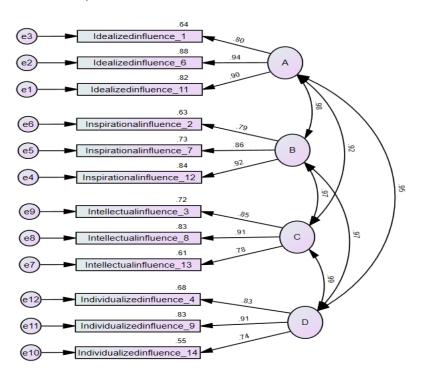
The Maximum Likelihood Estimates show that the variables loaded strongly along their respective factors, confirming the factor structure obtained through Exploratory Factor Analysis (EFA). The standardised regression weights suggest that the relationships between the latent variables and their indicators are strong, with the majority of coefficients being above the recommended value of 0.600.

The correlations between latent variables reveal that all relationships are positive, implying a direct proportionality between the factors. However, not all correlations are significant. For instance, pay (A) and promotion (B) show a strong and significant correlation, suggesting that employees' satisfaction with their pay and promotion opportunities are closely related. Similarly, the nature of work (H) and communication (I) demonstrate a significant positive correlation, implying that employees who find their work engaging and meaningful also value clear and effective communication within the organisation.

These findings align with the existing literature on job satisfaction. For example, research has consistently demonstrated that pay and promotion opportunities are critical determinants of job satisfaction (Judge, Piccolo, Podsakoff, Shaw, & Rich, 2010). Similarly, the nature of work and communication within the organisation have been found to be essential factors affecting job satisfaction (Harter, Schmidt, & Hayes, 2002; Riggio, 2014). Therefore, the results of the SEM analysis provide empirical support for these established relationships.

# 4.7.3 SEM - MLQ

Figure 9: MLQ structural equation model



Result (default model):

- Minimum was achieved.
- Chi-square = 207.990
- Degrees of freedom = 48
- Probability level = .000

The p-value was significant and does not meet the conditions for a good model.

# 4.7.3.1 Maximum Likelihood Estimates

 Table 29: Regression Weights: (Group number 1 - Default model)

			Estimate	Estimate S.E.		Р	Label
Idealised influence_11	<	Α	1.000				
Idealized influence_6	<	Α	1.135	.057	19.894	***	par_1
Idealized influence_1	<	Α	.808	.058	13.822	***	par_2
Inspirational influence_12	<	В	1.000				
Inspirational influence_7	<	В	.930	.056	16.571	***	par_3
Inspirational influence_2	<	В	.868	.062	13.981	***	par_4
Intellectual influence_13	<	С	1.000				
Intellectual influence_8	<	С	1.266	.095	13.272	***	par_5
Intellectual influence_3	<	С	1.184	.098	12.084	***	par_6
Individualised influence_14	<	D	1.000				
Individualised influence_9	<	D	1.083	.090	12.030	***	par_7
Individualized influence_4	<	D	.999	.092	10.800	***	par_8

 Table 30: Standardised Regression Weights: (Group number 1 - Default model)

			Estimate
Idealised influence_11	<	Α	.904
Idealized influence_6	<	Α	.936
Idealized influence_1	<	Α	.802
Inspirational influence_12	<	В	.919
Inspirational influence_7	<	В	.856
Inspirational influence_2	<	В	.793
Intellectual influence_13	<	С	.784
Intellectual influence_8	<	С	.909
Intellectual influence_3	<	С	.849
Individualised influence_14	<	D	.741
Individualised influence_9	<	D	.910
Individualised influence_4	<	D	.827

*Note.* The items that were used in the model all loaded significantly with the regression weights being greater than 0.60.

# 4.7.3.2 Model Fit Summary

Table 31: CMIN value

Model	NPARCMIN		DF	Р	CMIN/DF
Default model	42	207.990	48	.000	4.333
Saturated model	90	.000	0		
Independence mode	<b>1</b> 24	2114.549	66	.000	32.039

The CMIN/DF value was less than the recommended maximum of 5. This condition is met.

Table 32: Baseline Comparisons

Model	NFI	RFI IFI		TLI	CFI	
Wiodei	Delta1	rho1	Delta2	rho2	GFI	
Default model	.902	.865	.923	.893	.922	
Saturated model	1.000		1.000		1.000	
Independence model	.000	.000	.000	.000	.000	

Both the NFI and CFI meet the required minimum value (0.900).

Table 33: RMSEA

Model	RMSEA	ALO 90	HI 90	PCLOSE
Default model	.146	.126	.166	.000
Independence mode	.445	.428	.461	.000

The RMSEA and PCLOSE values do not meet the minimum criteria.

### 4.7.3.3 Correlation

 Table 34: Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	Р	Label
Α	<>	В	1.129	.142	7.974	***	par_9
Α	<>	С	.859	.121	7.082	***	par_10
D	<>	Α	.909	.131	6.958	***	par_11
В	<>	С	.886	.121	7.322	***	par_12
D	<>	В	.901	.128	7.062	***	par_13
D	<>	С	.752	.113	6.637	***	par_14

 Table 35: Correlations: (Group number 1 - Default model)

			Estimate
Α	<>	В	.984
Α	<>	С	.917
D	<>	Α	.946
В	<>	С	.973
D	<>	В	.965
D	<>	С	.987

For the dimensions that were included, the correlations were all significant. All the coefficients were positive.

# 4.7.3.4 Discussion on findings

The Structural Equation Model for the MLQ did not fit the data well. In the initial model, three dimensions had to be excluded, and some variables within each dimension were also excluded due to poor factor loadings. The remaining dimensions were:

- A. Idealised Influence
- B. Inspirational Influence
- C. Intellectual Influence
- D. Individualised Influence

The p-value for the chi-square test was significant, which does not meet the condition for a good model. The CMIN/DF value was less than the recommended maximum of 5, which meets the condition. However, the RMSEA and PCLOSE values did not meet the minimum criteria. The items that were used in the model all loaded significantly, with regression weights greater than 0.60. The model fit indices NFI and CFI met the required minimum value of 0.900, indicating a decent fit. However, the RMSEA was not within the acceptable range.

For the dimensions that were included in the model, the correlations were all significant, and all the coefficients were positive.

In summary, the SEM for the MLQ did not provide a good fit for the data. Some dimensions had to be excluded, and the remaining dimensions also had issues with factor loadings. While some model fit indices suggested a decent fit, the overall model did not meet all the required conditions for a good fit. Further model refinement or the exploration of alternative models is recommended.

#### 4.8 CONCLUSION

This chapter provided a comprehensive analysis of the data collected from the JSS, MLQ, IWPQ, and biographical information. Various statistical methods were employed to assess the psychometric properties of these instruments, including factor analysis, content analysis, reliability statistics, and Structural Equation Modelling. These analyses aimed to understand the underlying structure, relationship between factors, and the overall fit of the models.

For the Job Satisfaction Survey (JSS), factor analysis revealed a clear structure in line with the theoretical framework. Reliability statistics indicated high internal consistency among the items, suggesting that the JSS is a reliable measure of job satisfaction. The Multifactor Leadership Questionnaire (MLQ) underwent factor analysis, resulting in the exclusion of some dimensions and variables due to poor factor loadings. The SEM for the MLQ did not provide a good fit for the data, suggesting that the model requires further refinement or alternative models need to be explored. The Individual Work Performance Questionnaire (IWPQ) demonstrated adequate psychometric properties, with factor analysis supporting the hypothesised dimensions. Reliability statistics showed acceptable internal consistency for the IWPQ. Biographical information was analysed and discussed in relation to the JSS, MLQ, and IWPQ findings, providing additional context and insights into potential relationships between demographic variables and the constructs measured by these instruments.

#### **CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS**

This chapter presents a conclusion of the study, provides recommendations for the South African banking sector's leadership development initiatives, and proposes a VUCA framework or leadership competencies profile. The primary objective of this study was to examine the current state of leadership competencies and capabilities across South African banks and explore their implications for the 4IR. The findings presented in Chapter 4 provided insights into the prevalent leadership styles, their relationships with job satisfaction and work performance, and the need for targeted leadership development efforts. This chapter synthesises the research findings, discusses their implications for the South African banking sector, and offers practical recommendations for leadership development programs.

#### 5.1 SUMMARY/CONCLUSIONS OF THE STUDY

The primary objective of this research was to investigate leadership competencies and capabilities in South African banks for the 4IR. The study aimed to explore the current state of leadership development in the sector and identify potential areas for improvement to ensure the ongoing success and sustainability of these organisations in the rapidly evolving 4IR landscape (Schwab, 2016; Deloitte, 2021).

The study was guided by several research questions, which were addressed through a literature review and an empirical investigation involving questionnaires distributed to Learning and Development (L&D) managers in South African banks. The research questions focused on the relevance of existing leadership competency profiles, the appropriate balance between competencies and capabilities, and the development of a competency or capability profile tailored to the unique challenges of the 4IR (Northouse, 2018; Bolden & O'Regan, 2016).

The literature review provided a solid foundation for understanding the complex nature of the 4IR and its implications for leadership development in the South African banking sector. It revealed that the 4IR is characterised by rapid technological advancements, increasing interconnectedness, and unprecedented levels of complexity and uncertainty (Schwab, 2016). These factors necessitate the cultivation of specific leadership competencies and capabilities, such as adaptability, resilience, innovation, and strategic thinking (Northouse, 2018; Deloitte, 2021).

The empirical investigation yielded several key findings. First, it showed that transformational leadership is a dominant style among banking leaders and L&D managers in the sampled

South African banks, and is positively associated with job satisfaction and work performance. In contrast, laissez-faire leadership is negatively correlated with both job satisfaction and work performance (Judge & Piccolo, 2004). These findings align with existing research that highlights the effectiveness of transformational leadership in driving employee engagement and organisational performance, especially in the context of complex and rapidly changing environments (Bass & Riggio, 2006; Wang et al., 2011), such as the 4IR.

Second, the study found that the current leadership competency profiles in the South African banking sector may not adequately address the unique challenges of the 4IR, suggesting a need for a more tailored approach to leadership development (Deloitte, 2021; Northouse, 2018). This is consistent with research that emphasises the importance of developing context-specific leadership competencies and capabilities (Bolden & O'Regan, 2016; Deloitte, 2021). Third, the findings revealed the importance of fostering both competencies and capabilities in leaders, with a particular emphasis on adaptability, resilience, innovation, and strategic thinking (Northouse, 2018; Deloitte, 2021). This aligns with research that highlights the need for a balanced approach to leadership development, focusing on both the knowledge, skills, and abilities required for effective leadership, as well as the capacity to adapt and apply these competencies in complex and uncertain environments (Bolden & O'Regan, 2016; Deloitte, 2021).

Based on these findings, the study proposes a VUCA framework or leadership competencies profile tailored for the South African banking sector. This proposed framework emphasises key competencies and capabilities identified as essential for success in the 4IR, such as adaptability, resilience, innovation, and strategic thinking (Northouse, 2018; Deloitte, 2021). The framework also incorporates elements such as collaboration, emotional intelligence, and technological savvy, which are crucial for leaders in navigating the complexities of the 4IR (O'Leary & Mortensen, 2010; Goleman, 1995; Hess & Ludwig, 2016).

The study's findings contribute to the growing body of literature on leadership development in the context of the 4IR by highlighting the specific competencies and capabilities required for success in the South African banking sector. Moreover, the proposed VUCA framework or leadership competencies profile offers a practical and actionable guide for organisations in the sector to reassess and enhance their leadership development initiatives, better preparing their leaders to navigate the challenges and seize the opportunities presented by the 4IR (Bennett & Lemoine, 2014; Northouse, 2018).

In addition to the implications for leadership development in the South African banking sector, the study's findings also contribute to the broader understanding of effective leadership in the

context of the 4IR. As the banking sector is often at the forefront of technological advancements and global interconnectedness, the findings may have implications for other industries and regions facing similar challenges (Deloitte, 2021; Schwab, 2016).

Furthermore, the study's findings emphasise the importance of continuous learning and development for leaders in the 4IR, as the rapid pace of change and the constant emergence of new technologies and trends require leaders to stay up-to-date with the latest knowledge, skills, and best practices in their fields (DeRue & Myers, 2014). This suggests that organisations across industries should prioritise ongoing professional development opportunities for their leaders, such as workshops, training programs, and industry conferences (DeRue & Myers, 2014).

The study also highlights the importance of organisational factors, such as culture and leadership styles, in shaping the development and effectiveness of leadership competencies and capabilities in the context of the 4IR (Bass & Riggio, 2006; Judge & Piccolo, 2004). This underscores the need for organisations to create supportive environments that foster the development of essential competencies and capabilities, as well as facilitate the adoption of effective leadership styles, such as transformational leadership, that drive employee engagement and organisational performance in the rapidly changing 4IR landscape (Bass & Riggio, 2006; Wang et al., 2011).

Finally, the study's findings call for a more nuanced and context-specific understanding of leadership development in the 4IR, as the unique challenges faced by the South African banking sector may not be fully addressed by generic leadership competency profiles or frameworks (Deloitte, 2021; Northouse, 2018). This suggests that organisations and researchers should continue to explore the specific competencies and capabilities required for success in different industries, regions, and contexts, as well as develop tailored approaches to leadership development that address these unique challenges and opportunities (Bolden & O'Regan, 2016; Deloitte, 2021).

In conclusion, this study provides valuable insight into the current state of leadership competencies and capabilities in the South African banking sector and their implications for the 4IR. By identifying the specific competencies and capabilities required for success in this context, as well as proposing a tailored VUCA framework or leadership competencies profile, the study offers practical recommendations for organisations in the sector to enhance their leadership development initiatives and better prepare their leaders for the challenges and opportunities of the rapidly evolving 4IR landscape.

The following subsection delves into an analytical perspective of the fulfilment of the research objectives as guided by the research questions proposed. This section thus reinforces the foundational premises of the study and gives a detailed account of how the objectives were met.

#### 5.1.1 Appraisal of research objectives in light of the study findings

The core aim of this research was to critically examine the state of leadership competencies in the South African banking sector, specifically within the context of the 4IR Fourth Industrial Revolution. It sought to explore how existing leadership competencies align with the needs of this evolving era and proposed improvements to enhance leadership development.

To begin with, Research Question One scrutinised the effectiveness of existing leadership competency profiles for the 4IR. Through an extensive literature review and empirical investigation, it was found that although transformational leadership styles currently dominate, there is a pressing need to expand the leadership competencies profile to maintain relevance in the 4IR. This conclusion validates the first research objective: the existing leadership profiles need to be revisited and enhanced to better align with 4IR demands.

Next, Research Question Two addressed the focus of leadership growth—whether it should be on building competencies, capabilities, or both. The findings revealed the need for a balanced approach, emphasising that the 4IR necessitates not only competencies but also capabilities to effectively apply these competencies in a dynamic environment. This conclusion, therefore, meets the second objective: leadership development must consider both competencies and capabilities.

Research Question Three concerns creating a new leadership competency and capability profile for the 4IR. Based on the research findings, a VUCA framework was proposed, embodying the core competencies and capabilities necessary for effective leadership in the 4IR. This directly fulfils the third objective: the creation of a simplified competency/capability profile for the 4IR era.

The empirical study further solidified the findings from the literature review, underscoring the gap between current leadership styles and 4IR demands (Research Question One). It highlighted the need for a holistic approach to leadership development, considering the unique challenges of the 4IR (Research Question Four). While the study did not specifically delve into

differences based on socio-demographic variables or subgroup variables (Research Question Two and Three), it established a solid foundation for future research in these directions.

In summary, the study has effectively met its stated research objectives. It has provided a detailed analysis of the current leadership competency profiles, highlighted the need for a balanced approach in leadership growth, and proposed a new leadership competencies profile tailored for the 4IR. These findings not only contribute to the existing body of knowledge on leadership development in the 4IR but also provide practical recommendations for the South African banking sector.

#### 5.2 RECOMMENDATIONS

Based on the findings of this study, several recommendations can be made to improve leadership development in the South African banking sector in the context of the 4IR. These recommendations address gaps in current leadership competency profiles and foster essential competencies and capabilities required for success in the rapidly evolving 4IR landscape.

## 5.2.1 Reassess and Update Existing Leadership Competency Profiles

Organisations in the South African banking sector should reassess and update their existing leadership competency profiles. This may involve revisiting the current profiles and identifying gaps or areas for improvement, as well as incorporating the latest research on leadership competencies and capabilities relevant to the 4IR (Northouse, 2018; Deloitte, 2021).

### 5.2.2 Foster a Balanced Approach to Leadership Development

A balanced approach to leadership development should be adopted, focusing on both competencies and capabilities. While competencies provide a solid foundation of knowledge, skills, and abilities, capabilities enable leaders to adapt and apply their competencies effectively in complex and uncertain environments (Bolden & O'Regan, 2016; Deloitte, 2021). By cultivating both competencies and capabilities, South African banks can better prepare their leaders for the challenges of the 4IR and ensure their organisations' ongoing success and sustainability.

### 5.2.3 Develop a Tailored 4IR Leadership Competency Profile

Building on the reassessment and updating of existing leadership competency profiles, South African banks should develop a tailored 4IR leadership competency profile. This profile should emphasise key competencies and capabilities identified as essential for success in the 4IR, such as adaptability, resilience, innovation, and strategic thinking (Northouse, 2018; Deloitte, 2021).

## 5.2.4 Incorporate VUCA Framework into Leadership Development Programs

In addition to the tailored 4IR leadership competency profile, incorporating a VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) framework into leadership development programs can further enhance leaders' ability to navigate the challenges of the 4IR (Bennett & Lemoine, 2014). The VUCA framework helps leaders develop the skills and mindsets necessary to thrive in volatile, uncertain, complex, and ambiguous environments, which are characteristic of the 4IR. By integrating the VUCA framework into their leadership development initiatives, South African banks can better prepare their leaders to tackle the challenges and seize the opportunities presented by the 4IR.

## 5.2.5 Encourage Continuous Learning and Development

Given the rapid pace of change and the constant emergence of new technologies and trends in the 4IR, continuous learning and development should be a priority for leaders in the South African banking sector. Organisations should encourage and support their leaders in pursuing ongoing professional development opportunities, such as workshops, training programs, and industry conferences, to ensure that they remain up-to-date with the latest knowledge, skills, and best practices in their fields (DeRue & Myers, 2014). Additionally, organisations should consider implementing mentoring programs and creating opportunities for leaders to learn from their peers (Eby et al., 2013).

#### 5.2.6 Foster a Culture of Innovation and Agility

To succeed in the 4IR, South African banks need to create a culture that supports innovation and agility. This involves encouraging experimentation, embracing risk-taking, and learning from failures (Dyer et al., 2009). By fostering such a culture, organisations can empower their leaders to develop and implement innovative solutions. Additionally, a culture of agility can help leaders and organisations adapt more effectively to the rapidly changing landscape, ensuring their continued success in the face of uncertainty and disruption (Doz & Kosonen, 2010).

#### 5.2.7 Enhance Collaboration and Networking Opportunities

As the 4IR emphasises the interconnectedness of industries, technologies, and markets, effective collaboration and networking become increasingly important for leaders in the South African banking sector (Schwab, 2016). Organisations should provide opportunities for their leaders to connect with peers and experts from diverse sectors, both locally and globally, to exchange ideas, learn about emerging trends, and identify potential partnerships or alliances that can drive innovation and growth (Cummings & Holmberg, 2012). By facilitating these connections, South African banks can enhance their leaders' ability to navigate the complex and interconnected landscape of the 4IR.

#### 5.3 PROPOSED VUCA FRAMEWORK OR LEADERSHIP COMPETENCIES PROFILE

To this end a comprehensive and integrated VUCA framework and leadership competency profile is proposed. This framework combines the essential elements of VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) with the key leadership competencies and capabilities identified in the literature and the findings of this study.

The proposed VUCA framework and leadership competency profile consists of the following ten components:

- Adaptability: The ability to adjust and respond effectively to changing circumstances, including embracing new technologies and business models (Horney et al., 2010). Leaders in the South African banking sector must be prepared to quickly adapt their strategies, operations, and organisational structures in response to the rapidly changing environment of the 4IR.
- 2. Resilience: The capacity to recover quickly from setbacks and adapt to adversity, demonstrating mental and emotional toughness in the face of challenges (Ledesma, 2014). Resilient leaders are better equipped to manage the stress and pressure associated with leading organisations in the volatile and uncertain landscape of the 4IR.
- 3. Innovation: The ability to generate and implement new ideas, approaches, and solutions to address complex problems and seize emerging opportunities (Dyer et al., 2011). Innovative leaders are essential for driving organisational growth and competitiveness in the 4IR, as they can identify new markets, products, and services, and foster a culture of creativity and experimentation within their organisations.

- 4. Strategic Thinking: The capacity to analyse complex situations, identify critical issues, and develop long-term plans to achieve organisational objectives (Liedtka, 1998). Strategic thinkers can anticipate and respond to the challenges and opportunities presented by the 4IR, ensuring the ongoing success and sustainability of their organisations.
- 5. Collaboration: The ability to work effectively with others, including cross-functional teams, to achieve shared goals and leverage diverse perspectives and expertise (O'Leary & Mortensen, 2010). Collaborative leaders can foster strong relationships and partnerships both within and outside their organisations, driving innovation and growth in the interconnected landscape of the 4IR.
- 6. Emotional Intelligence: The ability to recognise, understand, and manage one's own emotions and those of others, fostering effective interpersonal relationships and decision-making (Goleman, 1995). Emotionally intelligent leaders are better able to navigate the complexities of the 4IR, as they can empathise with their team members, communicate effectively, and make informed decisions under pressure.
- 7. Technological Savvy: The ability to understand, evaluate, and leverage emerging technologies to improve organisational performance and drive innovation (Hess & Ludwig, 2016). Technologically savvy leaders can identify and capitalise on the opportunities presented by new technologies and digital platforms.
- 8. Learning Agility: The ability to rapidly acquire new knowledge and skills, and apply them effectively in novel and complex situations (DeRue & Myers, 2014). Learning agile leaders can adapt quickly to the evolving demands of the 4IR, as they are able to recognise and respond to emerging trends, challenges, and opportunities.
- 9. Global Mindset: The ability to appreciate and leverage cultural, political, and economic diversity, and operate effectively in a globalised environment (Gupta & Govindarajan, 2002). Leaders with a global mindset can navigate the interconnected landscape of the 4IR, identifying opportunities for growth and innovation across borders and fostering cross-cultural collaboration within their organisations.
- 10. Ethical Leadership: The ability to demonstrate strong ethical values, uphold high standards of integrity and fairness, and promote ethical decision-making within the organisation (Brown et al., 2005). Ethical leaders can ensure that their organisations operate responsibly and sustainably in the 4IR, addressing the social, environmental, and ethical challenges that arise in this rapidly changing landscape.

# 5.3.1 Implementation of the Proposed VUCA Framework and Leadership Competency Profile

To effectively implement the proposed VUCA framework and leadership competency profile in the South African banking sector, several strategies should be considered:

- Assessment and Diagnosis: Organisations should assess their current leadership capabilities and identify gaps in relation to the proposed VUCA framework and leadership competency profile. This can involve conducting 360-degree feedback assessments, performance evaluations, and self-assessments, as well as analysing existing leadership development initiatives.
- 2. Customisation of Leadership Development Programs: Based on the assessment and diagnosis, organisations should customise their leadership development programs to target the specific competencies and capabilities outlined in the proposed VUCA framework and leadership competency profile. This may involve revising existing programs or designing new ones to address the identified gaps and needs.
- 3. Integration of the VUCA Framework into Organisational Culture and Strategy: To ensure the successful implementation of the proposed VUCA framework and leadership competency profile, organisations should integrate these elements into their overall culture and strategy. This may involve incorporating the VUCA framework into the organisation's vision and mission statements, communicating the importance of the framework to all employees, and aligning leadership development initiatives with the organisation's strategic objectives.
- 4. Ongoing Monitoring and Evaluation: Organisations should regularly monitor and evaluate the effectiveness of their leadership development programs and initiatives in relation to the proposed VUCA framework and leadership competency profile. This can involve tracking key performance indicators, conducting regular assessments of leadership capabilities, and gathering feedback from participants and stakeholders to inform continuous improvement efforts.
- 5. Collaboration with External Partners: To support the implementation of the proposed VUCA framework and leadership competency profile, organisations should consider collaborating with external partners, such as universities, research institutes, and industry associations. These partnerships can provide access to cutting-edge research, expertise, and resources, and facilitate knowledge sharing and collaboration across the sector.
- 7. Fostering a Continuous Learning Culture: Organisations should promote a culture of continuous learning and development, encouraging leaders at all levels to engage in ongoing professional development opportunities, such as workshops, training programs, and industry conferences. This can help ensure that leaders remain up-to-date with the latest knowledge, skills, and best practices in their fields. Leveraging

Technology in Leadership Development: In the context of the 4IR, organisations should leverage technology to enhance their leadership development programs and initiatives. This may involve using digital platforms for delivering training, incorporating virtual reality or augmented reality technologies for immersive learning experiences, and utilising data analytics to track and evaluate the effectiveness of leadership development initiatives (Nambisan et al., 2017). By integrating technology into their leadership development efforts, organisations can ensure that their leaders are not only familiar with the latest technological advancements, but also adept at leveraging these tools to drive innovation and performance.

- 8. Focusing on Inclusivity and Diversity: To ensure the effectiveness and sustainability of the proposed VUCA framework and leadership competency profile, organisations should focus on promoting inclusivity and diversity within their leadership ranks. This may involve implementing targeted recruitment and development strategies to attract and retain diverse talent, as well as fostering a culture of inclusion and belonging within the organisation (Mor Barak, 2017). By cultivating diverse and inclusive leadership teams, organisations can benefit from a broader range of perspectives and experiences, which can enhance decision-making, innovation, and adaptability in the face of the 4IR's challenges.
- 9. Encouraging Employee Engagement and Empowerment: To maximize the impact of the proposed VUCA framework and leadership competency profile, organisations should encourage employee engagement and empowerment at all levels. This may involve fostering open communication channels, involving employees in decisionmaking processes, and providing opportunities for growth and development (Macey & Schneider, 2008). By empowering their employees, organisations can create a more agile and adaptable workforce, better equipped to navigate the complex and rapidly changing landscape of the 4IR.
- 10. Establishing a Supportive Environment for Leadership Development: Finally, organisations should create a supportive environment that enables leaders develop the competencies and capabilities outlined in the proposed VUCA framework and leadership competency profile. This may involve providing access to resources, tools, and support systems, such as coaching and mentoring programs, peer networks, and professional development opportunities (Hatala & Lutta, 2009). By creating a supportive environment for leadership development, organisations can help their leaders thrive in the face of the challenges and opportunities presented by the 4IR.

By implementing these strategies, organisations in the South African banking sector can effectively incorporate the proposed VUCA framework and leadership competency profile into

their leadership development initiatives, ensuring their leaders are well-equipped to navigate the complex and rapidly evolving landscape of the 4IR.

# 5.3.2 The Role of the South African Banking Sector in Implementing the Proposed VUCA Framework and Leadership Competency Profile

The South African banking sector has a critical role to play in implementing the proposed VUCA framework and leadership competency profile, as it can drive the adoption of these elements across the industry and contribute to the development of future-ready leaders. To effectively fulfil this role, the South African banking sector should consider the following actions:

- 1. Establishing Industry-Wide Standards and Best Practices: The South African banking sector can work together to establish industry-wide standards and best practices for leadership development in the context of the 4IR. This may involve developing a shared understanding of the proposed VUCA framework and leadership competency profile, as well as identifying and promoting the most effective strategies for implementing these elements in various organisational contexts.
- 2. Facilitating Collaboration and Knowledge Sharing: The South African banking sector can facilitate collaboration and knowledge sharing among its members by organising industry forums, workshops, and conferences focused on leadership development in the 4IR. These events can provide opportunities for organisations to share their experiences, challenges, and successes in implementing the proposed VUCA framework and leadership competency profile, as well as to learn from the insights and expertise of others.
- 3. Advocating for Policy Support and Regulatory Alignment: The South African banking sector can advocate for policy support and regulatory alignment to create an enabling environment for the implementation of the proposed VUCA framework and leadership competency profile. This may involve engaging with policymakers and regulators to raise awareness of the importance of leadership development in the context of the 4IR, and to ensure that the regulatory landscape supports and promotes the adoption of these elements within the industry.
- 4. Fostering Partnerships with Educational Institutions and Industry Associations: The South African banking sector can foster partnerships with educational institutions and industry associations to support the development and implementation of the proposed VUCA framework and leadership competency profile. These partnerships can help to

align educational curricula with the identified competencies and capabilities, as well as facilitate the sharing of best practices and resources across the industry.

## 5.3.3 Supporting Research and Development

The South African banking sector can support research and development initiatives focused on leadership development in the 4IR by providing funding, resources, and expertise. By investing in research and development, the industry can contribute to the ongoing refinement and improvement of the proposed VUCA framework and leadership competency profile, ensuring that it remains relevant and effective.

# 5.3.4 Monitoring and Evaluation of the Proposed VUCA Framework and Leadership Competency Profile

In order to assess the effectiveness of the proposed VUCA framework and leadership competency profile, and to facilitate continuous improvement, it is essential to establish a robust monitoring and evaluation system. This system should focus on measuring the impact of the framework and profile on leadership development and organizational performance, as well as identifying areas for improvement and refinement. The following are some key considerations for establishing an effective monitoring and evaluation system:

- Develop Clear and Measurable Objectives: To effectively evaluate the impact of the proposed VUCA framework and leadership competency profile, organizations should develop clear and measurable objectives for their leadership development initiatives. These objectives should be aligned with the identified competencies and capabilities, and should provide a clear benchmark against which progress can be assessed.
- 2. Establish Key Performance Indicators (KPIs): Organizations should establish a set of KPIs that can be used to measure the effectiveness of their leadership development initiatives in achieving the stated objectives. These KPIs may include both quantitative and qualitative measures, such as employee engagement scores, retention rates, and leadership performance evaluations.
- 3. Collect and Analyse Data: Organisations should regularly collect and analyse data related to the KPIs, in order to track their progress in implementing the proposed VUCA framework and leadership competency profile, and to identify areas for improvement. This may involve conducting regular surveys, assessments, and feedback sessions with employees and leaders, as well as analysing organizational performance data.

- 4. Adjust and Refine the Framework and Profile: Based on the insights gained from the monitoring and evaluation process, organizations should adjust and refine the proposed VUCA framework and leadership competency profile as needed. This may involve updating the identified competencies and capabilities, adjusting the focus of leadership development initiatives, or adopting new strategies and approaches to address emerging challenges and opportunities.
- 5. Share Lessons Learned and Best Practices: Finally, organizations should share the lessons learned and best practices from their monitoring and evaluation efforts with other stakeholders in the South African banking sector. This can help to foster a culture of continuous learning and improvement, and to ensure that the proposed VUCA framework and leadership competency profile remains relevant and effective in addressing the evolving challenges and opportunities of the 4IR.

In conclusion, the proposed VUCA framework and leadership competency profile for the South African banking sector is designed to equip leaders with the essential competencies and capabilities needed to navigate the complex and rapidly changing landscape of the 4!R. By adopting this framework and profile, and by implementing the recommended strategies and actions, organisations within the South African banking sector can better prepare their leaders for the challenges and opportunities of the 4IR and ensure the ongoing success and sustainability of their organisations in this dynamic environment.

### 5.4 LIMITATIONS OF THE STUDY

This study has the following limitations that should be considered when interpreting the findings and applying the recommendations. The sample size for the empirical investigation was relatively small and limited to Learning and Development managers and high-level banking executives in the banking sector. This may limit the generalisability of the findings to other industries or levels of leadership.

The study also relied primarily on self-report questionnaires for data collection, which can be subject to social desirability bias and may not accurately capture the full range of leadership competencies and capabilities required for success in the 4IR. Future research could benefit from incorporating more objective measures, such as performance evaluations or 360-degree feedback assessments, to provide a more comprehensive picture of leadership competencies and capabilities in the South African banking sector.

#### 5.5 FUTURE RESEARCH DIRECTIONS

Building on the findings and limitations of this study, several avenues for future research can be identified. Future research could explore the applicability of the proposed VUCA framework or leadership competencies profile to other industries or countries, to assess the generalisability of the findings and recommendations.

Future studies could also investigate the impact of organisational factors, such as culture or leadership styles, on the development and effectiveness of leadership competencies and capabilities in the context of the 4IR. This could provide valuable insights into how organisations can create environments that foster the development of the necessary skills and attributes for success in the rapidly changing 4IR landscape.

Lastly, future research could employ longitudinal designs to examine the development of leadership competencies and capabilities over time, as well as the impact of leadership development initiatives on organisational performance and innovation in the context of the 4IR. This would provide a more comprehensive understanding of the dynamics of leadership development and its effects on organisational success in the 4IR.

#### 5.6 CONCLUSION

This study has made a valuable contribution to the understanding of leadership competencies and capabilities in the South African banking sector for the 4IR. By examining the current state of leadership development in the sector and identifying potential areas for improvement, this study offers important insights and recommendations for enhancing the effectiveness of leadership development initiatives in the context of the 4IR.

The proposed VUCA framework and leadership competencies profile provides a valuable starting point for organisations seeking to adapt their leadership development initiatives to the unique challenges of the 4IR. By incorporating the key elements of adaptability, resilience, innovation, strategic thinking, collaboration, emotional intelligence, and technological savvy, South African banks can better equip their leaders to navigate the complex and rapidly changing 4IR landscape, ensuring the ongoing success and sustainability of their organisations.

As the 4IR continues to reshape the global economy and redefine the nature of work, the importance of effective leadership cannot be overstated. By developing leaders with the necessary competencies and capabilities to thrive in the 4IR, South African banks can seize the opportunities presented by this transformative era and ensure their ongoing competitiveness and success.

#### REFERENCE LIST

- Abutabenjeh, S., & Jaradat, R. (2018). Clarification of research design, research methods, and research methodology. *Teaching Public Administration*, *36*(3), 237–258. https://doi.org/10.1177/0144739418775787.
- Adams, J., & Khan, H. (2017). Reserach Methods for Graduate Business and Social Sciences Students. New York: Sage.
- Ahrens, T., & Khalifa, R. (2013). Researching the lived experience of corporate governance. Qualitative Research in Accounting & Management, 10(1), 4-30.
- Alchian, A., & Demsetz, H. (1972). Production, Information Costs, and Economic Organization. *American Economic Review*, 62(5), 777–795.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of Occupational Psychology, 63(1), 1-18. https://doi.org/10.1111/j.2044-8325.1990.tb00506.x.
- Ali, A., Keong, K. C., Zakaria, N., Zolkafli, U., & Akashah, F. (2018). The Effect of Design on Maintenance School Buildings in Penang, Malaysia. *Structural Survey*, 194-201.
- Ali, M. M. (2014). Essentials of Total Quality Management: A Meta Analysis. *International Journal of Health Care Quality Assurance* 26(2), 147-173.
- Aamodt, M. G. (2010). *Industrial/organizational psychology: An applied approach*. Cengage Learning.
- Anderson, R. J., & Adams, W. A. (Bill). (2019). Scaling leadership: Building organizational capability and capacity to create outcomes that matter most. Hoboken: John Wiley & Sons.
- Antonakis, J., Cianciolo, A. T., & Sternberg, R. J. (2004). *The nature of leadership*. London: Sage.

- Appelbaum, N. P., Dow, A., Mazmanian, P. E., Jundt, D. K., & Appelbaum, E. N. (2016). The effects of power, leadership and psychological safety on resident event reporting. *Medical education*, *50*(3), 343–350. https://doi.org/10.1111/medu.12947.
- Arkkelin, D. (2014). Using SPSS to understand research and data analysis. In *Psychology Curricular Materials*. *Book* (Vol. 1).
- Asrar-ul-Haq, M., & Kuchinke, K. P. (2016). Impact of leadership styles on employees' attitude towards their leader and performance: Empirical evidence from Pakistani banks. Future Business Journal, 2(1), 54-64. https://doi.org/10.1016/j.fbj.2016.05.002.
- Baker, M. J. (2016). *The marketing book.* Oxford: Butterworth-Heinemann.
- Barnard, C. I. (1938). *The functions of the executive*. Cambridge, MA: Harvard University Press.
- Bass, B. M., & Avolio, B. J. (1990). Developing transformational leadership: 1992 and beyond. *Journal of European Industrial Training,* 14(5), 21-27.

  https://doi.org/10.1108/03090599010135122.
- Bass, B. M., & Avolio, B. J. (1990). The implications of transactional and transformational leadership for individual, team, and organizational development. In R. W. Woodman & W. A. Pasmore (Eds.), Research in organizational change and development, 4, 231-272. Greenwich, GT: JAI Press.
- Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd ed.). Psychology Press.
- Bass, B., & Stogdill, R. (1990). *Bass and Stighills handbook of leadership.* New York: Free Press.
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting Review*, 71, 443–455.
- Beasley, M., Carcello, J. V., Hermanson, D. R., & Lapides, P. D. (2018). Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms. *Accounting Horizons*, *14*, 441–452.

- Bell, E., Bryman, A., & Harle, B. (2019). *Business research methods* (5th ed.). New York, USA: Oxford University Press.
- Best, J., & Khan, J. (2016). Research in education (3rd ed.). New York: McGraw Hill.
- Bennis, W. (1989). Managing the dream: Leadership in 21st century. *Journal of Organisational Change Management*, *2*(1), 6-10.
- Bednall, T. C., Rafferty, A. E., Shipton, H., Sanders, K., Jackson, C. J., & Streets, W. (2018). Innovative behaviour: How much transformational leadership do you need? *British Journal of Management*, 29, 796–816. https://doi.org/10.1111/1467-8551.12275.
- Bhandari, P. (2020). *An introduction to quantitative research*. Retrieved from https://www.scribbr.com/methodology/guantitative-research/.
- Boateng, E. (2018). *The future of facility management in Finland*. JAMK University of Applied Sciences.
- Boodhun, H. (2016). *Identification of the key urban facilities management principles of a sustainable urban precinct: A case study of Ebene Cybercoty, Mauritius.* University of Cape Town.
- Bonorchis, R., 2016. Standard Bank first-half net profit falls 18% | Fin24. [online] Fin24.

  Available at: https://www.news24.com/amp/fin24/companies/financial-services/standard-bank-first-half-net-profit-falls-18-20160818 [Accessed 6 August 2021].
- Bruno L. F. C., & Lay, G. E. (2016). *Personal values and leadership effectiveness*. Retrieved May 10, 2021 from: http://www.g-casa.com/download/Bruno\_Personal\_Values\_Leadership.pdf.
- Bryman, A. (2017). Social research methods (4th ed). New York: Oxford University Press.
- Burns, A. C., & Bush, R. F. (2016). *Marketing research*. New York: Pearson.
- Burns, J. (1978). Leadership. New York: Harper & Row Publishers, Inc.

- Buys, F., & Tonono, E. (2018). Reasons for the Transformation of Facilities Management in the Public Sector. *Acta Structilia* 14 (2), 76-90.
- Bressler, M. (2010). Planning and projecting critical human resource needs: The relationship between hope, optimism, organizational commitment, and turnover intention among U.S. Army reserve soldiers. *Journal of Behavioural Studies in Business*, *2*, 1-12. Retrieved from http://www.aabri.com/jbsb.html.
- Carmen, J. E. (222-236). Teamwork Effectiveness Factors in Healthcare and Manufacturing Industries. *Team Performance Management: An International Journal 19(3)*.
- Chatterjee, S., & Mohanty, P. (2017). Technological convergence, human capital and economic growth. Economic Modelling, 60, 1-12. <a href="https://doi.org/10.1016/j.econmod.2016.11.001">https://doi.org/10.1016/j.econmod.2016.11.001</a>.
- Chatman, J. A. (1991). *Matching people and organizations: Selection and socialization in public accounting firms*. Administrative Science Quarterly, *36*(3), 459-484.
- Charreaux, G. (1997). La creation de valeur de l'entreprise (10 ed.). Paris, France: Economica.
- Christiansen, B., & Chandan, H. C. (2017). Handbook of research on human factors in contemporary workforce development. In *Handbook of Research on Human Factors in Contemporary Workforce Development*. https://doi.org/10.4018/978-1-5225-2568-4.
- Churchman, C. W. (1968). *The Systems Approach.* New York: Dell Publishing Co. Incorporated.
- Cohen, L., Manion, L., & Morrison, F. (2018). *Research Methodology in Education*. Boston: Routledge.
- Collis, J., & Hussey, R. (2013). Business research: A practical guide for undergraduate and postgraduate students. (2nd ed.). London: Palgrave Macmillan.
- Conger, J. A., & Kanungo, R. N. (1998). Charismatic leadership in organizations. Sage Publications.

- Creswell, L., & Plano Clark, V.L. (2011). Designing and conducting: Mixed Methods research (2nd ed.). California, United States of America: Sage Publication.
- Creswell, J. W. (2013). Qualitative Inquiry and Research Design: Choosing among Five Approaches. Los Angeles: SAGE Publications.
- Creswell, J. (2016). Reaserch Design: Qualitative, Quantitative and Mixed Methods. New York: McGraw Hill Publishers.
- Croft, L., & Seemiller, C. (2017). Developing Leadership Competencies. *New Directions for Student Leadership*, 2017(157), 7–18. https://doi.org/10.1002/yd.20267.
- Crowther, A. &. (2019). Corporate Sustainability Reporting: A Study in Disingenuity? *Journal of Business Ethics*, 87 (1):279 288. Retrieved from https://philpapers.org/rec/ARACSR.
- Drath, W. H., McCauley, C. D., Palus, C. J., Van Velsor, E., O'Connor, P. M. G., & McGuire, J. B. (2008). Direction, alignment, commitment: Toward a more integrative ontology of leadership. The Leadership Quarterly, 19(6), 635–653.
- De Vos, A., Strydom, H., Fouche, C., & delport, C. (2015). Research at grassroot: For the socail scientists and human servicess profession. Pretoria: Van Schaik.
- Deegan, C., Rankin, M., & Voght, P. (2016). Firms' disclosure reactions to major social incidents: Australian evidence", *Accounting Forum*, *24*(1), 101-130.
- Denhardt, R. B., & Campbell, K. B. (2006). The role of democratic values in transformational leadership. Administration & Society, 38(5), 556-572. <a href="https://doi.org/10.1177/0095399706290142">https://doi.org/10.1177/0095399706290142</a>.
- DePoy, E., & Gitlin, L. N. (1994). *Introduction to research: Multiple strategies for health and human services. St.* Louis, MO; C. V. Mosby.
- Diamantidis, A. D., & Chatzoglou, P. (2019). Factors affecting employee performance: an empirical approach. *International Journal of Productivity and Performance Management*, 68(1), 171–193. https://doi.org/10.1108/IJPPM-01-2018-0012.

- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. Annual Review of Psychology, 41, 417–440.
- Dillman, D. (2018). *Mail and web-based survey: the tailored design method.* New York: John Wiley & Sons.
- Dudovskiy, J. (2018). *The Ultimate Guide to Writing a Dissertation in Business Studies: A Step-by-Step Assistance*. Retrieved from https://research-methodology.net/about-es/ebook.
- Durkheim, E. (2015). De la division du travail social: étude sur l'organisation des sociétés supéreures. Paris: Presses Universitaires de France.
- Dzdiuban, S. W., & Shirkey, E. C. (1974). When is a correlation matrix appropriate for factor analysis? Some decision rules. Psychological Bulletin, 81(6), 358–361.
- Engelbrecht, A. S. (2002). The effect of organisational leadership on value congruence and effectiveness: An integrated model. In S.M. Brink. (Ed.), South African Journal of Economic and Management Sciences, 5(3), 589-608. Pretoria: University of Pretoria.
- Elfil, M., & Negida, A. (2019). Sampling methods in clinical research; an educational review. *Archives of Academic Emergency Medicine*, 7(1), 52. https://doi.org/10.22037/emergency.v5i1.15215.
- Elmualim, A., Shockley, D., & Valle. (2016). Barrier and Commitment of Facilities Management Profession to the Sustainability Agenda. *Building and Environment* 45(1), 58-64.
- Fama, E., & Jensen., M. (1983). Separation of Ownership and Control. *Journal of Law and Economics*, 88(2), 301-325.
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups. *The Academy of Management Review*, 24(3), 489-505.
- Frels, R. K., & Onwuegbuzie, A. J. (2013). Administering quantitative instruments with qualitative interviews: A mixed research approach. *Journal of Counseling & Development*, *91*, 184-194. doi:10.1002/j.1556-6676.2013.00085.

- Frost & Sullivan. (2019). *An Assessment of South African Facilities ManagementIndustry.*Research for South African Facilities Management Association.
- Gay, L. (1996). *Educational Research* (5th Edition ed.). New jersey: Picador.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: a review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal, 8*(2), 47-77.
- Greener, S., & Martelli, J. (2015). An Introduction to Business Research Methods. BookBoon.
- Grobler, A., & Du Plessis, A. J. (2016). A conceptual model of the influence of corporate social responsibility on employee engagement. Acta Commercii, 16(1), 1-11. https://doi.org/10.4102/ac.v16i1.361.
- Hackman, J. R., & Wageman, R. (2005). A theory of team coaching. Academy of Management Review, 30(2), 269–287.
- Hancock, B. (1998). An Introduction to Qualitative Research. Trent Focus for Research and Development in Primary Health Care. Trent, Trent Focus,: 27.
- Hawley, J., & Williams, A. (1996). Corporate Governance in the United States: The Rise Of Fiduciary Capitalism. California: Saint Mary's College of California, School of Economics and Business Administration.
- Hess, G. (1996). Zum Stand der Diskussion in den Vereinigten Staaten. Köln: Otto Schmidt-Verlag.
- Hinkin, T. (1995). A review of scale development practices in the study of organizations. . *Journal of Management*, *21*(5), 967-988.
- Hirst, G., & Mann, L. (2014). E-learning and its impact on the workplace: An examination of the benefits, barriers and critical success factors. In ePedagogy in Online Learning: New Developments in Web Mediated Human Computer Interaction (pp. 1-14). IGI Global. <a href="https://doi.org/10.4018/978-1-4666-4106-5.ch001">https://doi.org/10.4018/978-1-4666-4106-5.ch001</a>.

- Ifeanyichukwu, O. E. (2018). *Problems of Facilities Management in Corporate Organisations in Lagos State: A Case Study of Some Selected Manufacturing Industrries.* University of Nigeria. International Facility Management Association. (2018, July 6). *Home Page*. Retrieved from IFMA: http://www.ifma.org.
- Iraossi, G. (2016). The Power of Survey Design: A users guide for managing surveys. *The World Bank Journal, 1*(1), 100-110.
- Jacobs, R., & Solomon, T. (1977). Strategies for enhancing the prediction of job performance from job satisfaction. Journal of Applied Psychology, 62(4), 417–421.
- Jensen, M., & Meckling, W. (1976). 'Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure', *Journal of Financial Economics*, *3*(4), 305-360.
- Jones, W., & Kottler, J. (2016). *Understanding research: Becoming a competent and critical consumer.* Upper Saddle River, NJ: Pearson.
- Kamarazaly, M. A. (2014). Challenges in Stratgic Facilities Management: Analysis of Problems Faced by University Facilities Managers in New Zealand and Australia. Massey University.
- Kielmann, K., Cataldo, F., & Seeley, J. (2018). *Introduction to Qualitative Methodology: A Training Manual.* Department for International Development.
- Kanter, R.M. (1989). When giants learn to dance: Mastering the challenges of strategy, management, and careers in the 1990s. London: Unwin.
- Klemp, G.O. (1980). *The assessment of occupational competence*. Washington, DC: National Institute of Education.
- Klein, A. (2015). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(3), 375-400.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet, H. C. W., & van der Beek, A. J. (2012). Development of an individual work performance questionnaire. International Journal of Productivity and Performance Management, 62(1), 6-28. <a href="https://doi.org/10.1108/17410401311285273">https://doi.org/10.1108/17410401311285273</a>.

- Korac-Kakabadse, N., Kakabadse, A., Kouzmin, A. (2020). 'Board governance and company performance: any correlations?', *Corporate Governance*, 1(1), 24–30.
- Kumar, R. (2019). Research Methodology: A Step-by-Step Guide for Beginners (5th ed.). New York: Sage publications.
- Kumar, N., & Singh, J. P., (2012). 'Outside directors, corporate governance and firm performance: Empirical evidence from India'. Asian Journal of Finance & Accounting, 4 (2), 39-55.
- Kurdi, M. K., Tharim, A. H., Jaffar, N., Azli, M., Shuib, M. N., & Ab-Wahid, A. (2015). Outsourcing in Facilities Management - A Literature Review. *Procedia Engineering 20*, 445-457.
- Lau, A. W., & Pavett, C. M. (1980). The nature and role of feedback: A study of the supervisor-subordinate dyad. Group & Organization Studies, 5(3), 279-294. https://doi.org/10.1177/105960118000500302.
- Lear, J. L. (2012). Lear on Aristotle: A conversation with Jonathan Lear. Philosophy in Review, 32(5), 331-333.
- Leedy, P., & Ormrod, J. (2015). *Practical research: Planning and Design* (International Edition ed.). New Jersey: Pearson Prentice Hall.
- Lehtinen, T. (eWork and eBusiness in Architecture, Engineering and Construction). 2016.

  Increasing Integration in Construction Projects: A Case Study on PPP Projects

  Adopting BIM.
- Loonam, J., Eaves S, Kumar, V., & Parry, G. (2018). Towards digital transformation: Lessons learned from traditional organizations. *Strategic Change*, 27(2), 101–109. https://doi.org/10.1002/jsc.2185.
- Lunde, Å., Heggen, K., & Strand, R. (2013). Knowledge and power exploring unproductive interplay between quantitative and qualitative researchers. *Journal of Mixed Methods Research*, 7, 197-210. doi:10.1177/ 1558689812471087.

- Mfana, Hasan, & Ali. (2019). Odd/Even Order Sampling Soft-Core Architecture towards Mixed Signals Fourth Industrial Revolution (4IR) Applications. Energies, 12(23), 4567. doi: 10.3390/en12234567.
- Manyika, J. (2016). Technology, jobs, and the future of work. McKinsey Global Institute.
- Makuta, E. (2019). Towards good corporate governance in state-owned industries: the accountability of directors. *Malawi Law Journal.*, *Vol.* 3, 55.
- Martowe, W. J. (1986). The role of flexibility in the adoption of advanced manufacturing technology. Journal of Manufacturing Systems, 5(2), 113-123. https://doi.org/10.1016/0278-6125(86)90045-4.
- Mbama, C. I., & Ezepue, P. O. (2018). 'Digital banking, customer experience and bank financial performance: UK customers' perceptions'. *International Journal of Bank Marketing*, *36*(2), 230–255. https://doi.org/10.1108/IJBM-11-2016-0181.
- McGregor, D. (1960). The Human Side of Enterprise. New York, NY: McGraw-Hill.
- McMillan, J., & Schumacher, S. (2016). *Reaesrch in education: Evidence Based Inquiry.* New York: Pearson Education, Inc.
- Mei Kin, T., Abdull Kareem, O., Nordin, M. S., & Wai Bing, K. (2018). 'Principal change leadership competencies and teacher attitudes toward change: the mediating effects of teacher change beliefs'. *International Journal of Leadership in Education*, *21*(4), 427–446. https://doi.org/10.1080/13603124.2016.127271.
- Merriam, S. B. (2019). *Qualitative research: A guide to design and implementation.* . San Francisco: Jossey-Bass.
- Mitchell, K. A. (2013). 'Urban Facilities Management: A Means to the Attainment of Sustainable Cities'. *Journal of Facilities Management 11(3)*.
- Migiro, S. O., & Magangi, B. A. (2011). 'Mixed methods: A review of literature and the future of the new research paradigm'. *African Journal of Business Management*, *5*, 3757-3764. doi:10.5897/AJBM09.082.

- Moorman, R. H., Niehoff, B. P., & Organ, D. W. (1993). Treating employees fairly and organizational citizenship behavior: Sorting the effects of job satisfaction, organizational commitment, and procedural justice. Employee Responsibilities and Rights Journal, 6(3), 209-225. https://doi.org/10.1007/BF01385031.
- Moses, M. (2019). *The Seven Biggest Problems with Leadership Today*. Retrieved from https://ceocoachinginternational.com/problems-with-leadership.
- Mumford, T. V., Campion, M. A., & Morgeson, F. P. (2007). The leadership skills strataplex: Leadership skill requirements across organizational levels. The Leadership Quarterly, 18(2), 154–166.
- Mustapa, S. A., & Adnan, H. (2018). 'Facility Management Challenges and Opportunities in the Malaysian Property Sector'. *Journal of Sustainable Development*, 79-85.
- Newson, M., & Deegan, C. (2020). 'Global expectations and their association with corporate social disclosure practices in Australia, Singapore and South Korea.' *The International Journal of Accounting*, *37*(2), 183-213.
- Northouse, P.G. (2016). Leadership: Theory and practice. New York: Sage publications.
- Northouse, P. G. (2014). *Introduction to leadership: Concepts and practice*. New York: Sage Publications.
- Nuyens, H. (2019). 'How disruptive are FinTech and digital for banks and regulators?' *Journal of Risk Management in Financial Institutions*, 12(3), 217–222. Retrieved from http://content.ebscohost.com/ContentServer.asp?T=P&P=AN&K=137835187&S=R&D=bth&EbscoContent=dGJyMNLe80Sep7U4zdnyOLCmr1Gep69SsKu4TbaWxWXS&ContentCustomer=dGJyMPGnr0q2rLBLuePfgeyx44Dt6flA.
- O'Connor, J., Priem, R., Coombs, J., & Gilley, K. (2016). 'Do CEO stock options prevent or promote fraudulent financial reporting?' *The Academy of Management Journal*,, 49(3), 483-500.
- O'Donovan, G. (2012). 'Environmental disclosures in the annual report: extending the applicability and predictive power of legitimacy theory'. *Accounting, Auditing & Accountability Journal*, *15*(3), 344-371.

- Oke, A., & Fernandes, F. (2020). 'Innovations in Teaching and Learning: Exploring the Perceptions of the Education Sector on the 4th Industrial Revolution (4IR)'. *Journal Of Open Innovation: Technology, Market, And Complexity*, 6(2), 31. doi: 10.3390/joitmc6020031.
- Oladokun, T. T., Oyewole, M. O., & Odebode, A. A. (2018). 'Perceptual Evaluation of the Effectiveness of Facility Management Strategies in Nigeria'. *Ife Journal of Environmental Design and Management 4(1)*, 93-102.
- Pakrudin, N. A., Mohd-Asmoni, M. N., Mei, J. L., Jaafar, M. N., & Mohammed, A. H. (2017). 'Critical Success Factors for Facilities Management Implementation in the Healthcare Industry'. *International Journal of Real Estate Studies 2(2)*, 69-83.
- Pallant, J. (2007). SPSS survival manual: A step by step guide to data analysis using SPSS for Windows (Version 15). McGraw-Hill Education.
- Palmer, B., Walls, M., Burgess, Z. and Stough, C. (2001), *Emotional intelligence and effective leadership*. Leadership & Organization Development Journal, *22(1)*, 5 10.
- Parthasarathy, S. (2017). *Corporate Governance –Principles, Mechanism & Practices*", (First Edition ed.). Bizmantra Publication.
- Parsons, V. L. (2017). 'Stratified Sampling'. In *Wiley StatsRef: Statistics Reference Online* (pp. 1–11). https://doi.org/10.1002/9781118445112.stat05999.pub2.
- Patton, M. Q. (2015). Qualitative evaluation and Research Methods. Beverly Hills: CA: Sage.
- Penrose, E. G. (1959). The Theory of the Growth of the Firm. New York: Wiley.
- Pound, J. I. (1993). The rise of the political model of corporate governance and corporate control. New York University Law Review, 68(5), 1003-1071.
- Paulhus, D. L., & Harms, P. D. (2014). *Measuring cognitive ability with the over claiming technique*. Leadership Institute Faculty Publications, *10*, 297–314. University of British Columbia, Canada.

- Pawar, B.S., & Eastman, K.K. (1997). The nature and Implications of contextual influences on transformational leadership: A conceptual examination. Academy of Management Review, 22(1), 80-109.
- Pearce, C. L., Sims, H. P., Jr., Cox, J. F., Ball, G., Schnell. E., Smith, K. A., & Trevino, L. (2013). *Transactors, transformers and beyond: A multi-method development of a theoretical typology of leadership*. Journal of Management Development, 22(4), 273-307.
- Perera, G. D. M., Khatibi, A., Navaratna, N., & Chinna, K. (2014). *Job satisfaction and job performance among factory employees in apparel sector*. Asian Journal of Management Sciences and Education, *3(1)*, 96–104.
- Percy, R. A. (1994). Construct validity of the Multifactor Leadership Questionnaire: A critical review and constructive revision. Unpublished doctoral dissertation, University of Western Ontario, London, Ontario, Canada.
- Pillai, R., Schriesheim, C.A., & Williams, E.S. (1999). Fairness perceptions and trust for transformational and transactional leadership: A two-sample study. Journal of Management, 25 (6), 897-933.
- Pillai, R., Williams, E.A., Lowe, K.B., & Jung, D.I. (2013). *Personality, transformational leadership, trust, and the 2000 U.S. presidential vote*. The Leadership Quarterly, *14*, 161–192.
- Pillay, M. (2013). *Emotional intelligence and leadership styles in a petrochemical organisation*. Masters Dissertation. Pretoria: University of South Africa.
- Putrivi, N. (2020). How Digital Innovation and Dynamic Organization Concept Can Help Creative Industries to Survive COVID-19 Global Pandemic. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3590926.
- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management. An Introduction to Process and Method.* London: Sage.
- Ritzer, G. (2011). Globalization: The Essentials. John Wiley & Sons.

- Rowe, M. L., Raudenbush, S. W., & Goldin-Meadow, S. (2012). *The pace of vocabulary growth helps predict later vocabulary skill. Child development, 83,* 508-525.
- Robson, C., & McCartan, K. (2016). *Real World Research* (4th ed.). New Jersey: Wiley Publishers.
- Runyon, R.P., & Haber, A. (1980). Fundamentals of behavioural statistics (5th edn.). Addison-Wesley, Reading, Mass.
- SDA Skills Development Act (No. 97 of 1998) as amended.
- Sageer, A., Raft, S., & Agarwal, P. (2012). *Identification of variables affecting employee* satisfaction and their impact on the organisation. IOSR Journal of Business Management, 5, 32–39. Retrieved May 10, 2021 fromhttp://iosrjournals.org/iosr-jbm/papers/Vol5-issue1/E0513239.pdf.
- Salas, E., Dickinson, T. L., Converse, S. & Tannenbaum, S. I. (1992). *Toward an understanding of team performance and training*. In R. W. Swezey and E. Salas (eds), Teams: Their Training and Performance (pp.3 29). Norwood: Ablex.
- Salas, E., Sims, D.E., & Burke, C.S. (2015). *Is there a big 5 in teamwork?* Small Group Research, 36(5), 555-599.
- Salgado, J.F. (1997). 'The five-factor model of personality and job performance in the European Community'. Journal of Applied Psychology, *82*, 30-43.
- Salleh, F., Yaakub, N., Dzulkifli, Z., (2011). The influence of skill levels on job performance of public service employees in Malaysia. Business and Management Review, 1(1). 31-4
- Salthouse, T. A. (2011). All data collection and analysis methods have limitations: Reply to Rabbitt (2011) and Raz and Lindenberger (2011). *Psychological Bulletin*, *137*, 796-799. doi:10.1037/a0024843.
- Salovey, P. & Mayer, J. D. (1990). *Emotional intelligence*. Imagination, Cognition, and Personality, 9, 185-211.

- Sapri, M., Muin, Z. A., & Sipan, I. (2016). Key Drivers of An Effective Facilities Management Practice for Malaysia State Mosque. *MATEC Web of Conferences 66*, 1-9.
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (3rd ed.). Pearson Education Limited.
- Saunders, M., Lewis, P., & Thomhill, A. (2014). Research Methods for Business Students (6th ed.). New York: Prentice Hall.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students* (7th ed.). New York: Pearson Education.
- Senge, P. M. (1990). *The Fifth Discipline: ARt and Practice of the Learning Organisation*. United States: Currency.
- Shamir, B., & Eilam, G. (2005). "What's your story?" A life-stories approach to authentic leadership development. The Leadership Quarterly, 16(3), 395–417.
- Sharma, S. (2019). Experimental and Ex Post Facto Designs. Paris: Horizons University.
- Shet, S., Desouza, K. C., & Awazu, Y. (2017). Leveraging big data to transform target selection processes in the pharmaceutical industry. Health Informatics Journal, 23(2), 118-126. https://doi.org/10.1177/1460458216653327.
- Shet, S. V., Patil, S. V., & Chandawarkar, M. R. (2017). Framework for methodical review of literature on leadership competencies. *Cogent Business & Management*, *4*(1). https://doi.org/10.1080/23311975.2017.1309123.
- Shleifer, A., & Vishny, R. (1997). A Survey of Corporate Governance.". *Journal of Finance*, 52, 737–83.
- Shole, L. (2016). The Value Contribution and Role of Facilities Management in the Design Process for Office Accomodation Service Type PPP Projects. University of Witwatersrand.
- Sileyew, J. K. (2019). Research Design and Methodology. *Cyberspace*. https://doi.org/10.5772/intechopen.85731.

- Singh, Y. (2016). Fundamentals of Research Methodology and Statistics (1st ed.). New Delhi: New Age.
- Smith, A. (1976). An Inquiry into the Nature and Causes of the Wealth of Nations (1 ed.). London: W. Strahan.
- Solomon, J., & Solomon, A. (2017). *Corporate Governance and Accountability*. Chichester: John Wiley & Sons.
- Spector, P. E. (1985). 'Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. American Journal of Community Psychology', 13(6), 693-713. https://doi.org/10.1007/BF00929796.
- Spector, P. E. (1994). Job Satisfaction Survey. University of South Florida, Tampa, FL.
- Sternberg, E. (1998). Corporate Governance: Accountability in the market place. London: IEA.
- Stogdill, R. M. (1963). Manual for the leader behavior description questionnaire-for XII. Bureau of Business Research, College of Commerce and Administration, Ohio State University.
- Suchman, M. (1995). Managing legitimacy. Academy of Management Review, 20(3), 571-610.
- Tabachnick, B., & Fidell, L. (2018). *Using multivariate statistics, 4th edn,* (4th ed.). Boston: Allyn & Bacon.
- Taherdoost, H. (2018). 'Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research'. International Journal of Academic Research in Management, 5(3), 28–36.
- Tavakol, M., & Dennick, R. (2011). 'Making sense of Cronbach's alpha'. *International Journal of Medical Education*, 2, 53-55.
- Tejeda, M. J., Scandura, T. A., & Pillai, R. (2001). 'The MLQ revisited: Psychometric properties and recommendations'. *The Leadership Quarterly*, 12(1), 31-52. https://doi.org/10.1016/S1048-9843(01)00063-7.

- Toe, D. D. (2015). An Overview of Facilities Management Strategies Employed in Shopping Centres in Johannesburg, South Africa. University of Witwatersrand.
- Tsai, C.T. S., & Su, C. S. (2011). 'Leadership, job satisfaction and service-oriented organizational citizenship behaviors in flight attendants'. *African Journal of Business Management*, 5, 1915-1926. Retrieved from http://www.academicjournals.org/journal/AJBM.
- Vargas-Hernandez, J. G. (2016). *Research Methodology Strategies in Strategic Management.*University of Guadalajara.
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). 'Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems'. *MIS Quarterly*, 37, 21-54. Retrieved from <a href="http://www.misq.org">http://www.misq.org</a>.
- Vial, G. (2019). 'Understanding digital transformation: A review and a research agenda'. *The Journal of Strategic Information Systems*, 28(2), 118–144. https://doi.org/10.1016/j.jsis.2019.01.003.
- Vigano, R., Zattoni, A., Hoskisson, R. E., & Huse, M. (2019). 'New perspectives on board research'. *Springer Science and Business Media*.
- Wang, G., Oh, I.-S., Courtright, S. H., & Colbert, A. E. (2011). "Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. Group & Organization Management", 36(2), 223–270.
- Wang, Y., Wang, X., Wang, J., Yung, P., & Jun, G. (2016). *Engagement of Facilities Management in Design Stage through BIM: Framework and a Case Study.* Hindawi Publishing Corporation.
- Welbourne, T. M. (2012). Editor-in-chief's note: 'Research methods in human resource management: Critical knowledge for practitioners and academics'. *Human Resource Management*, *51*, 1-2. doi:10.1002/hrm.21462.
- Wernerfelt, B. (1984). 'A resource-based view of the firm'. *Strategic Management Journal*, *5*, 171-180.

- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. Journal of Management, 17(3), 601-617. https://doi.org/10.1177/014920639101700305.
- Wilson, N., & McClean, S. (1994). *Questionnare Design: A practical Introduction.* New Abbey: University of Ulster Press.
- Woodward, D., Edwards, P., & Birkin, F. (1996). Organizational legitimacy and stakeholder nformation provision . *British Journal of Management*, 7(4), 329-347.
- Xaba, M. I. (2018). A Qualitative Analysis of Facilities Maintenance: A School Governance Function in South Africa. *South African Journal of Education*, 216-226.
- Yukl, G. (2002). Leadership in Organizations (5th edn). Upper Saddle River: Prentice-Hall.
- Zaccaro, S. J., White, L., Kilcullen, R. N., Parker, C. W., Williams, D., & O'Conner-Boes, J. (1997). *Cognitive and temperament predictors of Army civilian leadership*. Bethesda, MD: Management Research Institute.
- Zaccaro, S. J. (2011). *The nature of executive leadership: A conceptual and empirical analysis of success.* Washington, DC, US: American Psychological Association.
- Zaccaro, S. J., Kemp, C., & Bader, P. (2013). The major schools of leadership. London: Sage.
- Zaccaro, S. J., Kemp, C., & Bader, P. (2014). Leader traits and attributes. In J. Antonakis, A.
  T. Cianciolo, and R. J. Sternberg (Eds.). The nature of leadership (pp. 101–124).
  Thousand Oaks, CA: Sage.
- Zikmund, W. G., & Babin, B. J. (2016). *Business Research Methods*. Mason: South-Western/Cengage Learning.

## APPENDIX A: GATEKEEPERS LETTER





14 July 2022

Dear Esteemed Sub-Sector Committee Members

# RE: RESEARCH ON LEADERSHIP COMPETENCIES AND CAPABILITIES IN SOUTH AFRICAN BANKS FOR THE FOURTH INDUSTRIAL REVOLUTION

This letter serves to inform that Benazir Kajee is conducting research towards the completion of her MComm through UNISA. At Postgraduate level, Benazir has her Hons (Industrial Organisational Psychology) (UNISA), Postgraduate Diploma in Financial Planning Law (UFS), Postgraduate Diploma in Investment and Portfolio Management (UFS) and a Postgraduate Diploma in Compliance (UJ). <u>Link to LinkedIn Profile</u>.

The aim of the research is to determine:

- Have leadership competency profiles been implemented successfully from a leadership growth perspective? Will it keep leaders relevant in the 4IR?
- Should the focus of leadership growth be on building competence or capability? Or both?
- Create a simple capability &/competency profile to enable leaders for the 4IR / in the new' way of working' / VUCA environment.

We encourage you to circulate the <u>electronic survey</u> to Leaders and the L&D Community as part of this study. While participation is entirely optional, the study will contribute to theory development within the Banking and Alternate Banking Sectors.

The survey should take no more than 15 minutes. The survey has been approved by the UNISA Ethics Committee (approval number: 2021/CEMS/IOP/033). There are no risks associated with participating in this survey. The survey collects no identifying information of any respondent. All the responses in the survey will be recorded anonymously.

We humbly solicit your support in respect of this study.

LINK TO SURVEY

Yours faithfully,

Vuyani Ntanjana

Head: Strategy and Research

Telephone +27 11 805 9661 Mobile: 082 720 7265

Building C2, Eco Origin Office Park Motheo TVET College Central Office 349 Witch-Hazel Avenue Eco-Park Estate, Highveld Centurion

BANKSETA Gauteng (Head Office) BANKSETA Free State Office

c/o Georges & Aliwal Streets Bloemfontein

BANKSETA Eastern Cape Office

Waverley Office Park, Phase 4 Building 3-33, Phillip Frame Road Chiselhurst East London

BANKSETA Limpopo Office

Stand 3200, Platinum Park Extension 68, Bendor Polokwane

## APPENDIX B: ETHICAL CLEARANCE





### UNISA CEMS/IOP RESEARCH ETHICS REVIEW COMMITTEE

29 June 2022

Dear Mrs Benazir Kajee-Wadee,

Decision: Ethics approval from 29 June 2022 to 30 June 2025 NHREC Registration #: (if applicable) ERC Reference#: 2021/CEMS/IOP/033

Name: Mrs Benazir Kajee-Wadee Student #: 3333-877-9

Staff #: N/a

Researcher(s): Name: Mrs Benazir Kajee-Wadee

Address: 140 Willowbrook places, Sandown, 2196 E-mail address, telephone: 33338779@mylife.unisa.ac.za, 0825664659

Supervisor (s): Name: Prof Nisha Harry

Address: Unisa, Muckleneuk Campus, Preller Street, Pretoria, 0003 E-mail address, telephone: harryn@unisa.ac.za, 012 429 8304

Leadership Competencies and capabilities in South African Banks for the Fourth

Industrial Revolution.

Qualification: Masters (MCom)- Post graduate degree

Thank you for the application for research ethics clearance by the Unisa CEMS/IOP Research Ethics Review Committee for the above-mentioned research. Ethics approval is granted for THREE years.

The low-risk application was reviewed by the CEMS/IOP Research Ethics Review Committee on the 28th June 2022 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision was approved on 28th June 2022.

The proposed research may only commence with the provision that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa COVID-19 Position Statement on research ethics dated 26 June 2020 which is attached.



Prefer Street, Mucbeneux Ridge, City o PO Box 392 UNISA 0003 S Telephone: +27 12 429 3111 Facsimile: +27 12

#### Signature:

Email: tebelc@unisa.ac.za

- The researcher(s) will ensure that the research project adheres to the values and principles expressed in the Unisa Policy on Research Ethics.
- Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Unisa CEMS/IOP Research Ethics Review Committee.
- The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
- 5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
- 6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
- 7. No field work activities may continue after the expiry date (29 June 2025)
- Submission of a complete research ethics progress report will constitute an application for the renewal of Ethics Research Committee approval.

#### Note:

The reference number 2021\_CEMS/IOP\_033 should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,

Signature

Signature

John

Acting Chair of IOP ERC

E-mail : tebelc@unisa.ac.za

Tel: (012) 429-8809

Prof MC MULALIDZI (50: 28, 2022 15:30 GMT+2)

Acting Executive Dean: CEMS
E-mail: tshilmc@unisa.ac.za

Tel: (012) 429-3724



Linkersty of South Africa Prefler Street, Muckleneuk Ridge, City of Tahwan PO Box 392 UNIA 0003 South Africa Telephone: +27 12 429 3111 Facsimle: +27 12 429 4150

## **APPENDIX C: CORRELATIONS STATISTICS**

	CORRELATION																						
		Idealized	Inspirational influence	Intellectual	Individualized influence	Reward influence	Affective Commitment	Continuance	Commitment	Commitment	Рау	Promotion	Supervision	Fringe Benefits	Contingent rewards	Operating conditions	Coworkers	Nature of work	Communication	Total Satisfaction	Task Performance	Contextual Performance	Counterproductive Work Behaviour
Idealised influence	Pearson Correlation																						
	N	158																					
Inspirational influence	Pearson Correlation	.905**																					
	Sig. (2- tailed)	0,000																					
	N	158	158																				
Intellectual influence	Pearson Correlation	.838**	.856**																				
	Sig. (2- tailed)	0,000	0,000																				
	N	158	158																				
lo divido elle e d	Pearson Correlation	.862**	.857**	.866**																			
Individualised influence	Sig. (2- tailed)	0,000	0,000	0,000																			
	N	158	158	158																			

								CORR	ELATIO	N												
		Idealized influence	Inspirational influence	Intellectual	Individualized influence	Reward influence	Affective Commitment	Continuance Commitment	Normative Commitment	Pay	Promotion	Supervision	Fringe Benefits	Contingent rewards	Operating	Coworkers	Nature of work	Communication	Total Satisfaction	Task Performance	Contextual Performance	Counterproductive Work Behaviour
Doward	Pearson Correlation	.792**	.847**	.881**	.832**																	
Reward influence	Sig. (2- tailed)	0,000	0,000	0,000	0,000																	
	N	158	158	158	158	158																
A 55 - Air	Pearson Correlation	0,129	.173 <sup>*</sup>	0,150	.170 <sup>*</sup>	.202*																
Affective Commitment	Sig. (2- tailed)	0,107	0,029	0,061	0,033	0,011																
	N	158	158	158	158	158	158															
Ourthouse	Pearson Correlation	.216**	.236**	.289**	.303**	.280**	.431**															
Continuance Commitment	Sig. (2- tailed)	0,006	0,003	0,000	0,000	0,000	0,000															
	N	158	158	158	158	158	158	158														
Namesativa	Pearson Correlation	.653**	.677**	.602**	.621**	.639**	.350**	.386**														
Normative Commitment	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,000	0,000														
	N	158	158	158	158	158	158	158	158													

								CC	RRELA	TION											CORRELATION														
		Idealized influence	Inspirational influence	Intellectual	Individualized influence	Reward influence	Affective Commitment	Continuance Commitment	Normative Commitment	Pay	Promotion	Supervision	Fringe Benefits	Contingent rewards	Operating conditions	Coworkers	Nature of work	Communication	Total Satisfaction	Task Performance	Contextual Performance	Counterproductive Work Behaviour													
Pay	Pearson Correlation	.302**	.351**	.322**	.240**	.363**	0,141	0,046	.502 <sup>**</sup>																										
	Sig. (2- tailed)	0,000	0,000	0,000	0,002	0,000	0,077	0,568	0,000																										
	N	158	158	158	158	158	158	158	158	158																									
Promotion	Pearson Correlation	.341**	.392**	.405**	.254**	.425**	0,038	-0,039	.443 <sup>**</sup>	.661 <sup>**</sup>																									
	Sig. (2- tailed)	0,000	0,000	0,000	0,001	0,000	0,636	0,630	0,000	0,000																									
	N	158	158	158	158	158	158	158	158	158	158																								
Supervision	Pearson Correlation	.685 <sup>**</sup>	.679 <sup>**</sup>	.637**	.659**	.605 <sup>**</sup>	0,041	0,116	.516**	.416**	.366**																								
	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,609	0,146	0,000	0,000	0,000																								
	N	158	158	158	158	158	158	158	158	158	158	158																							
Fringe Benefits	Pearson Correlation	.287**	.334**	.293**	.296**	.305**	0,047	0,036	.285**	.498**	.387**	.433**																							
	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,556	0,649	0,000	0,000	0,000	0,000																							
	N	158	158	158	158	158	158	158	158	158	158	158	158							_															

	CORRELATION																					
		Idealized influence	Inspirational	Intellectual influence	Individualized influence	Reward influence	Affective Commitment	Continuance Commitment	Normative Commitment	Рау	Promotion	Supervision	Fringe Benefits	Contingent rewards	Operating conditions	Coworkers	Nature of work	Communication	Total Satisfaction	Task Performance	Contextual Performance	Counterproductive Work Behaviour
Contingent rewards	Pearson Correlation	.433**	.515**	.450**	.421"	.487**	0,118	0,059	.593**	.735**	.640**	.579**	.538**	-								
	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,140	0,459	0,000	0,000	0,000	0,000	0,000									
	N	158	158	158	158	158	158	158	158	158	158	158	158	158								
Operating conditions	Pearson Correlation	0,065	0,124	0,022	0,064	0,004	0,052	- 0,050	.176°	.173	.212**	0,094	.288**	.262**								
	Sig. (2-tailed)	0,418	0,120	0,786	0,424	0,963	0,517	0,535	0,027	0,030	0,007	0,241	0,000	0,001								
	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158							
Coworkers	Pearson Correlation	.492"	.504**	.400**	.451"	.370**	0,110	.180°	.498**	.376"	.306**	.526**	.246**	.498**	.322**							
	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,170	0,024	0,000	0,000	0,000	0,000	0,002	0,000	0,000							
	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158						
Nature of work	Pearson Correlation	.466**	.467**	.506**	.472**	.422**	0,074	.162*	.549**	.489**	.460**	.519**	.239**	.517"	.171*	.575**	-					
	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,357	0,042	0,000	0,000	0,000	0,000	0,003	0,000	0,032	0,000						
	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158					
	Pearson Correlation	.399"	.442"	.328**	.336"	.281"	0,078	0,088	.427**	.474**	.350**	.548**	.461"	.619**	.321"	.518"	.502**					
Communication	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,333	0,271	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000					
	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158				

										CORF	RELATI	ON										
		Idealized influence	Inspirational influence	Intellectual influence	Individualized influence	Reward influence	Affective Commitment	Continuance	Normative Commitment	Рау	Promotion	Supervision	Fringe Benefits	Contingent rewards	Operating conditions	Coworkers	Nature of work	Communication	Total Satisfaction	Task Performance	Contextual Performance	Counterproductive Work Behaviour
Total	Pearson Correlation	.546**	.601**	.534"	.500**	.522**	0,110	0,090	.634"	.785**	.720**	.705**	.651**	.868"	.429**	.676**	.702**	.755**				
Satisfactio n	Sig. (2- tailed)	0,000	0,000	0,000	0,000	0,000	0,167	0,260	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000				
	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158			
	Pearson Correlation	0,117	.163*	0,102	0,091	0,117	0,127	.248**	.273"	.160°	.160°	0,012	0,128	.160*	.218"	.220**	.277**	.246**	.247**			
Task Performance	Sig. (2- tailed)	0,143	0,041	0,203	0,256	0,143	0,113	0,002	0,001	0,045	0,044	0,882	0,109	0,045	0,006	0,006	0,000	0,002	0,002			
	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158		
	Pearson Correlation	.174*	.217"	.226**	.186*	.192*	0,136	.228"	.229"	0,103	0,018	0,115	0,085	0,003	0,096	0,114	.225**	0,005	0,113	.499"		
Contextual Performance	Sig. (2- tailed)	0,029	0,006	0,004	0,020	0,016	0,088	0,004	0,004	0,198	0,822	0,152	0,288	0,966	0,232	0,153	0,004	0,949	0,157	0,000		
	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	
Counterprod	Pearson Correlation	250**	320**	285**	270**	298**	168°	199°	318**	160°	0,094	304"	0,069	260"	186°	455**	352**	425"	354"	227**	- 0,105	-
uctive Work Behaviour	Sig. (2- tailed)	0,002	0,000	0,000	0,001	0,000	0,035	0,012	0,000	0,044	0,238	0,000	0,390	0,001	0,019	0,000	0,000	0,000	0,000	0,004	0,190	
Deliavioui	N	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158