

**DEVELOPING A MODEL THAT INTEGRATES THE STUDENT RELATIONSHIP
MANAGEMENT SYSTEM WITH A TELEPHONE INFORMATION SYSTEM TO
SUPPORT UNISA DISTANCE STUDENTS**

by

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Submission in accordance with the requirements
for the degree of

DOCTOR OF PHILOSOPHY IN EDUCATION

in the subject

CURRICULUM STUDIES

at the

UNIVERSITY OF SOUTH AFRICA (UNISA)

SUPERVISOR: PROFESSOR M MAKOE

NOVEMBER 2023

Declaration

I declare that the thesis entitled **DEVELOPING A MODEL THAT INTEGRATES THE STUDENT RELATIONSHIP MANAGEMENT SYSTEM WITH A TELEPHONE INFORMATION SYSTEM TO SUPPORT UNISA DISTANCE STUDENTS** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Signature:  Date: 19 November 2023

Name and surname: Nkhensani Faith Tshabalala

Dedication

This research work is dedicated to my precious Father God, Jesus Christ, who is my King, the Holy Spirit my guider, my dad Pastor Solomon Matsimbi, my late beautiful mom (the woman with great faith in Jesus Christ) and to my lovely family.

Acknowledgements

Primarily, I give glory and honour to the Trinity of God, God the Father, God the Son (King Jesus Christ) and the precious Holy Spirit for the preordained life that elevated me to this qualification. I never imagined that my lifelong journey would include this level of qualification. I praise You Lord for connecting me to the right people that assisted me during my journey of research and study. Next, I would like to express my heartfelt gratitude to my primary supervisor, Professor Mpine Makoe, for her guidance, inspiration, encouragement, wisdom and patience throughout this entire ODeL research study. Your feedback sharpened and refined my research.

A special thank you goes to my lovely and special family and my dearest friend, lover and husband Tatana Rich Tshabalala. Thank you for encouraging me to pursue my studies when I was about to drop-out owing to pressure. To my awesome three children, Victoria, Malwandla and Zoe (Rich Junior): thank you for giving me the time and space to work on my research. Furthermore, I must express my very profound gratitude to my dearest parents, Dad Pastor Solomon Matsimbi and my late beautiful mother Annah Matsimbi, who graduated to glory in September 2017. You both believed in me when the circumstances of my childhood education were against me. Thank you for your love, support, prayers, counsel and guidance. My dear Mom, continue to rest in eternal peace in the presence of our King, Jesus Christ.

My gratitude also goes to Professor Gezani Baloyi at UNISA, my husband's brother. Your guidance when I was stranded and did not know what to do during administration processes played an enormous role. Your encouragement and support did not go unnoticed. I would also like to thank Professor M Sepota at UNISA for his support and to the UNISA Call Centre consultants who participated in the study. Your contributions are priceless. In addition, I would like to thank Dr Nkosinathi Sithole, who is now in Australia, Dr McA Fundira and Mr A. Masenge for their guidance and assistance throughout my studies. You played an important role in my studies.

You made a difficult road easier to navigate. Finally, Mr Reinoud Boers, kindly receive my heartfelt gratitude for your quality of editing. Your editorial art of work played a special role in my research study – fox@boers.org.za. Dr Sithole, thank you for your referral.

Abstract

This research study aims to develop a model that integrates a SRM system with a TIS to enhance student support services for UNISA distance students. The increasing number of distance learners and their diverse needs necessitate the implementation of effective technological solutions to improve communication and support. The study explores the current challenges faced by UNISA call-centre consultants when using the SRM system and proposes a model that integrates the SRM system and the TIS to address these challenges. The study revealed the potential benefits of integrating the SRM system and the TIS, including improved access to information, enhanced communication channels and more efficient query handling.

The research methodology employed qualitative interviews with call-centre consultants involved in student support within the administrative support environment of UNISA. The study is underpinned by a relativist ontology that acknowledges multiple realities shaped by individual perspectives and experiences. This philosophical stance aligns with qualitative research and emphasises the importance of understanding context and subjectivity when exploring complex phenomena. Results were analysed using the thematic analysis six-step process. This highlighted the key challenges faced by call-centre consultants, such as difficulties in accessing relevant information, delays in receiving feedback on escalated complex student enquiries and inadequate options provided by the SRM system. A statistical analysis of call-centre telephone trends was also undertaken to examine the extent in which the SRM system has been utilised to support students.

The integrated findings led to the development of ten themes for the study from which the model was developed. The proposed model integrates the SRM system with the TIS to provide a seamless and comprehensive support system for distance students. It includes instituting system and relationship procedures in the call-centre department. This integration would allow for an efficient handling of queries and improved communication with students. The model emphasises the importance of call-centre staff training to ensure effective implementation and utilisation of the integrated system while leveraging on the importance of technology in establishing efficient communication channels to improve support services and enhance the overall student experience. The model provides a roadmap to distance education universities and

institutions wishing to implement similar integrated systems to address the unique challenges faced by distance students.

Keywords: communication channels, distance education, distance students, information sharing, personalised support, query handling, student relationship management system, support services, technology integration, telephone information system.

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LIST OF ABBREVIATIONS

4IR	Fourth industrial revolution
ACD	Automated call distributor
AI	Artificial intelligence
APU	Asia Pacific University
ARCSG	Affective, reflective, cognitive, systematic, gender model
BMR	Bureau of Market Research
CBR	Case-based reasoning
CCM	Corporate Communication and Marketing Department
CD	Compact disc
CEDU	College of Education
CHAT	Cultural History Activity Theory
CMC	Computer-mediated communication
CoL	Commonwealth of Learning
COVID-19	Corona Virus 2019
CRM	Customer relations management
CRM-SOS	CRM strategy orientation support
DE	Distance education
DHEI	Department of Higher Education Institutions
DIA	Directorate Information and Analysis
DII	Department of Institutional Intelligence
DIR	Directorate of Institutional Research
DSAA	Directorate Student Assignment and Assessment
DSAR	Directorate Student Administration Application and Registration
FAQ	Frequently asked question
GNU	Gnu's Not Unix
GUSI	General UNISA Satisfaction Index
HEI	Higher education institution
HEQC	Higher Education Quality Committee
HU	Hermeneutic unit
ICA	Intelligent Conversational Agent

ICT	Information Communication Technologies
ID	Identity document
IP	Internet protocol
ISS	Integrated student support
ISSS	Integrated student support system
IT	Information technology
IVR	Interactive voice response
KM	Knowledge management
KPI	Key performance indicators
LOT	Internet of Things
MANCOM	Management committee
MCQ	Multiple choice assignments
MIS	Management information system
MOCCs	Massive open online courses
MOODLE	Modular Object-Oriented Dynamic Learning Environment
NFSAS	National Student Financial Aid Scheme
ODeL	Open Distance Electronic Learning
OSP	Online service provider
OTP	One-time password
OU	Open university
PGCert	Postgraduate Certificate
PHP	Hypertext preprocessor
POPI	Protection of personal information
QMS	Quality management system
REC	Research Education Committee
RPL	Recognition of prior learning
RPSC	Research Permission Subcommittee
SAIDE	South African Institute for Distance Education
SCRM	Social customer relationship management
SCSC	Student Communication Services Centre
SDG	Sustainable development goal
SGBs	School Governing Bodies

SFA	Sales force automation
SLA	Service Level Agreement
SME	Small and medium-sized enterprises
SMM	Social media market
SRM	Student Relationship Management
SWOT	Strengths, Weaknesses, Opportunities, Threats
TIS	Telephone Information System
TP	Temporary registered
UCC	UNISA Contact Centre
UDL	Universal Design for Learning
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNISA	University of South Africa
UP	University of Pretoria
US	United States
USSS	UNISA Student Satisfaction Survey

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CHAPTER 1

THE PROBLEM AND ITS BACKGROUND

1.1 Introduction

The landscape of education has been evolving continually as technology advances. Open Distance e-Learning (ODEL) institutions have been at the forefront of this transformation. The University of South Africa (UNISA), the largest distance education institution in Africa and the first institution in the continent to deliver education through ODeL, has recognised the critical role that integrated technological solutions play in enhancing student support services. Hence it relies on a variety of technologies to reach its distance students. In this process, the application of information communication technologies (ICT) support is critical.

The ICT revolution in education, often referred to as the marketisation of education, has led to students in ODeL, as well as in other educational fields, being considered a “customer” (Tait, 2000:288). By viewing students as customers, Higher Education Institutions (HEIs) can improve their services and enhance student retention and satisfaction. This comes about by the transformation of Customer Relationship Management (CRM) into Student Relationship Management (SRM) (Ackerman & Schibrowsky, 2007). According to Rababah, Mohd and Ibrahim (2011:223), “CRM is the building of a customer-oriented culture by which a strategy is created for acquiring, enhancing the profitability of, and retaining customers, that is enabled by an IT application for achieving mutual benefit for both the organisation and the customer”. The SRM system is said to be based on the principles of CRM and assists organisations to build relationships with their customers, enhancing loyalty and retention (Seeman & O’Hara, 2006).

The approximately 400 000 students registered at UNISA are not only supported cognitively but also administratively by integrated information systems and processes. To provide student services within the space of ODeL administrative support, the institution introduced information systems and communication platforms, including the ICT SRM system to manage student enquiries and services. These comprise an Avaya telephone information system, automated interactive voice response (IVR),

voice prompt, email communication and social media, e.g. Facebook, Twitter (now renamed X) and Instagram (UNISA, 2022).

An internal report (UNISA, 2019) first disclosed that UNISA's ICT Department had introduced an SRM system that was to be integrated with the call centre's Avaya telephone information system (TIS) that has call-flow and routing functions that receive, respond to and transfer calls, and records abandoned calls. Five telephone options were introduced for rapid call flow between the call centre and the support departments within the UNISA administrative support environment.

According to Patel and Singh (2018), automated call routing is a process that enables customers to be connected to where they need to get their enquiries resolved. They state that "Information systems are a set of interrelated components that collect (or retrieve), process, store and distribute information to support decision-making and control in an organisation". Statistics show that almost 64 per cent of universities in the United States (US) use CRM, while 59 per cent of universities in Mauritius have recorded successful outcomes by using CRM (Songsom, Nilsook & Wannapiroon, 2019). However, UNISA's ICT support system has been found to be inadequate and has been criticised for not being able to assist students with their enquiries (UNISA, 2017). ICT in distance education, according to Tait (2000), enables students to access information. Therefore, while planning the technologies to be employed to successfully support distance students, universities should first establish which technologies are available to students.

Distance students often work in isolation and face challenges in accessing knowledge resources (Lehong, van Biljon & Sanders, 2019). For this reason, UNISA has embraced the use of technologies to mediate teaching and learning. However, 2017 student satisfaction survey findings at UNISA revealed that administrative support, in particular ICT support systems, had failed to meet the needs of students (the Directorate Information and Analysis (DIA) and the Bureau of Market Research (BMR) (2017).

Tait (2000) reminds us that, although administrative processes are not seen as a primary focus of student support within ODeL, institutions that are not committed to setting up administrative procedures that provide effective management systems often face student dissatisfaction. If students are not supported administratively their

academic progress is affected, a situation that results in most of them abandoning their studies (Tait, 2000). His model of student support identified three functions of student support namely (a) cognitive, (b) affective and (c) systematic. Tait (2000) describes cognitive as a process of emotionally supporting students academically by ensuring accessibility to materials and resources for their studies while affective or emotional support is described as the ability to create an environment and support processes that help students to carry out their studies without difficulties. In addition, systematic students is defined as offering administrative support procedures and information systems that allow students to access information rapidly and with ease. Furthermore, Simpson (2002) concurs that, ODeL student support services should embrace the provision of services such as course materials and production, i.e. both academic and non-academic administrative support that enables students to be organised and productive during their studies. These services include, but are not limited to orientation, admission, counselling and set programmes for time management by students. All administrative services should be set up to assist students to close the gap caused by the distance learning mode (Simpson, 2002).

Drawing from Tait's (2000) model, this study does not address cognitive issues but only focuses on systematic and administrative support. The fact that university students rely on administrative support to plan and achieve success in their studies, Tait (2000) suggests that the functions to be considered for student support include the management of enquiries, the management of information, record-keeping and the administration processing systems used, while always keeping in mind the geographical remoteness of students, who should have access and be able to connect to information systems for the processing of their queries.

This model was created to work efficiently in addressing the student support needs of those who are studying at distance, however, all that changed during the 2020 lockdown when all institutions had to teach via distance. It is at this time where every system was affected. UNISA call-centre consultants stayed at home for a month without adequate resources and connectivity to effectively support UNISA distance students (UNISA, 2021). As a result, UNISA students did not have access to the university's telephone system during this time. Purba and Panday (2015:514) maintain that ICT plays a pivotal supporting role in the delivery of services with "real-time output" based on the stakeholders' needs.

Student-support processes should be designed to meet all the needs of a student to ensure quality learning (Thorpe, 2002). Failure to effectively integrate information systems and processes used to manage student enquiries within ODeL institutions may result in student dropping out (Tait, 2000). A university should endeavour to address the needs of diverse learners' profiles by offering relevant student support timeously and with quality. It has been reported that a lack of student support has resulted in high drop-out rates in ODeL (Makoe & Nsamba, 2019). Simpson (2012) also pointed out that insufficient student support had played a role in students abandoning their studies. For this reason, UNISA should make every effort to implement solutions that improve student support services.

1.2 The context of the study

To address student support needs, UNISA has put into place a number of initiatives, such as a call centre and support departments, divisions and directorates that are strategically positioned within UNISA to manage student enquiries and to provide services in support of academic success. A UNISA Contact Centre (UCC) was established in 2004 for the purpose of supporting academic progression from application to graduation. The UCC's mandate was to receive, respond to and escalate student enquiries. When a UCC consultant was not able to resolve a complex query, the query was escalated to a relevant support department or division for further investigation, analysis and response. Even so, students continued to be unhappy with the service they received.

In response to student complaints about poor service, UNISA management conducted UNISA Student Satisfaction Surveys (USSSs) in 2005 to gather information about the standard of service received by students. The Bureau of Market Research (BMR) and the Department of Information and Strategic Analysis (DSIA) were mandated by the university to conduct student satisfaction surveys to identify service quality gaps and provide recommendations to management on improving student support services (Nsamba, 2016).

The findings of student satisfaction survey revealed that the index rating for student support services stood at 67,91 per cent, dropping to 66,77 per cent in 2006. In the same report, the academic performance index for 2005 was recorded at 71,13 per

cent, reducing to 69,47 per cent in 2006 (BMR, 2006). In 2007, the UNISA student support services index recorded a concerning drop to 64,63 per cent, while the academic performance index remained almost unchanged at 69.07 per cent in 2007 (BMR, 2007). A further drop in the student support services index was recorded to 63,13 per cent in 2008, while the academic performance index fell to 67,53 percent (BMR & DISA, 2008). In 2009, the student support services index recorded a further concerningly persistent drop to 59,11 per cent, while the academic performance index fell to 62,79 per cent. It was noted that the index drops for student services within administrative support between 2005 to 2009 negatively affected academic performance (BMR & DISA, 2009). Tait (2000) indicates that, if ODeL administrative systems are not well planned, it negatively affects academic planning.

In the studies, many students raised concerns that the UCC consultants were uncooperative, impatient and unhelpful. Furthermore, UCC consultants were not sensitive to foreign students' calls by not answering them, which proved to be extremely expensive for these students. Eighteen per cent of participants recommended that UNISA should consider following a more aggressive communication profile in broadcasting and print media, especially as regards registration dates. Some 31,9 per cent of participants indicated that there was room for UNISA to improve its enrolment and registration processes, while 26,2 per cent were concerned with the time taken to respond to emails. Even five years later, the UNISA 2010 student satisfaction survey reported that most student enquiries escalated by the UCC were not resolved in good time, while others were not responded to at all. The general UNISA student support was recorded at worrying 59.38 per cent in 2010, while academic performance was recorded at 62.87 per cent in the same year (BMR & DISA, 2010).

Based on these findings, UNISA management resolved to close the UCC because of unending student dissatisfaction with the service in July 2011. The university operated without a call centre from August 2011 to September 2019 when it became clear that the university cannot operate without this essential component of supporting distance students. In mid-September 2019 university management resolved to re-establish the UCC to manage student enquiries. In 2020, during COVID-19, another student satisfaction survey was conducted and the report revealed that students rated UNISA's ICT support at 48,78 per cent, which was not satisfactory considering the

number of UNISA registered students who rely on ICT support to carry out their studies and get their enquiries resolved.

The student rating of academic support was 59,02 per cent. Although this was good, general administrative support was rated at only 47,96 per cent. Furthermore, the time the university took to provide feedback on assignments was rated at a concerning 37,91 per cent. Students' primary concerns during COVID-19 were the slow release of study material (3,19 per cent), the lack of service (4,87 per cent), registration difficulties (4,87 per cent) and the lack of communication (15,40 per cent). The poor rating by students of UNISA's administrative support services was of great concern, particularly for an ODeL institution with a large number of students. It indicated that the information systems that were supposed to provide student support were not integrated.

As indicated by many student-satisfaction surveys conducted by UNISA over the years, complaints have persisted and there has not been much improvement in administrative support performance. UCC consultants have emphasised the importance of feedback from UNISA staff to resolve student enquiries effectively (BMR & DISA, 2010). Call centres rely on university support departments to achieve their performance goals (Du Preez, 2008). The emerging ICT revolution is also considered to promote the "marketisation" of education (Tait, 2000). This implies that the use of ICT will assist ODeL institutions to understand the importance of student support and the needs of students. Thus, the application of a customer care element when support is provided to students will increase student satisfaction because of the increased quality service received by them. In addition, Tait (2000) pointed out the importance of understanding the uniqueness of each ODeL system and process within his framework. Each institution should consider its systems before planning a tailor-made student support system to best cater for its specific circumstances. With this in mind, UNISA has strategically positioned the call centre to be the central point of contact to manage student enquiries from application to graduation.

1.3 Student relationship management

To respond to the challenges of providing student support, an SRM system was procured by UNISA in January 2012 to be integrated with the TIS and processes that

manage student enquiries within the administrative support environment. SRM was introduced at UNISA because such systems have become an essential component in many educational institutions which has adopted it to enhance their communication with students (Badwan, Al Shobaki, Abu-Naser & Abu Amuna, 2017). SRM systems are designed to provide a centralised platform that facilitates communication between students and the university administration and enables the management of student data.

The adoption of SRM systems has significantly transformed the traditional methods of student communication, making it more efficient, effective and streamlined (Wang & Lee, 2020). As such, the experiences that students and university staff have with SRM systems are critical to the evaluation of their effectiveness and the identification of areas for improvement. This study focuses on exploring the experiences of call-centre consultants with UNISA’s SRM system and has the aim of identifying common issues and challenges faced by its use and to provide solutions on how best to address these challenges. The intent is to provide insights into how SRM system can be optimised to improve student support and communication, leading to better student experiences, student satisfaction outcomes and retention.

UNISA’s goal is to have systems that speak to each other and allow students to access information with ease and on time. These systems include an SRM system, the TIS, IVR, voice-prompt options, email, chatbot and fax. The SRM system is intended to provide personalised follow-ups by tracking and logging the results of every interaction, prompting and escalating follow-up actions as required. To achieve this, eight building blocks for UNISA’S SRM strategy were identified, as shown in Table 1.1.

Table 1.1: The eight building blocks of the UNISA SRM strategy
Source: UNISA, 2014

Recommendation	UNISA objectives/comment	Principle/comment
Set goals and objectives by customer segment, align them with the UNISA Business Model objectives and the Annual	The following UNISA objectives provide the SRM system goals: <ul style="list-style-type: none"> i. To create a customer/student-centred environment to enhance customer relations. 	It is good practice to outline the destination, audit the current situation, map the journey and take

Performance Plan	<ul style="list-style-type: none"> ii. To enable UNISA to provide quality service to students. iii. To create a culture of service responsiveness. iv. To enable UNISA to effectively manage and administer student queries and cases. v. To enhance student experience. vi. To profile student needs proactively. vii. To managing student satisfaction. viii. To gain student insight. ix. To interact with and solicit feedback from students. x. To build sustainable relationships with students. xi. To achieving a sustainable competitive advantage. xii. To preserve the integrity and reputation of the institution. 	the future into account
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The SRM tool fosters learning within the framework of sustainable development in higher education, responding to a growing demand for its implementation (Hamed, Muhamad Zamari, Safian & Norhayati, 2015). However, according to Songsom, Nilsook and Wannapiroon (2019) there are risks associated with the use of SRM. Emphasising the importance of proper SRM utilisation in universities, it is noted that the ultimate purpose cannot be achieved without its effective implementation. To harness SRM efficiently, an appropriate tool is essential, encompassing methods to comprehensively and systematically realise the concept of SRM. While there is limited current research supporting the hypothesis that SRM induces risk, it is crucial to consider these issues when managing the university (Hamed *et al.*, 2015).

Despite an SRM system having been implemented for student support by UNISA in 2014, USSS findings subsequently revealed that student enquiries were not

responded to on time because of gaps in the administrative support system. Quality reviews by the Commonwealth of Learning (CoL) (2001) and the Higher Education Quality Committee (HEQC) (2010) have indicated that student support at UNISA is insufficient. In another study, Nsamba (2016) found that UNISA's student support service could not cater for the needs of the students and did not meet their expectations. She reported that there was a gap between the expectations of students and their perceptions of quality student support services, indicating that students did not receive the service they expected to experience. In the same study, Nsamba (2016) noted that the university's performance was raised as an issue by students.

This study will concentrate on the SRM system to address issues of administrative support within UNISA as an ODeL institution. The term SRM was introduced for higher education institutions (HEIs) to fit into the context of ODeL. In support of this, Ackerman and Schibrowsky (2007) delineated the pressures faced by HEIs when providing services to students. The authors pointed out that institutions should start treating their students as customers, which indicates a transformation from the CRM concept to the SRM concept. By conceptualising students as customers, institutions can improve HEI services and enhance student retention and satisfaction. More specifically, the focus of higher education should be to build long-term relationships with their students (Ackerman & Schibrowsky, 2007). Gholami, Muhamad Zamari, Mardani, Streimikiene, Sharif and Zakuan (2018) found that an effective SRM system can help institutions to understand the uniqueness of each student's expectations and retain accurate information that can assist it to maximise student "value" by meeting the needs of students while operating with integrated educational technologies for sustainability.

1.4 Problem statement

Even though UNISA adopted the SRM system with a view to enhancing administrative student support services, there is still a challenge with the optimal use of the system since some of the integrated telephone options of the system have not been activated for access by students. UNISA's SRM system is supposed to have five telephone options to enhance student support, namely Option 1: application and registration

enquiries; Option 2: MyUNISA and MyLife enquiries; Option 3: library services enquiries; Option 4: exam enquiries; Option 0: contact with call-centre consultants.

Option 0 is the only one that is activated; all other options are not. This creates a problem for students as they cannot direct their queries to a relevant support department. This has resulted in most students missing their application and registration deadlines, and not being able to obtain their examination timetables and the due dates for the submission of assignments on time. The limitations to the effective use of the SRM system in support of students is a major challenge, not only for students but also for the university at large. Although SRM is being used successfully by other universities (Songsom, Nilsook & Wannapiroon, 2019), Lumadi (2021) found the UNISA administration process to be complex and not used optimally.

The SRM system has the capability of providing UNISA with information that maintains and builds long-lasting relationships with its students. Poor student support services impact directly on UNISA student satisfaction and, by extension, the university's reputation. Furthermore, the General UNISA Satisfaction Index (GUSI) report (DIA & DMR, 2017) revealed that there had been a gradual decline of student satisfaction since 2005. Although student satisfaction started high at 67.91 per cent in 2005, the satisfaction index indicated a dropped to below 60 index points in 2009. In 2017, the GUSI recorded the lowest score of 60.85; following the 59.11 score recorded in 2009, making the 2009 administrative student support services' score the worst since the inception of student satisfaction surveys in 2005 (DIA & BMR, 2017). The report pointed out that although over the period 2005 to 2017 students were happy with the academic product and services (curriculums), the lack of access to information and administrative support was a large concern.

The persistent demand for quality service by students has compelled UNISA to revisit its systems and the processes used to manage enquiries. Despite these efforts, there has been very little improvement. Student dissatisfaction has led to protests at the beginning of each academic year. Student concerns about the lack of customer care include the tardiness of enquiries being addressed, the lack of response to emails and telephone calls by UNISA staff, and regional offices not answering some enquiries and providing poor and slow feedback. Despite the recommendations that services be

improved, little has been achieved. Students are frustrated and as a result they voice their complaints on different electronic platforms, including the social media.

1.5 Aim of the study

This study seeks to examine the extent to which the SRM system and the Avaya TIS could enable call-centre consultants to effectively support UNISA distance students. The study will also explore the experiences of call-centre consultants when using the SRM system with the intent of identifying system gaps in the support of students. The ultimate aim is to improve student support by enabling easy and timeous accessibility to accurate and quality information, thereby enhancing UNISA student satisfaction and student retention.

1.6 Objectives of the study

- To examine the extent to which the SRM system has been utilised to support students.
- To explore the experiences of call-centre consultants when using the SRM system to receive, respond to and transfer student telephone enquiries.
- To design an integrated student support call routing model that enables access by students to quality information in an easy and timeous manner.

HEIs rely on the successful implementation of an SRM system to accomplish their key missions and goals of providing excellent student support services. It is important this system should be used optimally to meet the expectations of students.

1.7 Research questions

To address this concern, the primary research question for this study is “to what extent does the SRM system support the administration of telephonic student enquiries at UNISA?” The principal research question can then be broken down into the following specific sub-questions:

- What are the experiences of call-centre consultants when using the SRM system to receive, respond to and transfer student telephone enquiries?

- How has the SRM TIS been used to enable call-centre consultants to support ODeL students?
- What constitutes the effective integration of the SRM system with the TIS and processes for call routing in the call-centre environment?

1.8 Rationale for the study

To ensure that SRM is fit for the purpose in which it was developed to do, the student management systems should address the needs of students. This require systems that put students at the centre of operations. Systems that are not responsive and student enquiries that are not resolved on time, impact negatively on student experiences with support services and academic planning. For instance, if students fail to complete their registration within the specified time limit on UNISA's Student System, they encounter difficulties in accessing their study materials. This obstacle will result in delayed assignment submissions. Over time, the cumulative effect can culminate in an inability by students to take their scheduled examinations and result in a year of academic progress being squandered. Hence Tait's (2000) model emphasises that a well-planned management system is a crucial element for the provision of quality student support services. Such a desirable outcome for UNISA can only be accomplished if the university provides reliable information that is easily accessible to students and its SRM system and TIS are integrated for student support.

Two of UNISA's strategic pillars are service excellence and student support. These goals can be achieved by using advanced technologies optimally and integrating processes in accordance with the quality and time management requirements and approved turnaround times set by the university. To address some of the challenges associated with inadequate support to distance students, the SRM system, which is tailor-made to cater for a university's required business processes and information systems, is used to enable rapid access to information in a flexible manner (Lin, 2003). An effective SRM system will enable university employees to analyse student profiles quickly from the information collected and uploaded onto the student support system.

1.9 Call-centre statistical data

When examining the extent to which the SRM system and TIS are used, it is imperative to delve into the realm of UNISA call-centre statistical data, which provides a detailed analysis of critical call-centre metrics, shedding light on the dynamics of incoming calls, trends over the years, abandoned student calls and the percentage of abandoned calls. Examination of these quantitative data points provides valuable insights that align with the research objectives, contributing to a comprehensive evaluation of the integrated support system's efficacy in addressing the needs of distance learning students at UNISA.

A comparison of incoming calls between the years 2020, 2021 and 2022 presents an opportunity to evaluate the system's usage and effectiveness over time. In addition, an examination of abandoned student calls and the corresponding percentages of such calls further illuminates potential areas of concern that require attention in the ongoing improvement of student support services.

Through a systematic exploration of these statistical indicators, the stage is set for a data-driven analysis that elucidates the practical implications of the integrated support system. By contextualising the research objectives within the realm of real-world call-centre operations, the analysis strives to provide valuable insights that can inform strategic decisions aimed at enhancing the overall student experience and promoting successful distance learning at UNISA.

1.10 Conceptual framework

Considering the student-support challenges being faced by UNISA as an ODeL institution, it is believed that Tait's (2000) conceptual framework on student support will be used as a guide to assist in developing a model for SRM within the UNISA context. However, it should be noted that SRM is not as fully developed as CRM. To bring out the relationship between the CRM and SRM concepts, Ackerman and Schibrowsky (2007) defined CRM as a planned procedure that an organisation uses to attract new customers and to retain those that are profitable. In a similar manner, SRM is a procedure that universities use to recruit new students and maintain quality services to ensure that those students who are profitable to a university remain loyal.

Both the CRM and SRM concepts focus on attracting, maintaining, meeting and exceeding customer expectations. In keeping with Tait's (2000) suggestion that university students be referred to as customers, in pursuit of higher levels of customer satisfaction, loyalty and retention, HEIs have introduced CRM.

UNISA's "Student Walk" model within the administrative support component implies that, for the success of student support, UNISA's ICT department must know all systems used to manage enquiries and then plan on how all these systems can be integrated for the effective flow of calls from one division/department to another. The model can be implemented successfully when all UNISA's TISs used to manage student enquiries speak to each other and the delegated officials working on those systems fully understand how calls should flow for successful student support.

1.11 Research design and methods

A research design encompasses both conceptual ideas and empirical investigation (Creswell, 2007). These guide the process of gathering and analysing data to address a specific research question (Rowley, 2012). While ontology is the nature of reality, epistemology is the relationship between the nature of reality that informs the researcher and axiology that pertains to the values and ethics guiding the research (Sobh & Perry, 2006; Savigny, 2007:36; Morrow, 2007; Tuli, 2010). The chosen research design for a study is thus influenced by the epistemological stance and the questions it seeks to answer (Polit & Beck, 2010), and shapes the framework and methodology employed. Positivism is deductive in nature and separates the researcher from the objects that are the subject of observation (Johnson, Onwuegbuzie & Turner, 2007). It uses quantitative research methods that operate under the assumption of a single objective reality aimed at measuring and describing the relationships between variables to establish causality (Santos & Brito, 2012). On the other hand, interpretivism is meant to seek out meanings and interpretations of people's experiences, and aims to cultivate a deeper understanding of the context under investigation.

Since this study explores the experiences of call-centre employees, it is characterised as emic and idiographic, embracing subjectivism, in contrast to the etic and nomothetic nature of the positivist research paradigm that reflects objectivism (Morrow, 2007).

What grounds this study is qualitative research characterised by its interpretative and naturalistic approach to subject matter (Morrow, 2007; Towers & Chen, 2008). This method seeks to identify the presence or absence of specific aspects within a phenomenon (Santos, 2006). Consequently, qualitative researchers explore phenomena in their natural settings, aiming to comprehend and interpret them based on the meanings individuals attribute to these phenomena (Towers & Chen, 2008). By exploring the nature of human interaction with technology and its impact on educational processes, the study aims to uncover a deeper insight into the ontological aspects of these phenomena to develop a framework that is meant to guide the complex dynamics between human agency and technological mediation. The aim of this is to inform future developments and strategies in higher education institutions. The development of framework was deemed essential to assist in framing the research questions, identifying relevant variables and establishing connections between different aspects of the study to enhance the coherence and depth of the qualitative analysis. Ultimately, utilising a conceptual framework in qualitative research facilitates systematic inquiry, theory development and a deeper understanding of the research subject (Gregory, 2020).

1.11.1 Data generation

A targeted sampling approach was employed to select UNISA call-centre consultants who possessed substantial experience of more than six-years in utilising both the SRM system and the TIS to provide support to distance learning students. This deliberate selection aimed to procure comprehensive insights and in-depth information from individuals who have extensive familiarity with these systems and their functions in the context of aiding UNISA's remote learners. Purposive sampling is a technique commonly employed in qualitative research to gain rich and relevant information from participants who have extensive knowledge and an understanding of the phenomenon being studied (Creswell & Plano Clark, 2011). Call-centre consultants were selected because they are the only people within UNISA who deal with general enquiries ranging from applications to graduation. Other staff members in UNISA's administrative support departments deal with specific areas of expertise only. The participants were interviewed to gain insight into how UNISA's systems are being used to support students within the administrative support environment. A semi-structured interview format was used to probe perceptions of the processes and systems used

to manage student enquiries, and to bring to light the factors participants believe contribute to the delays in responding to student enquiries.

The first objective of this study was to examine the extent to which the SRM system has been utilised to support students. This was done by analysing UCC telephone Management Information System (MIS) reports drawn directly from the SRM system. These provide detailed information on the number of student calls received, responded to and abandoned within the UNISA administrative support environment. Abandoned calls are those that were not answered, with the student giving up and dropping the call. In addition, UNISA student satisfaction survey reports (UNISA, 2023) and other relevant documents that could assist in shedding light on the topic were also analysed. All unpublished data or reports were verified before being used as primary data. Furthermore, call-centre SRM/MIS call reports were analysed with a view to examining how students' calls were managed by one department or another, and how effective the SRM system was in supporting call-centre consultants.

To address objective two which is to explore the experiences of call-centre consultants when using the SRM system to receive, respond to and transfer student telephone enquiries, data was collected through semi-structured interviews. This enabled me to gather deep and rich data in the process of conducting qualitative exploration. The interviews also allowed the researcher to ask questions that provided an opportunity to learn more about the in-depth experiences of the participants (Creswell, 2007). Rowley (2012) defines research interviews as in-person discussions through which the interviewer gathers information and gains insights from participants. Qualitative interviews are characterised by interactivity, the use of sensitive language, and maintaining a flexible agenda (Britten, 1995).

The interview process is used when qualitative researchers explore issues for which "little theory is available, or measurement is unclear" (Kohn, 1997). Interviews were conducted with the intention of gathering data from participants who use the SRM system and TIS on a daily basis to administratively support UNISA distance students. Ten participants were interviewed in a closed environment without noise interruption. COVID-19 social distancing regulations were observed. Since the SRM system was introduced at UNISA, no research has been conducted to establish its effectiveness. The detailed information gathered during interviews forms part of the study.

1.11.2 Data analysis

Thematic analysis was used to uncover themes that emanated from interviews. According to Smit (2002), thematic analysis is the most powerful workbench tool for analysing qualitative data. It is a robust and widely adopted qualitative research methodology used to explore patterns, meanings and insights within textual or qualitative data (Kiger & Varpio, 2020; Islam & Aldaihani, 2022). It offers a systematic approach to uncovering underlying themes, concepts and patterns of meaning that emerge from participants' narratives, observations or interviews. Thematic analysis provides researchers with a rigorous and flexible framework to analyse complex data while retaining sensitivity to the nuances of participants' experiences and viewpoints (Frost 2021; Vaismoradi & Snelgrove, 2019).

In this context, the thematic analysis served as a robust methodological tool to uncover and interpret the multifaceted experiences, challenges and perspectives of UNISA call-centre consultants using the integrated SRM system and TIS. Thematic analysis made it possible to identify and examine recurring themes that shed light on the effectiveness, obstacles and potential enhancements of the integrated system in support of UNISA's distance students. By means of this analysis, the study sought to gain a deeper understanding of the intricate dynamics that characterise student support within ODeL and contribute to the broader discourse on optimising student services in higher education contexts.

1.11.3 Reliability and validity in qualitative studies

In qualitative research, the assessment of research quality involves employing trustworthiness criteria (Lincoln & Guba, 1985; Plummer, 2017). To enhance the trustworthiness of focus-group data, two essential strategies are emphasised: dependability and credibility (Plummer, 2017). Credibility and dependability concern the trust that is put in the truth of the discovery and/or findings of the research study. Credible information obtained during interviews represents the original views of the participants; the correct interpretation of these views is a fundamental requirement. To achieve this goal, I will work through four key strategies: varied field experience, triangulation, peer examination and audit trail (Anney, 2014).

Qualitative research operates on the assumption that my identity influences study findings, emphasising the absence of objectivity. The adage, "The researcher is the research instrument," underscores this perspective. To uphold rigor and quality, qualitative researchers strive for the gold standard, ensuring trustworthiness in their work (Teh & Lek, 2018).

1.11.4 Research ethics

Before conducting this study, I followed UNISA's formal procedures for collecting data. An application form was submitted to the Ethical Clearance Committee of the Research Education Committee (REC), College of Education (CEDU). This committee is responsible for ethical clearance applications. Once ethical clearance had been obtained, I obtained permission to conduct the research from the Research Permission Subcommittee (RPSC) of the Senate Research, Innovation and Post-graduate Degrees Committee since the study was dependent on the use of UNISA staff, students and data.

This was followed by a request to interview UNISA staff. I approached the Deputy Registrar, who is the custodian of UNISA students, and the call centre for approval to interview participants. During the field work, I clearly explained to the participants how the data was to be collected and advised them that they could terminate the interview if they so wished. Participants completed a consent form to confirm their willingness to be interviewed.

Data collected from participants is held confidentially and is used for research purposes only. Participants were assured of their right to remain anonymous and that their rights to privacy and the non-use of their personal identities was protected by their names not being disclosed in the study report. During report writing, codes were used in the research study instead of the participants' names.

1.12 Outline of the thesis

The entire thesis is designed to comprise six chapters, as follows:

Chapter one introduces the study by providing the background to the research field, the research purpose and research problem. It covers the justification for undertaking the research, the methodology, thesis organisation and the key limitations of the study.

Chapter two reviews the existing body of literature as it relates to the theory and practice of CRM and SRM, the role of the ICT function within ODeL institutions, and student support and/or services.

Chapter three reviews the conceptual frameworks, models and theories in the field of student support and service design. It discusses the ontology of CRM, the origins of both CRM and SRM, and defines CRM and its dimensions. Student support frameworks were used to develop a conceptual model and propositions.

Chapter four discusses the design of the research project, the methodological choice and explains why the qualitative method of research is appropriate in this instance. Aspects such as research design, research methods, sampling, validity, reliability and limitations are discussed. In addition, the data analysis tools used and the ethical considerations are discussed in this chapter.

Chapter five addresses the empirical results of the qualitative study, including the qualitative semi-structured interviews conducted. The data and analysis presentation is also covered.

Chapter six concludes the thesis. It integrates the qualitative results and summarises the major findings of the research. In addition, it discusses the results and outlines the contributions the thesis makes to the literature and in practice. It also addresses the limitations of the study and offers suggestions that may be of value to future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Chapter overview

This chapter provides a comprehensive review of the literature relevant to the field of Open and Distance Learning (ODeL) and student support services within higher education institutions (HEIs). The exploration is structured to encompass various dimensions, tracing the evolution of open universities, scrutinising the role of information systems, evaluating the state of HEIs in South Africa and delving into the specifics of administrative support in the context of ODeL. The review will also focus on the significance of call-centre student support services, the broader landscape of student support services, the promotion of digital access and inclusivity, and UNISA's call-centre information and telephone systems. Furthermore, the chapter will engage with the concept of student relationship management as a pivotal component of effective student support services. The description commences by tracing the trajectory of open universities, elucidating on their historical development, their contemporary significance and their potential in shaping the future of higher education. The chapter also delves into the diverse information systems employed in ODeL student support, illuminating their pivotal role in enhancing administrative efficiency, student engagement and academic success.

The literature review extends its gaze to the South African higher education landscape, evaluating the performance and challenges of HEIs. This assessment provides the contextual backdrop against which the specificities of administrative support in ODeL are examined. The exploration of administrative support encompasses a comprehensive analysis of call-centre student support services, shedding light on their role as a crucial communication nexus between students and institutions. The review also addresses broader student support services, contextualising them within the dynamic ODeL environment. It explores strategies for promoting digital access and inclusivity, ensuring that diverse student populations can effectively engage with educational opportunities. UNISA's call-centre information and telephone systems are subsequently investigated, offering insights into their structure, functionalities and impact on student support.

The chapter culminates with an exploration of the concept of student relationship management within student support services. It delves into the importance of establishing strong relationships with students, leveraging technology to enhance personalised support and fostering a student-centric approach within HEIs. This chapter navigates through the interconnected domains of open universities, information systems, administrative support, call-centre services, student support, digital access and student relationship management. By weaving together these strands of literature, it lays the foundation for understanding the multifaceted landscape of student support services in the realm of ODeL.

2.2 Introduction

ODeL enhances and enables learning, especially for under-privileged students who cannot afford to be full-time students. These students often find it difficult to reach the university because of their location and/or are unable to access full-time higher education facilities owing to financial difficulties or personal home issues (Baloyi, 2013:555).

ODeL is defined as “forms of education provision that use contemporary technologies to enable varied combinations of synchronous and asynchronous communication among learners and educators who are physically separated from one another for part or all of the educational experience” (Alfonso, 2012:6). This type of learning offers entry to an extensive range of interactive and multimedia learning materials, facilitating the creation of learning environments tailored for learners in various circumstances (Tait, 2018a). ODeL aims to remove barriers to accessing higher education, in particular for low-income students from rural areas who need support in learning to succeed (Baloyi, 2013:556).

ODeL has enabled an increase in student numbers but has failed to provide access to adequate student support services. One reason is that students do not have equal access to technological resources, while other are not ready for tertiary educational studies (Baloyi, 2014:128). If ODeL institutions desire to enhance accessibility, it is pivotal to reflect, review and realign their operational systems and business processes for quality student support. This, in turn, necessitates a corresponding conceptual and

operational reorientation of systems and processes, initiating institutional self-reflection.

According to Tait (2003), an active student support system is central to any open distance learning centre. ODeL centres have designed and developed structures and systems that form part of the student assistance programme (Baloyi, 2021:2). Helping students to learn remotely remains key to student success. Learners study on their own without guidance from their educators and the fact that many drop out of school because of lack of support is worrying. Even so, most high-school students show a high level of motivation and bring experience to their learning. Thus, even though we are in the Fourth Industrial Revolution (4IR), many students do not have internet connectivity (Baloyi, 2021:3).

2.3 The past, present and future of open universities

To minimise confusion between open learning and distance education. Alfonso (2012) argues that, the rightful space for the use of “open learning” is not in an administrative context but rather in a philosophical sense. Open learning applies where universities have “open” administration policies; where their teaching is face-to-face in contrast to others that teach using a distance mode without their students attending physical classes.

Distance teaching is characterised by instructional methods where teaching actions are carried out separately from learning behaviors. This includes activities that, in a face-to-face setting, would occur in the learner's presence. Consequently, communication between the teacher and the learner relies on print, electronic, mechanical, or other devices (Tait, 2000).

2.3.1 Modes of interaction in Open Distance eLearning

Communication with students in ODeL institutions is facilitated by print, electronic, mechanical and other devices, and students do therefore not necessarily have to attend classes physically. In such universities, the administration process complies with approved higher-education standards. As an ODeL institution, UNISA has introduced Recognition of Prior Learning (RPL) with a view to assisting its students to gain access to formal qualifications. RPL allows students to gain credits within the

formal certificate, diploma and degree qualifications structure offered by UNISA based on the level and extent of their knowledge (UNISA, 2023). UNISA Intranet is a secured private network used within UNISA by its employees to share information amongst themselves. Open universities and ODeL institutions rely strongly on technologies to communicate with their students.

The rapid evolution of communication technologies has both enriched and posed challenges to the distinctive role of open universities (Paul & Tait, 2019). Early on, open universities strongly embraced new technologies to advance learning, pioneering innovative methods in course production, design, and student services. While the concept of large-scale universities wasn't unique, open universities saw themselves as agents of embedded innovation (Paul & Tait, 2019).

In adapting to part-time study routes, they integrated traditional full-time, campus-based modes. The diverse student backgrounds in mass higher education prompted a commitment to reform teaching and enhance student support (Paul & Tait, 2019). Many graduates of the Third Industrial Revolution lacked the skills necessary to fully function in their country's economy and students thus required different skills to optimally excel in 4IR (Baloyi, 2021:2).

This calls for UNISA to revisit its administrative support systems, that is the SRM/CRM systems used to manage student enquiries so that students have easy and timeous access to the university. Although the main focus of ODeL is administrative support, not academic support, weak administrative systems in support of students have a direct negative impact on the pass rate (Tait, 2000). Over the years, UNISA Student Satisfaction Survey findings have shown how poor administrative student support has negatively affected academic planning and study completion rates (Tait, 2000).

2.4 The use of technology in supporting students

Supporting students in ODeL relies heavily on technologies. E-learning, therefore, is defined as the process of learning and offering technology courses via the internet or other electronic media, including multimedia, flashcards or other advanced technologies (Du Plessis, 2017). Modern technologies and e-learning tools may include emails, videos, smartphones, podcasts, Twitter (now renamed X), Facebook

and WhatsApp. In the UNISA administrative support environment, SRM and TIS, emails, webchats and a chatbot are employed to receive and respond to student enquiries (UNISA, 2012; UNISA, 2022).

E-learning research has explored different ways of delivering learning. Many researchers have found that social media improves student collaboration, interaction and engagement. Da Cunha, Van Kruistum and Van Oers (2016) used Cultural History Activity Theory (CHAT) to assess Facebook use in Brazilian schools. They discovered that Facebook increased student collaboration and engagement. Hamad (2017) explored the experience of students using WhatsApp as a collaborative way to improve their English language skills. Respondents concurred that WhatsApp improves vocabulary, enriches speaking and writing skills, and increases interest.

The data clearly shows that the most used e-learning tools are emails and the telephone at 100 per cent and 50 per cent respectively, while respondents indicated that they did not use CDs, Facebook or blogs to support learning (Nsamba, 2019:71). The results indicated that the choice of electronic educational resources is not determined by the needs of the student. Interest can be influenced by purchasing power issues and this should thus be considered. Nsamba (2019:72) found that the data indicated dissatisfaction with the levels of engagement and interaction even though students were free to use technology.

As outlined by Wagner, Hassanein, and Head (2008), the e-learning process involves six key participants: students, teachers, educational organisations, content providers, technology providers, and accreditation bodies assessing learning curricula quality. In the educational market, e-learning systems hinge on students acting as consumers. Users of e-learning systems enjoy various advantages, including unrestricted access to academic material, free from the limitations of time or geographical boundaries (Kabassi & Virvou, 2004; Tarhini, Hone, Liu & Tarhini, 2017).

Collaboratively, students, teachers, colleges, and administrative and technical departments work together to facilitate access to online resources, utilise e-learning platforms for course content and communication, provide academic and technical support, and assess online systems. This concerted effort is crucial for the success of e-learning and academic outcomes (Bhuasiri, Xaymoungkhoun, Zo, Rho & Ciganek, 2012).

2.4.1 Functions of student support

Examining quality solely from the perspective of DE institutions, which act as service providers, confines quality assessment to management, excluding the essential involvement of students as service users (Nsamba, 2016). This approach contributes to lower course completion and graduation rates compared to traditional face-to-face institutions. Inadequate support services in DE can result in student dissatisfaction and neglect of studies (Simpson, 2002; 2003). Rienties, Beusaert, Grohnert, Niemantsverdriet and Kommers (2012) emphasise that HEIs influence student performance and retention through the quality of services provided.

To address the unique needs of students in ODeL, it is imperative to offer comprehensive student support services (Nsamba, 2016). Tait (2000) defines these services as a three-part system encompassing cognitive (academic), affective (social and emotional), and administrative (system administration) functions. These functions are interdependent, and any inefficiency in one can adversely affect the others, potentially leading students to disengage from the system (Tait, 2000; Mills & Tait, 2004). Thorpe (2002) underscores the direct impact of student support quality on course effectiveness, influencing retention and achieving learning outcomes. Student support services in DE should be tailored to course requirements, student expectations, and the nature of DE, employing various forms of processes and transactions, including traditional methods and modern technologies (Nsamba, 2016).

2.4.2 Student-centric approaches in administrative support

To conceptualise how student support should be planned, it was interesting to discover that the Tait (2000) model denoted student centeredness as a critical factor in the support students. Tait (2000:288) talks about the marketisation of education, where the student in ODeL, as in other educational fields, is being constructed as a “customer”. By this, Tait means that a student should be treated as a customer. His research has highlighted the relevance of CRM and SRM within HEIs to support his approach that a student should be positioned at the centre of administrative support. Ackerman and Schibrowsky (2007) also argue that educational institutions should view students as customers to improve their services and enhance student retention and satisfaction. Goldgehn (1991:40) has reiterated that “the marketing plays a crucial role in attracting students within institutions ... where student satisfaction is at the centre

of the administrative support office for sales and promotional function”. On the other hand, cost, quality and convenience is acknowledged to be pivotal for students within institutions. Researchers have pointed out that to compete globally, students should be seen as customers , especially in the manner in which students exercise their “choice” when they contact HEIs (Abu Amuna, Al Shobaki, Abu-Naser & Badwan, 2017; Wali & Andy-Wali, 2018; Beheshti & Bagheri, 2010).

2.4.3 UNISA administrative student support processes

In the year 2009, UNISA’s Department of Corporate Communication and Marketing (CCM) was commissioned by the university’s Deputy Registrar to streamline administrative student support processes. The CCM finalised and implemented the UNISA Student Walk model in 2011 (Figure 2.1).



Figure 2.1: UNISA Student Walk model

The model comprises of four product phases, namely:

- My Choice @ UNISA, a set of products for the awareness and application process.
- My Registration @ UNISA, a set of products developed to help students through the registration process.
- My Studies @ UNISA, a product developed to support student understanding of the ODeL process and its administrative processes.

- My Link @ UNISA, a product that supports students through the graduation process.

2.5 Call-centre student support services

In 2019, the call centre was reintroduced in the UNISA administrative support environment and more staff members were employed to oversee student enquiries. However, despite these efforts, there seemed to be little improvement, with a greater number of complaints about service delivery (DIR & DII, 2020). The question is this: given UNISA's closure of the call centre in 2011, only to reopen it in 2019 as the SCSC call centre with identical functions and responsibilities, what obstacles are preventing the university from achieving a continuous cycle of success in its endeavours to enhance student support?

There seems to be a continuous challenge with the TIS used by the call centre for student support services (UNISA, 2012). Cleveland and Mayben (2005:4) state that "Incoming call centre management is the art of having the right number of skilled people and supporting resources (technologies) in place at the right times to manage an accurate forecasted workload, at service level and with quality". An organisation is said to have achieved its goal when it is able to meet customer expectations, according to Zhang, Kim and Goodsir (2019). UNISA strives to provide quality service in the service of humanity (UNISA, 2023), but it still remains a challenge.

Tait (2002:3) posits that there is no way for students to get to know anyone other than their lecturers because their student advisors are supportive in a 'call centre' model that does a lot to keep everyone satisfied. All students use advisory services in some manner, but these can be a cause for frustration if student enquiries are not resolved on time. When a customer calls the call centre to get an answer to a question, satisfaction with the interaction is based on the agent's ability to respond to enquiries timeously and efficiently (McNally, 2007:181). For this reason, agents must communicate effectively with consumers and ensure that they understand the needs of the customers (Reinartz, Kafft & Hoyer 2004:170). The important function of customer retention accomplished by call centres is that of problem management that blocks the speed and process of complaints.

2.6 Administrative support in ODeL

SRM is key to administrative support which is referred to services provided by organisations to help students apply and register for a course. The process of application begins with the acceptance of an application and registration. Until registration has been completed, the student will not be allowed to participate in the course (Lumadi, 2021:118). Lumadi states that students describe the registration process as formal and complex.

Administrative staff in DE institutions play a crucial role in providing support to students. Students are at the core of these services, engaging with administrative staff during service performance and delivery. As highlighted by the South African Institute for Distance Education (SAIDE) (2003), DE programs demand a higher degree of administrative support compared to traditional face-to-face institutions. DE administrative staff handle various responsibilities, including student registration, material production, dispatch of study materials, technical management and support, assignment management, and the administration of tutorial classes.

The top two reasons for dropouts are perceived to be lack of concern for the student and two poor services (Kisimbii, Gakuu & Kidombo, 2018). According to Kamau (2012), support in the forms of academic, advisory, administrative, counselling, and infrastructural assistance is deemed effective when it contributes to sustaining distance learners in their studies and enhances retention and completion rates. UNISA students have stated that delays by the university in responding to their administrative enquiries cost them a year of studies. Another complaint by UNISA students was that they did not receive their examination timetables on time. As a result of this they were left frustrated and were unable to plan their academic calendar (DIA & BMR, 2017).

The retention of learners stands out as a pivotal concern for HEIs. Despite significant growth in DE over the years, a critical weakness persists – notably, the high dropout rates in comparison to traditional universities (Kisimbii, Gakuu & Kidombo, 2018). Recognizing the significance of learner support services is crucial in addressing this challenge. Numerous studies emphasize the indispensable role of learner support services as a vital resource for students facing difficulties, especially in the initial year

of study. Effective support services have been shown to enhance student persistence (Boettcher, 2004; McCracken, 2004).

Learner retention is directly tied to the effectiveness of learner support services, as evident in the work of Kisimbii *et al.* (2018). Strengthening these support services, particularly in ODeL, correlates with increased learner retention (Kisimbii *et al.*, 2018). A student portal serves as a valuable tool for disseminating innovative interventions and communication from the administration to students and other stakeholders (Kisimbii *et al.*, 2018). The primary reasons for student dropouts include perceived lack of concern for students and inadequate services. Raisman (2013) contends that institutions failing to support student progress and graduation must take charge to improve outcomes or risk losing US federal funding. In the United States, universities focus on strategies aimed at the vulnerable first year of college, recognising it as a critical period for learners (Kisimbii *et al.*, 2018).

They continue to consider ways of reaching out to students early in their academic year. Students who are uninvolved in their studies tend to spend minimal time on campus, abstain from extracurricular activities, and seldom initiate contact with faculty members or peers. The most impactful forms of involvement are academic engagement with faculty members and participation in student peer groups, as emphasized by Kisimbii *et al.* (2018). This observation aligns with the findings of this study, where learner support services at UNISA, particularly in the form of administrative support, aim to foster both academic and social engagement in college life.

2.6.1 Use of technology in ODeL institutions

Open universities in certain countries establish physical centres, referred to as regional centres, study centres, or teaching centres, spread across provinces, districts, or states. The primary aim of these centres is to provide support to both students and faculty (Lumanta *et al.*, 2017). Conversely, some institutions leverage the full potential of ICT in distance learning, delivering teaching and support services online. These universities offer online access to print or digitised materials, enable online communication with tutors, and assign specialised student support teams for each subject area. Alternatively, they create online environments for accessing course

materials, participating in interactive learning activities, submitting assignments, and engaging through video conferencing or email (Lumanta *et al.*, 2017).

The use of an online student portal is increasingly essential in ODeL. Continuously evaluating learner satisfaction becomes crucial to ascertain the success of the learner support system in providing meaningful learning experiences (Secreto & Pamulaklakin, 2015). Responsive learner support services are pivotal for the success of DE learners in an open and ODeL environment, aiding them in achieving their learning goals (Secreto & Pamulaklakin, 2015). Student services, often considered the administrative backbone of higher education, serve as crucial contact points for students (Van Voorhis & Falkner, 2004).

Student attrition, attributed to factors like isolation, competing responsibilities, and technical issues, underscores the necessity for effective learner support in ODeL structures (Steinbrown & Merideth, 2003). Brindley, Walti, and Zawacki-Richter (2004) define learner support in open and distance learning as encompassing all activities designed to assist learners in the cognitive, affective, and systemic realms of the learning process.

Online HEIs should strive to offer comprehensive support services that cater to the diverse needs of a technologically oriented student population (Secreto & Pamulaklakin, 2015). These services need to be conveniently available to learners at any time and place, possibly through web-based platforms (Secreto & Pamulaklakin, 2015). Mitigating the feeling of isolation is crucial for learner motivation, and advancements in ICT can significantly contribute to reducing this sense of isolation (Secreto & Pamulaklakin, 2015).

The Online Service Provider (OSP) is an internet-based application offering various services, acting as a centralised point of access for students, faculty, and staff, available 24/7 (Presley & Presley, 2009). While OSP holds the potential to diminish the impact of isolation in DE, its development must align with the needs of learners to prevent frustration. A well-structured online support system is essential to minimise frustration and motivate learners to stay in their programs (Hara & Kling, 1999; Jonassen & Grabowski, 1993). Evaluating OSP based on functionality, efficiency, appearance, ease of use, and security, learners' suggestions are sought to enhance

existing functionalities and maximise the ODeL learning experience (Secreto & Pamulaklakin, 2015).

2.7 Student support services

Students need to be supported as they go through learning. Before discussing student support services, it is necessary to identify what is intended with the term “ODeL Student Support”. Garrison, Anderson and Archer (1999), Tait (2010) and Thorpe (2002) in Alton-Lee (2003:182) describe student support as a core concept but the definition of the term varies from one researcher to another. Some researchers consider interactivity and resources as crucial in defining student support, while others focus on service customisation or individualisation (Baloyi, 2013:555). Customisation refers to the services to both individuals and students in groups that supplement integrated learning resources and course materials for all students, which is often recognised as a special offering by ODeL institutions. Thus, student support is distinguished within all aspects of the ODeL programme, which, in general, can be called the main focus of student support.

According to Tait (2000:289), the main function of student support is threefold:

- *Affective*: provides an environment that supports students, enhances commitment and builds self-confidence.
- *Cognitive*: supports and promotes learning by aligning the values and similarities of each student's teaching and learning materials.
- *Systematic*: creates a functional, transparent and friendly student and knowledge management system.

These functions are both interdependent and essential. It can be argued that student support is most evident in the administrative process, often from an efficiency perspective in relation to the systematic function. But when shortcomings prevail, there will be a reduction in the affective function, which is associated with an increase in student commitment to and satisfaction with the school and often results in students dropping out (Tait, 2000:289). Likewise, in institutions where administrative procedures or information management are inefficient, leading to delays or acting as a barrier to accessibility without flexibility and inclusivity, students experience a sense of exclusion. What is less known is the cognitive function of student support, which

includes assessment and tuition. This understanding of the role of student support is based on the central idea that knowledge is given literally and processed through learning by doing.

UNISA student support considers “diverse” students’ needs during their studies, while acknowledging that student support cannot be overlooked in the space of teaching, learning and research in ODeL. In its quest for this commitment, UNISA relies on “well-defined processes, procedures and robust organisational systems supported by ICT”. The role of ICT in higher education is pivotal for student support. Amongst others, it was found that “high internet connectivity and lack of technological infrastructure” are some of the difficulties faced by universities within the space of ODeL (Tweheyo & Mugarura, 2021). In South Africa, a move to e-learning has presented challenges as the “expectations and roles” of students and employees changed (Kunene, 2017). At the same time, it is acknowledged that ICT plays a pivotal role in bridging the gap between the university and its students. This means that if ICT is weak, it will affect student support within ODeL institutions negatively. According to Njiro (2016), developing technologies such as print, video, telephone and computer have significantly contributed to communication systems used to support students within the ODeL environment. This clearly indicates the importance of ICT as an enabler in ODeL institutions.

There seems to be a common challenge concerning infrastructure within ODeL institutions in Africa. A study conducted in Kenya shows that most of the country’s universities offer ODeL, even though this had created challenges on both the economic and infrastructural front (Nyerere et al, 2012). The study discusses how Kenya adopted a national ICT policy with the aim of ensuring the “availability of accessible, efficient, reliable and affordable ICT services”. To enhance the quality of teaching and learning in its educational system, the Kenyan government encourages the application of ICT by schools, colleges and universities. Despite most universities in Kenya having moved to ODeL, the use of “modern ICT” remains low. One of the reasons was found to be a lack of internet connectivity (Njihia, Mwaniki, Ireri & Chege, 2020). Similarly, UNISA students have found the university’s admission process and administrative support services problematic and frustrating because of system challenges experienced when contacting the university (Lumadi, 2021).

UNISA aims to implement support structures and systems for students that have a variety of backgrounds. As a consequence, supplementation methods must be varied as the university puts students first in its teaching and learning programme. According to Simpson (2002), Thorpe (2002) and Tait (2003), student support plays an important role in improving student achievement in distance learning (Baloyi, 2021:2).

2.7.1 Types of information systems within ODeL administrative support

Victor, Emmanuel and Olusola (2014) investigated the design of an interactive voice response system (IVRS) to fit into tertiary institutions' student information systems in Nigeria, with the Rufus Giwa Polytechnic being the case study. Using the rapid application development approach, the system was designed using a VOXEO Prophecy server, HTML, Ajax-PHP, a WAMP server and MySQL, with the school web portal providing the IVR server and the required database. The system's aim is to eradicate errors, stress, delays and the long queues experienced by students when accessing information. The system performs optimally by delivering results to students on their mobile devices., according to Victor *et al.* (2014).

In Australia, Kang and Lau (2006) discussed the development of a web-based student enquiry system using techniques of case-based reasoning (CBR) combined with advances in ontology. The authors found that the system functions as an online enquiry front-desk to permit future students to find out whether they are qualified for admission to a postgraduate course. Singh, Joseph and Jabbar (2019) have presented the implementation of a rule-based enquiry chatbot that is designed exclusively to assist students at the Asia Pacific University (APU). The implemented chatbot known as the "APU Admin Bot" has the aim of providing students with a quicker solution to resolving their queries instead of having to depending on the administrative offices. The chatbot avoids students having to wait in line at the APU administrative office to address personal enquiries. Rather, upon engaging with the chatbot, students will be directed to a suitable individual immediately (Singh *et al.*, 2019).

Conversational agents, also known as chatbots, refer to computer programs that engage in conversations and provide users with a natural language interface (Singh *et al.*, 2019). A chatbot is aimed at conducting a conversion between a human and a machine via auditory or textual methods (Dnyaneshwar, Somnath, Rajendrakumar &

Dadasaheb, 2020). Based on information stored in databases it identifies sentences and decides on the response to be provided to a query. By employing a graphical user interface, it seems as if a real person is talking to the user. A student information chatbot uses artificial intelligence (AI) algorithms to analyse user queries and responses by using keyword matching. This web application answers user queries very efficiently (Dnyaneshwar *et al.*, 2020).

In another study, Gbenga, Okedigba and Oluwatobi (2020) developed a model for real-time responses to admission-related enquiries to bridge the lag usually experienced during conventional telephone and email interaction. Utilising IBM Watson, the model was implemented to create a chatbot for swiftly addressing admission inquiries. The performance of the chatbot was assessed using Botium, resulting in an accuracy of 95.9% (212 successful cases compared to nine failed test cases). Botium is a test automation framework and a set of tools designed for chatbot and voice-assistant testing. It provides a platform for creating, managing and executing automated tests for conversational AI applications (Bravo-Santos, Guerra & de Lara, 2020). It enables testers and developers to assess the performance and functionality of chatbots and voice assistants by conducting automated conversations and evaluating the responses. The approach introduces users to new and emerging technological solutions for optimal and rapid responses in the educational sector.

2.8 SRM in student support

SRM is one such mechanism that has been used widely for administrative support. SRM and CRM are two closely related concepts that have gained significant attention in recent years, particularly within the context of higher education. SRM refers to the strategies and techniques used by HEIs to manage relationships with their students, while CRM refers to the practices used to manage relationships with customers. In the context of higher education, these two concepts overlap and can be seen as complementary approaches to improving student engagement and success.

One of the key benefits of using SRM in higher education is the ability to provide a more personalised and streamlined experience for students. As Taylor (2021) notes in his study entitled “The impact of SRM on student engagement in higher education”, the use of SRM systems can lead to increased student engagement and satisfaction.

By providing a centralised repository for student information and automating tasks such as sending reminders and follow-ups, SRM can help HEIs manage student relationships more effectively.

Another important aspect of SRM within higher education is the integration of SRM with call-centre systems. Patel and Singh (2022) conducted a comparative study of different SRM systems and found that those that had been integrated with call-centre systems were more effective in managing student relationships. This was because call centres played a critical role in providing support to students and having access to real-time student information could help agents to provide more effective and efficient support. Chen and Zhang (2022) echoed this point in their study headed “Integrating SRM into call centres in higher education”, where they found that the integration of SRM into call-centre systems could improve the efficiency and effectiveness of call-centre operations.

Effective voice prompts are also a crucial aspect of SRM within call centres in higher education. As Brown and Lee (2021) note in their study entitled “Leveraging CRM and SRM to improve student retention in higher education”, the use of effective voice prompts could help HEIs to provide a more personalised and streamlined experience to students. Voice prompts can also help to automate repetitive tasks, such as verifying student information, which can free up call-centre agents to focus on more complex tasks.

Finally, it is important to note the benefits of an effective SRM system within higher education. Wang and Lee (2020) found in their study, that SRM systems can help HEIs to manage student relationships by providing a centralised repository for student information and automating tasks such as sending reminders and follow-ups. An effective SRM system can also help HEIs to improve student engagement and success, as Kim and Kim (2019) emphasised in their study, that, by providing a more personalised and streamlined experience for students, SRM systems can help to build stronger relationships between institutions and their students, and this can lead to improved student retention and success. Kosch, Friedrich and Breitner (2012) present a structured literature review to analyse requirements for an SRM system. Examining results from an online survey conducted with students and alumni from four Ivy League universities, the researchers analyse findings. The study highlights the importance for

universities to prioritize perceived service quality, satisfaction, and trust to improve both student and alumni retention.

This illustrates that the use of SRM best practices within higher education can provide significant benefits for both institutions and students. By providing a more personalised and streamlined experience for students, improving call-centre operations and automating tasks, HEIs can improve student engagement, retention and success. HEIs must stay informed about the latest best practices and trends to ensure that they are providing the best possible support to their students. Changes in culture and the education system, geography, technology, curricula and student behaviour creates a pattern of diversity in which the development of student support systems must match organisations and sectors (Tait, 2000:288).

2.8.1 The use of CRM in higher education institutions

The evolution of SRM stems from the CRM concept. Daradoumis, Rodriguez-Ardura, Faulin, Juan, Xhafa and Martinez-Lopez (2010) examined the feasibility of implementing CRM processes in universities, focusing on its essential components. Wali and Andy-Wali (2018) explored the integration of a social media marketing (SMM) platform into CRM capabilities for marketing higher-education services in Nigerian public universities. Their study identified four themes—market reach, academic coordination, post-academic services feedback, and student and staff collaboration—supporting the role of SMM in CRM effectiveness for student recruitment and retention. Additionally, Khashab, Gulliver, and Ayoubi (2020) introduced the CRM Strategy Orientation Support (CRM-SOS) framework, aiming to assist HEIs in aligning their strategic CRM systems with business strategy during the pre-implementation stage, reducing the risk of CRM implementation failure. They found that a new CRM-SOS framework for HEIs comprised five stages that could be fitted in the strategic outputs and matched the top management key performance indicators (KPIs).

When applied correctly and efficiently, CRM leads to heightened profitability and enhanced customer loyalty, both crucial requisites for any organisation (Grover, 2011). In view of considerable research and development in the web-enabled CRM area during the last two decades, it has become necessary to take stock of emerging technologies and the identification of surfacing opportunities and bottlenecks during implementation (Grover, 2011). Beheshti and Bagheri (2010) formulated a knowledge-

based CRM model, integrating CRM theories (a proven, highly effective customer-oriented business strategy in recent decades) and knowledge management. This fusion serves as the linchpin for the proposed CRM framework, fostering a continuous learning environment for effective operation.

Wali and Wright (2016) examined the effects of CRM and service quality in the higher education sector of the United Kingdom (UK). The authors found that an effective CRM programme to improve service quality had the ability to induce positive advocacy behaviour by its international students. In exploring the effect of CRM in higher education. Deif (2019) found four dimensions for measuring customer relationship management were suggested, namely knowledge management, interaction, communication and feedback.

2.8.2 SRM used in other ODeL institutions

In South Africa there is no ODeL institution that has implemented an SRM system. Continentally, there is a study by Lamptey, Umude and Atteh (2020) that focused on the challenges faced by colleges of education in Ghana concerning teacher education quality. It highlights the struggle of pre-tertiary schoolteachers trained by these colleges to meet competence standards. The study advocates student-centred learning and emphasises the need to empower students as drivers of their own learning processes. It also discusses the urgent need for administrative staff to implement SRM to enhance teacher preparation and overall education quality.

In addition, a study in Thailand by Phuengrod, Wannapiroon and Nilsook (2021) delved into the components and effectiveness of an SRM system processed by an Intelligent Conversational Agent (ICA) platform. The study aimed to understand the student-institution relationship across various stages, including strategy, life cycle, retention, services, identification, experience, proposition development and network building. Seven experts who assessed the research found that the proposed SRM components were comprehensive and highly suitable for real-world application emphasised the importance of technology and strategic management for enhancing student relationships and loyalty. The fact only two studies could be found on SRM in ODeL institutions indicates the limited research that has been undertaken in this area.

2.9 UNISA call-centre information and telephone system

UNISA's ICT Department has installed the Avaya TIS for call-centre administrative support to receive, respond to and transfer student calls. The university's SRM system is integrated with the Avaya system for the effective flow and routing of student calls from the call centre to other support departments (UNISA, 2023).

Avaya is a leading provider of communication and collaborative technology solutions, including telephony systems (Avaya Inc., 2018). In recent years, Avaya has become increasingly popular with HEIs, offering a range of benefits that support the unique needs of these organisations. One of Avaya's key products is the Internet Protocol (IP) Office telephony platform, which provides advanced features and benefits to support the communication needs of HEIs. Some of the features of the Avaya IP Office include integrated voice, data and video communications, easy administration and management of the system, and the ability to support remote workers and telecommuting (Singla & Arora, 2021). These features allow HEIs to streamline communication and collaboration between staff, students and the faculty while reducing operational costs.

Another key benefit of Avaya technology in HEIs is the improved customer experience it provides (Avaya Inc. 2018). With advanced call-centre solutions and workforce optimisation tools, Avaya technology can help call-centre consultants to work more efficiently, resolve customer issues more quickly and provide a better overall customer experience. The ease of use and scalability of Avaya technology was highlighted in recent studies (Gartner Group, 2022; Singla & Arora, 2021). Avaya's solutions can be easily configured and managed, making it a good choice for institutions of various sizes and technical capabilities. The technology can be scaled up or down as needed to support changes in the requirements of HEIs.

In addition to the Avaya telephone system, UNISA's ICT Department has introduced the Automated Call Distributor (ACD) system within the call centre to support student services. According to Cleveland and Mayben (2005:261), an ACD is a specialised telephone system employed in inbound call centers. This programmable device automatically handles incoming calls, queues them, allocates calls to consultants, delivers delay announcements to callers, and offers real-time and historical reports on

these activities. An ACD can function as a standalone system or incorporate ACD capabilities within a network or PBX.

ACD is a crucial technology that is widely used in call centres, including those of HEIs. It plays an essential role in improving call managing times, increasing efficiency and enhancing customer satisfaction. ACD is defined as a call centre technology that automatically routes incoming calls to the most appropriate agent based on predefined criteria (Patel & Singh, 2018). The technology makes use of various call routing algorithms and call prioritisation techniques to ensure that calls are managed in the most efficient manner possible. It helps to minimise waiting times, reduces call abandonment rates and improves overall call-centre performance.

One of the primary roles of ACD within HEIs is to improve call-handling times (Kim & Lee, 2021). It ensures that calls are directed to the right agent quickly and efficiently, thereby reducing waiting times and improving the overall customer experience. It also helps to increase the efficiency and productivity of the call centre by enabling agents to manage more calls in less time (Zhang & Wang, 2022). ACD also helps to enhance customer satisfaction (Patel & Singh, 2018). By improving the overall customer experience, ACD helps to build brand loyalty.

The purpose of ACDs is to improve call routing and call prioritisation (Patel & Singh, 2018). Call routing is the process of directing incoming calls to the most appropriate agent based on predefined criteria, such as availability, skill set or workload. Call prioritisation is the process of determining the order in which calls are managed based on factors such as urgency, importance or customer type.

2.9.1 Call centre turnaround times

Turnaround time is crucial to evaluate call-centre operations as it can have a significant impact on customer satisfaction and overall efficiency. Studies have shown that a reduction in turnaround time can lead to improved customer satisfaction as shorter waiting times and a faster resolution of issues can result in a better customer experience (Singh & Patel, 2021). Reduced turnaround times can also lead to increased operational efficiency since call-centre agents will be able to oversee a greater volume of calls in a shorter amount of time (Kaur & Kaur, 2020).

There are various strategies that can be implemented to reduce turnaround time in call centres, such as improving call routing, providing effective training to call-centre agents and implementing technology-based solutions (Taylor & Chen, 2022). Turnaround time is an important aspect of call-centre operations that should be monitored and optimised to improve customer satisfaction and increase efficiency. The average turnaround time allowed by UNISA for the resolution of student enquiries is 48 hours (UNISA, 2021). The call centre was strategically positioned within the university to provide administrative student support by bridging the gap between UNISA students and support departments, and to improve academic support. When student enquiries cannot be resolved by the call centre, they are escalated to the following support departments within UNISA for further analysis, investigation and response:

- Directorate Student Admission/Application and Registration (DSAR)
- Directorate Student Assignment and Assessment (DSAA)
- Dispatch Department (for study material)
- Finance Department (study fees)
- MyUNISA and MyLife
- Records Management
- Graduation Division
- Regional Services

UNISA call-centre consultants are not able to resolve all student enquiries as they have limited access to information on the UNISA Student System, which stores student profiles/data. This has a direct negative impact on the call centre's student support services function as it increases the waiting time for feedback to students (UNISA, 2020). Some of the challenges faced by the call centre when resolving student enquiries include:

- An increase in incorrect responses provided to students.
- Limited access to the Student System support functions.
- Lack of access to the Student System to make changes and update student information.
- Lack of feedback or updates by support departments on whether a student query has been resolved or not.

- The unavailability of support staff or officials at support departments when call-centre consultants attempt to transfer a student call.
- Limited ICT support.

2.9.2 UNISA call centre student telephone escalation process

Where a student query cannot be resolved immediately the following process is followed:

- The call-centre consultant escalates the enquiry by email to the Student Communication Student Centre (SCSC), call centre escalation inbox (SCSCescalate@UNISA.ac.za).
- From the SCSC escalation inbox, designated consultants check the query.
- If it is a complex enquiry, it is escalated to a relevant support department or college by email for further analysis, investigation and resolution.
- Within 24 hours of the query having been forwarded, an alert will be sent to the call-centre supervisor/s, who will then check manually if the query has been resolved. If not, they will follow up with the relevant support department.
- When a consultant receives a complex email student enquiry, the email is escalated to the SCSC: call centre escalation inbox (SCSCescalate@UNISA.ac.za).
- From the SCSC escalation inbox, designated call-centre consultants check the query.
- If it is a complex enquiry, it is escalated by email to the internal escalation inbox used by UNISA regional offices: (appregions@UNISA.ac.za).
- Within 24 hours of the query having been forwarded to the handover folder, an alert will be sent to the identified call-centre supervisor, who will then check if the query has been resolved and make a follow up if unresolved. The challenge with this process is that it is a manual process, despite the availability of the SRM system adopted by UNISA for student support.

2.9.3 Student Support functions

UNISA's Student System functions encompass a range of capabilities that facilitate comprehensive student support. These include handling application statuses,

registration requests, academic records, study material dispatch information, financial statements, payment allocations, examination details, graduation information, etc. With features for updating contact details, addressing financial cancellations (the financial implication of a study cancellation) and correcting student names, the system empowers call-centre consultants to offer accurate and timely assistance, thereby enhancing the overall student support experience.

Table 2.1 offers a comprehensive insight into the specific functions within the Student System that the call-centre consultants use to provide effective student support. These functions encompass various stages of the student lifecycle, ranging from application and registration to dispatch, finance, student funding, assignments, exams and graduation. The table indicates a consultant's engagement with diverse aspects of the student journey. The system promotes comprehensive and well-informed support services.

Table 2.1: Accessible Students System functions used by call-centre consultants

Students System functions used by UNISA call-centre consultants for student support	
Call-Centre consultants only have access to handle the following Student System functions and provide information to students	
Application	<ul style="list-style-type: none"> • Application feedback/status (F902) • Application fee (F255)
Registration	<ul style="list-style-type: none"> • Readmission and phasing out (F93) • Registration request (modules) received (Temporarily Registered) (F160) • Finalised registrations (F160) • Electronic cancellation and adoption of study units (F71) • Qualification audit progress/status (F171 & F191) • Academic record (F135, F179, F140) • Exemption of study units request follow-up (F794) • Proof of registration (F124) • Study unit detail (452)
Dispatch	<ul style="list-style-type: none"> • Study material dispatched information (F313) • Study material availability (F155)
Finance	<ul style="list-style-type: none"> • Financial statement (185) • Study fees quotation (F393) • Payment allocation/transfer of funds (F799 & F674) • Processed refunds(F185)
Student funding	<ul style="list-style-type: none"> • Payment of study fees by the National Student Financial Aid Scheme (NSFAS) (F358)

	<ul style="list-style-type: none"> • Allocation of allowance (NSFAS) (F461 & F185)
Assignments	<ul style="list-style-type: none"> • Confirmation of assignments being received and or marked (454)
Exams	<ul style="list-style-type: none"> • Examination venue (F163) • Examination timetable (F342) • Examination results (F373) • Remark and recheck results (364) • Students identified for final year(FI) Concession (F171)
Graduation	<ul style="list-style-type: none"> • Graduation information (date, venue and posted/returned certificates) (456)
The following Students System functions are used to update student information	
DSAR	<ul style="list-style-type: none"> • Contact details and address change/update (F163)
Finance	<ul style="list-style-type: none"> • Reinstated cancelled modules (F157)
Student System functions that can enhance student support by the call centre and reduce escalation	
DSAR	<ul style="list-style-type: none"> • Finalisation of registration for Temporary Registered (TP) modules when full registration is reflected but the system did not fully register within the turnaround time. • Update and/or correct student names (when spelt incorrectly and when there is a name change)

In the "Application" section, consultants have access to functionalities that pertain to the status of applications and the application fee. These are critical elements for guiding prospective students through the application process and provide transparency and clarity. The "Registration" category is particularly extensive, which suggests that call-centre consultants are equipped to oversee a wide array of registration-related inquiries, ensuring accuracy and efficiency in the registration process.

The "Dispatch" section encompasses study material-related functions that directly influence student access to learning resources. This is crucial in supporting the ability of students to engage effectively with course content. The financial aspects that can be handled by consultants under "Finance" are pivotal to providing students with accurate information about their financial obligations and transactions.

Functions related to "Student Funding" highlight the consultants' involvement in assisting students who are financially supported by external funding sources, such as NSFAS. Functions pertaining to "Assignments", "Exams" and "Graduation" reflect the consultants' role in addressing inquiries related to assessment, examination coordination and the graduation process.

The table also indicates certain system functions used to update student information. These include updating contact details and cancellations and indicates the initiative-taking role support departments should have in maintaining accurate and up-to-date student records. Importantly, the table underscores the potential for certain Student System functions, particularly within the DSAR and Finance domains, both areas in which student support by the call centre can be enhanced significantly to minimise the need for further escalation. Functions like finalising registration for TP modules and updating student names reflect the ability of DSAR to assist call-centre consultants to respond to student enquiries promptly and effectively, thereby reducing the need for students to seek assistance through other channels.

In essence, table 2.2 elucidates the pivotal role of call-centre consultants to provide multifaceted student support. Access to specific Student System functions empowers them to address a wide spectrum of student enquiries and concerns, contributing to a holistic and seamless student support experience.

2.9.4 Turnaround time in call centres

Turnaround time in call centres refers to the amount of time it takes for a call-centre agent to resolve a customer issue or the time between receiving a call and successfully resolving the query. This concept is crucial to evaluate call-centre operations as it can have a significant impact on customer satisfaction and overall efficiency. Studies have shown that a reduction in turnaround time can lead to improved customer satisfaction as shorter waiting times and a faster resolution of issues can result in a better customer experience (Singh & Patel, 2021). Reduced turnaround times can also lead to increased operational efficiency since call-centre agents will be able to oversee a greater volume of calls in a shorter amount of time (Kaur & Kaur, 2020).

There are various strategies that can be implemented to reduce turnaround time in call centres, such as improving call routing, providing effective training to call-centre agents and implementing technology-based solutions (Taylor & Chen, 2022). Turnaround time is an important aspect of call-centre operations that should be monitored and optimised to improve customer satisfaction and increase efficiency.

2.10 Literature gap

In the aftermath of the implementation of the SRM system at UNISA, there is a noticeable absence of research endeavours that comprehensively scrutinised its influence on the institution's student support services. Consequently, an apparent dearth of pertinent theories and reports concerning the specific subject under investigation prevails within the UNISA context. In the light of this void, the present study emerges as a timely, pertinent and pivotal endeavour aimed at bridging this knowledge gap. By exploring and analysing the integration of the SRM system and its impact on student support services, this study can make a substantive and valuable contribution to the existing body of knowledge.

This study proposes to develop a framework as a strategic approach to comprehensively address the complex dynamics of telephonic student enquiries at UNISA. The existing challenges in administering effective support for ODeL students through the SRM system necessitated a systematic and structured model. By creating a framework, the study aims to establish a roadmap for improving the integration of the SRM system with the TIS and optimising call routing processes in the Call Centre. This framework is envisioned to enhance the overall efficiency and effectiveness of the support services provided by Call Centre consultants, fostering better communication and problem resolution for ODeL students.

The development of a framework will serve as a strategic initiative to bridge gaps in student support, aligning with the broader goal of advancing telephonic administrative services at UNISA. The framework will not only seek to address the specific research questions but also offer a holistic perspective on the interactions between various components of the system. Through a systematic framework, the study aspires to contribute valuable insights and recommendations for the enhancement of UNISA's student support infrastructure, ultimately fostering an environment conducive to the success of ODeL students. To bridge the research gap identified in this study, further investigation is warranted into the specific dynamics and impacts of collaborative strategies on student support services within ODeL institutions. Additionally, exploring the potential synergies and challenges between SRM and CRM implementation can provide valuable insights into enhancing administrative and academic support for ODeL students.

2.11 Conclusion

This chapter has presented the literature basis of the study. ODeL student support concepts were introduced. In addition, TIS, call-centre services and the role of ICT in student support within ODeL administrative support as it relates to this study have also been presented. Literature references on academic support services within ODeL were also provided to show the relationship between administrative support and academic support, and how these two can affect each other if not given attention. The importance of collaboration within ODeL was enumerated with a view to indicating the positive impact if a well-planned collaboration strategy is implemented across various institutions and stakeholders. For example, Tait (2000) outlines the strong relationship between academic and administrative support services, and how both play a pivotal role in student support. Finally, the student support processes within UNISA and the role of SRM in Student Support services were given. The relationship between SRM and CRM and their role within ODeL institutions were explained.

CHAPTER 3

CONCEPTUAL FRAMEWORK

3.1 Chapter overview

This chapter delves into the conceptual framework that underpins the study. The purpose of this chapter is to develop a model that integrates the SRM system with the TIS used to support distance students within ODeL institutions, with the focus being on UNISA as an ODeL institution. The chapter discusses student support models in ODeL institutions relevant to this study, the UNISA administrative student support process and the use of student relationship management systems in HEIs.

The chapter also delves into the realm of digital transformation, a paradigm that redefines the operational landscape of higher education. It examines how digital transformation intertwines with sustainable business practices to foster a comprehensive approach to student support within the context of ODeL. The synergies between digital transformation and sustainable business practices pave the way for more efficient and environmentally conscious methods of delivering student support services. An analysis of customer relationship management addresses service and HEIs that have adopted CRM and SRM.

3.2 Overview of SRM

To support the teaching and learning processes, it is important to have information about students. Such information allows for comprehensive and effective decisions to be made or actions to be implemented to monitor student experiences closely. UNISA's system supported by SRM concepts and SRM performance facilitates this process. The SRM system will be implemented using conceptual and technological structures that support business intelligence (Al-Weshah, Al-Manasrah & Al-Qatawneh, 2019).

The idea of SRM is to promote academic achievement and to maintain a close relationship between students and institutions. A set of actions was defined and include the actioning of SRM (Hamed et al., 2015).

The SRM system is based on the principles of CRM (Seeman & O'Hara, 2006), which is currently used in corporate environments to develop and maintain a strong corporate relationship with customers. Organisations need to get to know their customers to build relationships with them based on qualities such as trust, loyalty and resilience (Patel & Singh, 2018). To do so, organisations need to develop specific strategies and compete with their internal competencies and capabilities. The quality of customer relationships is important and should result in a competitive advantage for the institution over its competitors (Lia, Huang & Song, 2019). The use of information and communication technologies can help maintain close relationships with clients and improve organisational outcomes (Gholami *et al.*, 2018).

The CRM systems must support processes and events that are designed for customers. According to Abu Amuna *et al.* (2017), these events include, among other things, marketing (leads, establishment of a customer division, marketing campaign planning and contract management); sales (automatic sales management, sales support services, analysis of sales and orders management); and services (call-centre management, product configuration and help-desk management). The processes give businesses the opportunity to compete by using all the information and knowledge they have about their customers. Institutions need to identify and implement specific organisational strategies that help maintain a close relationship with customers (Payne & Frow, 2016). The SRM system should be based on the definition of the concept of SRM and on the complexity of the steps that underpin the concept and its implementation.

SRM is understood to be a means of knowing what students achieve, the main goal being to maintain a tight and successful student-institution relationship by closely observing students' academic performance throughout their educational journey (Hamed *et al.*, 2015). SRM comprises the introduction of a comprehensive set of well-defined institutional activities that provide personal contact with the student and the effective and complete monitoring of their progress (Al-Weshah *et al.*, 2019).

3.3 Structural framework

Performance of the events involved in the implementation of SRM means that (Gholami *et al.*, 2018):

- Information about students should be kept in a safe place that meets student perceptions.
- Data is analysed using the necessary tools to obtain information about the student or a group of students.
- A set of appropriate actions is taken individually, rather than by a group of students, to identify any situation, event or behaviour.

Options for data protection and data repository ensure that the planned SRM system will be implemented using concepts and technologies related to business intelligence systems. These systems include data generation, data storage, and the use of information management and analysis tools to provide comprehensive and helpful data support systems (Han & Kamber, 2001).

The design of the SRM system is based on traditional technological infrastructure supported by business intelligence. A full overview of the SRM system is shown in Figure 3.1. Information about students is kept in various data repositories (for example, an e-library, an academic repository or a library), while other information, such as educational activities (class marks, performance and presence) are mainly administered by teachers (Vaismoradi, Jones, Turunen & Snelgrovedoi, 2016). It is recommended that student information from a variety of sources is kept in a data warehouse (Inmon, 2005; Cunningham, Song & Chen, 2004), the form of which must be carefully defined to support SRM performance.

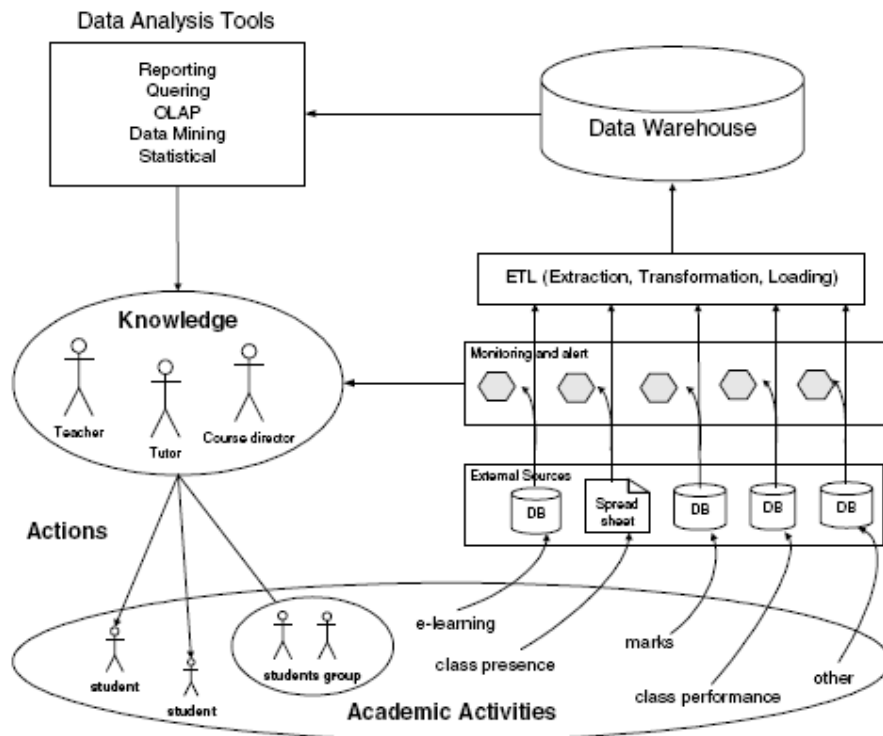


Figure 3.1: Overview of student relationship management

Source: Vaismoradi *et al.*, 2016

The use of data mining tools makes it possible to access information about student behaviour or student groups. The system simply sends a message on the course director's behalf to a student or group of students who exhibit certain characteristics (Patel & Singh, 2018). Data analysis using appropriate tools (e.g. OLAP, data mining, queries, reporting) (Vaismoradi *et al.*, 2016) allows access to student information. Based on the available information, a series of automatic actions will be performed for students or student groups, depending on the implementation of the SRM system and the actions defined by the educational institution.

Figure 3.2 illustrates a critical component of the strategic framework focusing on the management of student enquiries and support at UNISA. This framework entails three primary functions. First, it encompasses the responsibilities of the UNISA SCSC call centre, highlighting its utilisation of the SRM system. Second, it emphasises the call centre's escalation process when dealing with complex student inquiries, underlining the importance of this facet in the overall support system. Lastly, the figure highlights the role of the SRM system in managing student satisfaction, demonstrating the interconnectedness of these functions in optimising the student support process.

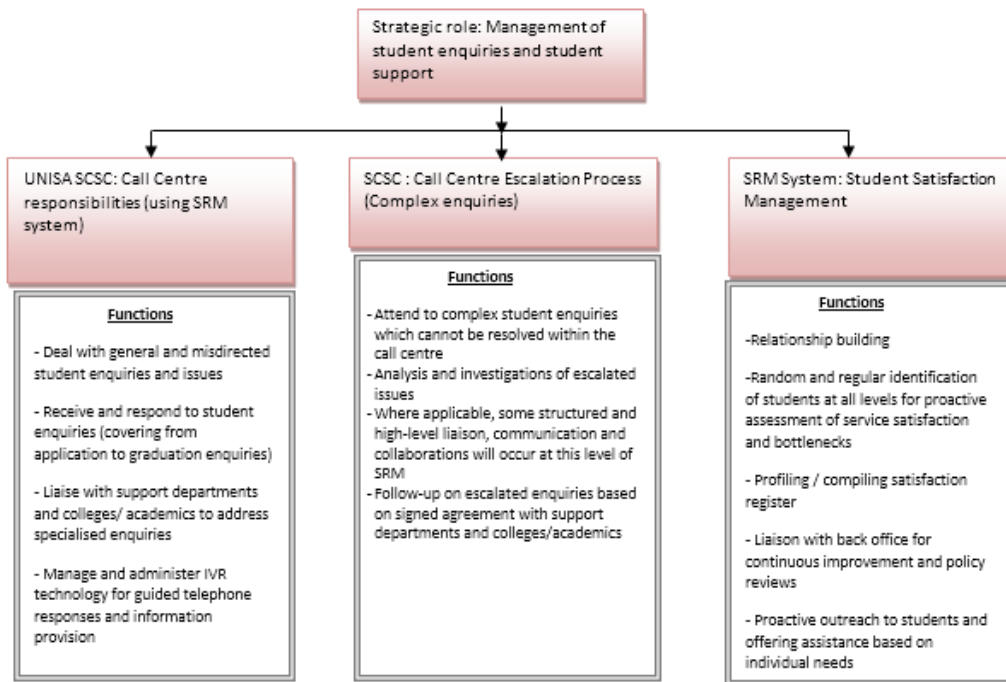


Figure 3.2: UNISA call centre administrative student support processes
Source: UNISA (2012)

Figure 3.3 clarifies the role of the UNISA call centre within the university (Unisa internal HR report, 2019).

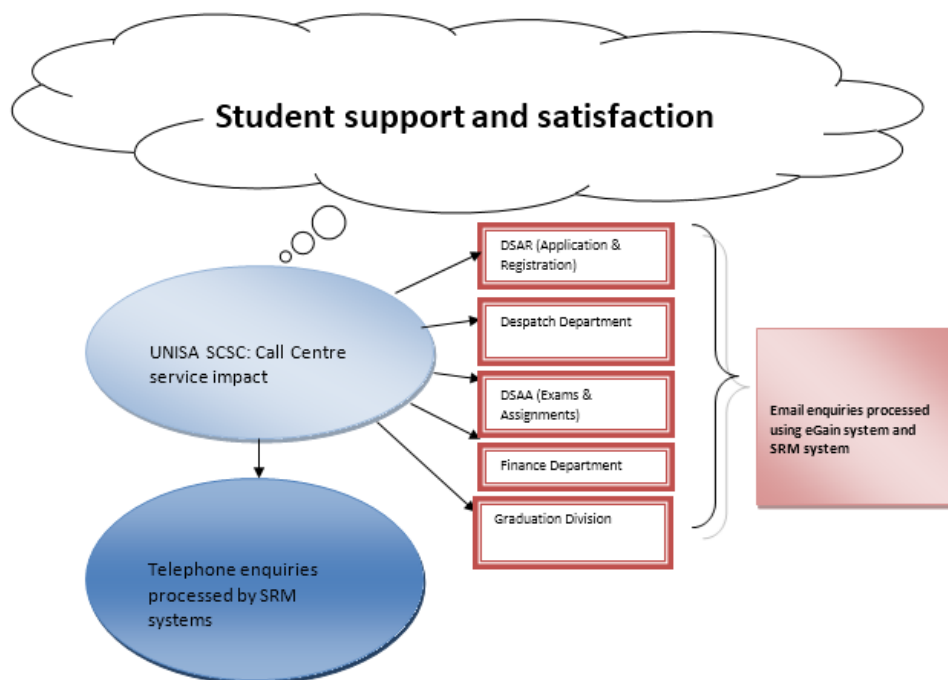


Figure 3.3: UNISA SCSC: call centre student support impact
Source: UNISA (2012)

According to UNISA (2012), the SRM systems' anticipated capabilities were to:

- Provide a track and trace function for student enquiries (quality assurance).
- Record all interactions between the students and UNISA.
- Integrate UNISA's administration systems for effective and efficient student support.
- Reflect the contact history of a student.
- Allow for the retrieval of all recorded material on request.
- Provide detailed historical data of transactions.
- Have recording options for quality assurance purposes.
- Simplify and enable the call centre to escalate and transfer call.

The focus of the former UNISA Vice-chancellor, Prof. Mandla Makhanya, was to mitigate any risks that might prevent ICT from achieving its objectives and goals since this could have a direct negative impact on UNISA achieving its strategic objectives and goals (UNISA, 2022). A Quality Management System (QMS) was set in place to review customer feedback, process performance and service conformity, and to make recommendations for improvements (UNISA, 2021). In a presentation by Prof. Makhanya to the Université de Lorraine in France he said that UNISA was dedicated to ensuring that it becomes the "Cutting-edge ODeL institution" (UNISA, 2017). UNISA's determination to continue to be a global e-learning and distance-learning institution following a business model cannot be overemphasised and for this reason its employees must provide exceptional student support.

In addition, the current UNISA Vice-chancellor, Prof. Puleng Lenka Bula, in her 2022 strategic objectives and priorities paper, made the ICT department responsible for providing support to staff and students so that their access was enhanced (UNISA, 2022). In another presentation she highlighted the important role ICT plays within ODeL to ensure the overall mode of service delivery (UNISA, 2021). Furthermore, Mr EM Carvalho, Portugal's ambassador to South Africa, advised UNISA management during a *Lekgotla* that higher education systems should be designed in such a manner that they ensure growth and reskilling for everyone in the system (UNISA e-Connect, 2022). The ambassador's focus was on ODeL institutions supporting both students and staff members and his emphasis was on the importance of ICT support.

UNISA has put in place its ODeL policy for the purposes of positioning itself “nationally, on the African continent and internationally” and to direct its “processes, practices and systems”. Amongst UNISA’s principles is a commitment to its services, benchmarked to international practices (UNISA, 2018). Hence this research study includes a worldwide literature review that will contribute meaningfully to UNISA as an ODeL institution and assist the university to provide student support that will result in student satisfaction and retention. It is a great opportunity to explore this field and provide a meaningful contribution to how best UNISA can use the SRM system optimally for student support, retention, loyalty and satisfaction.

According to UNISA’s Open Distance eLearning Policy (2018:2), UNISA defines open distance learning as “a multi-dimensional concept aimed at bridging the time, geographic, economic, social, educational and communication distance between students and the institution, students and academics, students and courseware, and students and peers”. ODeL is described as “an approach that combines the principles of student-centredness, lifelong learning, flexibility of learning provision, the removal of barriers to access learning, the recognition for credit of prior learning experience, the provision of learner support, the construction of learning programmes in the expectation that students can succeed, acknowledging that students bring their own knowledge and experience to learning”. In the same policy document, it is stated that UNISA student support considers “diverse” students’ needs during their studies, while acknowledging that student support cannot be overlooked in the space of teaching, learning and research in ODeL. In its quest for this commitment, UNISA relies on “well-defined processes, procedures and robust organisational systems supported by ICT”.

The role of ICT in higher education is pivotal for student support. Amongst others, it was found that “high internet connectivity and lack of technological infrastructure” are some of the difficulties faced by universities within the space of ODeL (Tweheyo & Mugarura, 2021). In South Africa, a move to e-learning has presented challenges as the “expectations and roles” of students and employees develop (Kunene, 2017). At the same time, it is acknowledged that ICT plays a pivotal role in bridging the gap between the university and its students. This means that if ICT is weak, it will affect student support within ODeL institutions negatively. According to Njiro (2016), developing technologies such as print, video, telephone and computer have significantly contributed to communication systems used to support students within the

ODeL environment. This clearly indicates the importance of ICT as an enabler in ODeL institutions.

There seems to be a common challenge concerning infrastructure within ODeL institutions in Africa. A study conducted in Kenya shows that most of the country's universities offer ODeL, even though this had created challenges on both the economic and infrastructural front (Nyerere et al, 2012). The study discusses how Kenya adopted a national ICT policy with the aim of ensuring the "availability of accessible, efficient, reliable and affordable ICT services". To enhance the quality of teaching and learning in its educational system, the Kenyan government encourages the application of ICT by schools, colleges and universities. Despite most universities in Kenya having moved to ODeL, the use of "modern ICT" remains low. One of the reasons was found to be a lack of internet connectivity (Njihia, Mwaniki, Ireri & Chege, 2020). Similarly, UNISA students have found the university's admission process and administrative support services problematic and frustrating because of system challenges experienced when contacting the university (Lumadi, 2021).

3.4 CRM perspectives and definition

CRM is frequently utilised to denote a technology-driven solution facilitating Sales Force Automation (SFA). In academic circles, relationship marketing and CRM are commonly interchanged (Parvatiyar & Sheth, 2001). However, relationship marketing is also commonly used to refer to a person-to-person relationship (Ryals & Payne, 2001). Many organisations are confused about what CRM is and how it can help them achieve their goals. Payne and Frow's (2016) research identified various views about the meaning of CRM. Some people thought of it as a service-oriented solution that consists of a loyalty programme, a database or a call centre. Others thought it was about building a data warehouse or implementing an e-commerce strategy.

CRM is a strategic methodology focused on enhancing shareholder value by establishing meaningful relationships with key customers and customer segments. By combining the potential of relationship marketing strategies and IT, CRM aims to cultivate profitable, enduring relationships with customers and other vital stakeholders. This approach unlocks improved opportunities for utilising data and information to comprehend customers and collaboratively create value. Achieving this involves cross-functional integration of processes, people, operations, and marketing

capabilities, facilitated by information, technology, and applications (Payne & Frow, 2005).

The CRM continuum shown in Figure 3.4 gives guidance with regard to Payne and Frow's (2005) research considerations and the strategic and cross-functional emphasis of the conceptual framework developed by them.

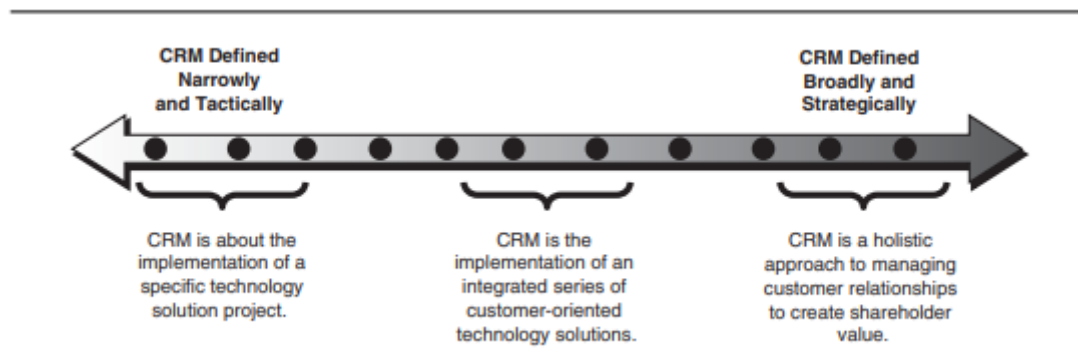


Figure 3.4: The CRM continuum

Source: Payne and Frow (2005)

Gartner (2001) advocates for a renewed perspective on business processes within CRM. This entails reconsidering how these processes are perceived by the customer and reengineering them to become more customer-centric. Supporting this notion, Kale (2004) emphasises that a pivotal aspect of CRM lies in recognising all strategic processes occurring between an enterprise and its customers (Payne & Frow, 2005).

3.4.1 Framework for CRM

The information technology revolution and the advent of the World Wide Web granted companies the opportunity to shape their interactions with customers (Winer, 2001). The web offers an avenue for companies to forge more robust relationships with customers than previously achievable offline. Through direct responses to customer requests and the delivery of highly interactive, personalised experiences, companies now possess enhanced capabilities to establish, nurture, and sustain long-term customer relationships (Winer, 2001). These online capabilities complement traditional interactions with salespeople, customer service representatives, and call centres. Simultaneously, companies have the option to leverage the cost-effectiveness of web customer services, either to reduce service costs or provide

lower-quality service through electronic contact only (Winer, 2001). The flexibility of web-based interactions empowers firms to choose their service recipients and determine service quality. The CRM revolution has been hailed as the new mantra of marketing, facilitated by technological advancements and innovations in CRM-related products that make it easier to deliver on the promise of increased profitability through reduced customer churn (Winer, 2001).

The strategy development process necessitates a dual focus on the organisation's business strategy and customer strategy, where the interconnectedness of the two fundamentally impacts the success of the CRM strategy (Payne & Frow, 2005). Figure 3.5 illustrates how the value creation process transforms outputs from the strategy development process into programs that both extract and deliver value. The three key elements of the value creation process involve determining the value the company can provide to its customers, assessing the value the company can receive from its customers, and effectively managing this value exchange through co-creation or co-production, ultimately maximising the lifetime value of the targeted customer segment (Payne & Frow, 2005).

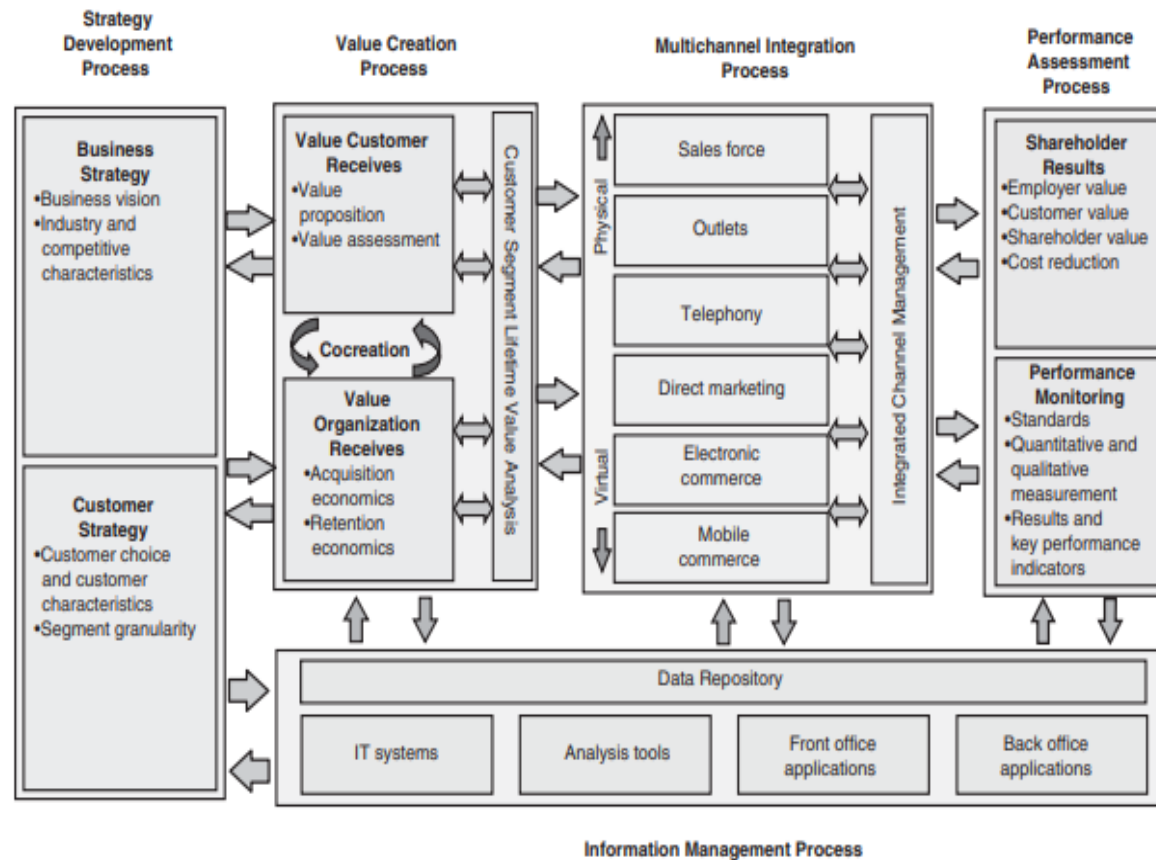


Figure 3.5: Information management process
 Source: Payne and Frow (2005)

The framework for CRM presented several critiques in its application. One notable issue is the potential dichotomy between cost-effectiveness and service quality in web-based customer interactions. While online platforms offer the advantage of direct, personalised experiences and reduced service costs, there's a risk of compromising service quality if interactions are solely electronic. Additionally, the framework emphasises the importance of dual focus on business strategy and customer strategy, yet it does not delve deeply into the complexities of balancing these strategies to maximise CRM success.

3.4.2 A conceptual framework for a CRM strategy

The multichannel integration process stands out as one of the pivotal processes in CRM, translating the outputs of the business-strategy and value-creation processes into value-adding activities for the customer (Payne & Frow, 2005). The performance assessment process is crucial for ensuring that the organisation's strategic CRM objectives are met at an appropriate and acceptable standard, laying the groundwork for future improvements. This process comprises two main components: shareholder results, offering a macro view of overall relationships driving performance, and performance monitoring, providing a detailed micro view of metrics and key performance indicators (Payne & Frow, 2005).

Limited research has been conducted on the role and contribution of CRM applications in managing customer encounters (Bitner, Brown & Meuter 2000). The authors investigated the role of customer knowledge as a mediating mechanism explaining the impact of CRM applications on customer satisfaction. Additionally, they explored the moderating effect of supply chain integration in leveraging CRM applications. Literature must be reviewed and hypotheses developed before the methodology is discussed and the results are presented (Mithas, Krishnan & Fornell, 2005).

The CRM applications have an impact on customer knowledge, and one of the main reasons companies implement CRM applications is to monitor customer behavior and gain insights into customer preferences and changing needs (Mithas, Krishnan & Fornell, 2005). Davenport and Klahr (1998) contend that customer knowledge possesses attributes that make it one of the most intricate forms of knowledge. It may originate from diverse sources and various media, carrying numerous contextual

meanings. Additionally, customer knowledge is dynamic, undergoing rapid changes. CRM applications facilitate organisational learning about customers by allowing firms to analyse purchase behaviour across transactions through different channels and customer touchpoints (Mithas, Krishnan & Fornell, 2005).

Companies extensively employing CRM applications are likely well-versed in the data management challenges associated with initiating, maintaining, and terminating customer relationships. This familiarity grants firms a competitive edge, enabling them to harness customer data for personalized offerings and responsive customer engagement (Mithas, Krishnan & Fornell, 2005). Customer knowledge accumulated from service encounters becomes accessible for all future transactions, empowering employees to address customer needs in the right context. Additionally, firms can leverage customer knowledge to profile customers and discern their latent needs based on similarities in purchase behaviours with other customers (Mithas, Krishnan & Fornell, 2005).

The conceptual framework for a CRM strategy outlined several issues and findings. One notable problem highlighted was the limited research on the role of CRM applications in managing customer encounters, particularly in terms of mediating customer knowledge and its impact on customer satisfaction. The framework also emphasised the complexity of customer knowledge, stressing the need for robust data management practices to leverage customer data effectively. Moreover, the framework identified the importance of multichannel integration in translating business strategy into value-adding activities for customers but lacked detailed guidance on how to achieve seamless integration across channels.

3.4.3 The necessity of using CRM

CRM application features include a focus on strengthening relationships with customers (which is more beneficial to existing customers than to new ones); analysing customer information for business decisions; creating effective communication channels with clients based on the conversion of data into information and internet marketing; improving person-to-person marketing; and developing data-based marketing (Tohidi & Jabbari, 2012).

The benefits of using CRM in an organisation that has the goal of achieving customer satisfaction and surviving in the competitive environment can include the following actions (Tohidi & Jabbari, 2012):

- Reduction of marketing and sales cost.
- Identifying customer's consumption patterns.
- Attracting customers faster and more effectively and gaining a better understanding of their needs.
- Increasing customer loyalty to the organisation.
- Enabling customers to visit again.
- Modelling customer behaviour within work units.
- Adjusting scarce resources with strategic solutions in the organisation.
- Developing plans for strategic investment.

The CRM implementation process, as outlined by Tohidi (2011), involves CRM design and strategy development, the redesign of CRM strategy, re-engineering work processes, and the selection of suitable software. The objective of formulating customer-based business strategies is to identify approaches and opportunities that foster a mutually beneficial scenario in a competitive environment. The execution of customer-based business strategies necessitates organisational changes in interaction and business structure. Deciding on these changes requires a clear understanding of the sections and components that interact with customers and those that can provide additional value to the customer (Tohidi, 2011).

The re-design of applications and the re-engineering of processes will be implemented to reduce customer costs and increase customer service (Tohidi, Afshar & Jafari, 2010). In fact, redefined processes should be able to direct all activities in such a way that the focus of all the applications will be on customer satisfaction. The revision of chain activities must be repeated regularly and the selection of appropriate software to facilitate processes (where possible) is important for the proposed model for implementing CRM (Tohidi & Jabbari, 2012).

Figure 3.6 illustrates the fundamental model, encompassing seven essential components: establishment of a database, data analysis, decisions regarding customer selection, tools for targeting customers, strategies for building relationships

with targeted customers, privacy considerations, and metrics for gauging the success of the CRM program (Winer, 2001).

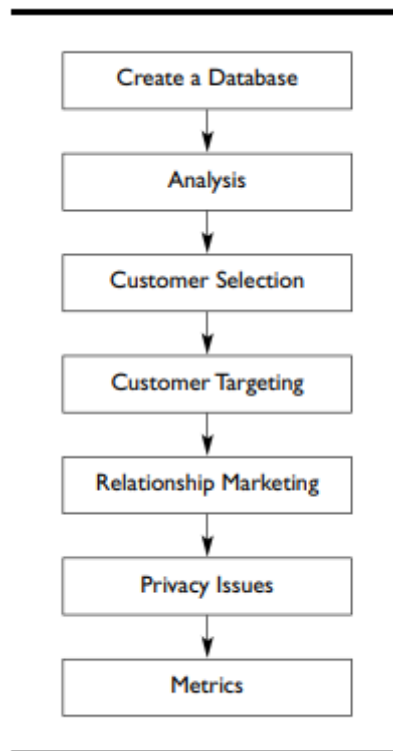


Figure 3.6: Customer relationship management model

Source: Winer (2001)

The framework on the necessity of using CRM highlighted several challenges and findings. One key problem identified was the complexity and resource-intensive nature of CRM implementation, including CRM design and strategy development, process redesign, and software selection. While the framework emphasised the potential benefits of CRM in reducing marketing and sales costs, identifying consumption patterns, and increasing customer loyalty, it fell short in addressing the potential barriers and risks associated with CRM adoption. These may include issues related to data privacy, the need for continuous process improvement, and the challenge of aligning CRM strategies with evolving customer needs and market dynamics.

3.4.4 A strategic concept of CRM

Winer's (2001) study aimed to develop a process-oriented conceptual framework, elevating CRM to a strategic level by identifying key cross-functional processes in CRM strategy development. The specific objectives were to:

- Identify alternative perspectives of CRM.
- Emphasise the importance of a strategic CRM approach within a holistic organisational context.
- Propose five key generic cross-functional processes for effective CRM strategy development.
- Develop a process-based conceptual framework for CRM strategy and review each process's role and components (Payne & Frow, 2005).

Employee engagement and change management are crucial in CRM implementation, as limited employee commitment can lead to CRM failure. Payne and Frow (2005) highlight these implementation and people issues as a priority for further research. While direct e-mail offers are a useful component of CRM, they serve more as a technique for implementation than a program itself (Figure 3.7). Building and sustaining relationships rely on available programs, with email being a delivery mechanism (Winer, 2001). The overarching goal of relationship programs is to provide higher customer satisfaction than competing firms.

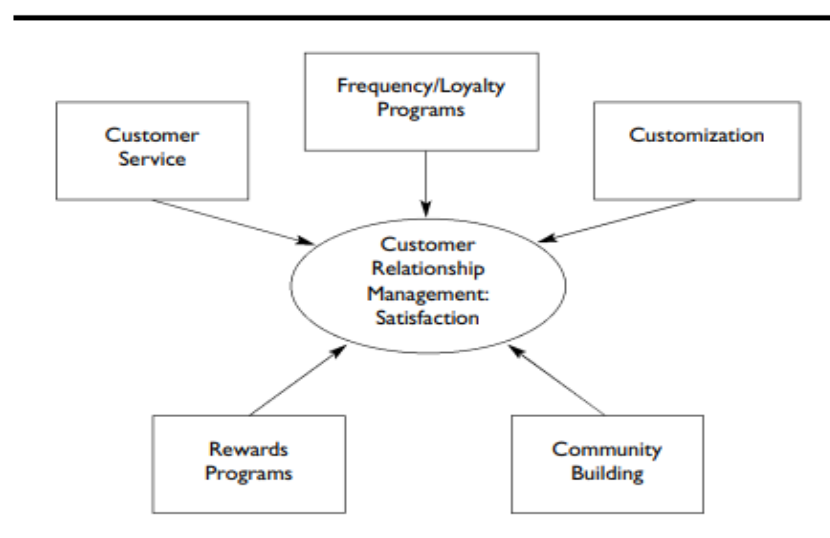


Figure 3.7: Customer relationship management programme

Source: Winner (2001)

Contemporary managers acknowledge the importance of aligning customers' perceptions with actual product performance. Meeting these expectations is crucial, and the demand for higher performance levels rises due to competition, marketing communications, and evolving customer needs. Research also indicates a robust and positive correlation between customer satisfaction and profitability (Anderson, Fornell & Lehmann, 1994).

3.4.4.1 Customisation of the community

The concept of mass customisation extends beyond one-to-one marketing, involving the creation of products and services tailored to individual customers rather than just communication with them (Winer, 2001). Online businesses leverage the Web to establish networks of customers for exchanging product-related information and fostering relationships between customers and the company or brand. These interconnected groups and relationships are referred to as communities (Winer, 2001).

For instance, Adobe, a software company, cultivates a community by dedicating a section of its website to users and developers. It provides tips and other information and is open to the community as regards product information. This binds customers to the company and its brands. It gives customers the feeling that they own this section of the site (Winer, 2001). For example, easy access when students use the UNISA SRM system will enhance student support and increase student satisfaction.

3.4.4.2 The effect of CRM applications on customer satisfaction

CRM encompasses the process of establishing and nurturing relationships with business consumers. It involves identifying, attracting, differentiating, and retaining customers in a friendly manner. CRM extends its influence across an entire supply chain to generate customer value at every stage, either through enhanced benefits or reduced costs. This, in turn, boosts profits by increasing business within a firm's customer base (Hassan, Nawaz, Lashari & Zafar, 2015). It represents seamless coordination between sales, customer service, marketing, field support, and other customer functions. Through CRM, companies gain insights into their customers, comprehend their unique needs, and tailor their service or product offerings in a

sustainable and competitive manner, leading to significant incremental shareable value.

Customer satisfaction has significant implications for the economic performance of firms (Singh & Patel, 2021). For example, customer dissatisfaction results in complaints while customer satisfaction impacts positively on customer loyalty and usage behaviour (Fornell, 1992; Johnson, 2015).

CRM allows firms to personalise their offerings for each customer. By collecting information from customer interactions and analysing it to identify hidden patterns, CRM assists firms in tailoring their offers to match individual customer preferences (Mithas *et al.*, 2005). Personalised offers enhance the perceived quality of products and services from the customer's perspective. As perceived quality is a factor in determining customer satisfaction, CRM indirectly influences satisfaction through its impact on perceived quality. Additionally, CRM enables firms to enhance the reliability of consumption experiences by facilitating timely and accurate processing of customer orders, requests, and accounts (Mithas, Krishnan & Fornell, 2005).

3.4.4.3 The mediating role of customer knowledge

While customer knowledge and customer satisfaction are crucial metrics for evaluating CRM success, it is theoretically significant to explore whether the link between CRM and enhanced customer satisfaction is mediated by improvements in customer knowledge (Mithas, Krishnan & Fornell, 2005).

3.4.4.4 Customer service through CRM

Customer relationship-building activities within the business realm are managed by a dedicated division known as customer service. This frontline function caters to a wide spectrum of consumer needs, encompassing complaint resolution, value delivery and overall customer contentment. The ultimate goal is to bolster customer loyalty (Johnson, 2015). The CRM process yields substantial advantages in nurturing and reinforcing customer relationships, fostering satisfaction and delivering value. Customer loyalty is bolstered through four core activities: identification, acquisition, retention, and development.

The achievement of customer satisfaction and loyalty cannot be separated from the quality of service that is provided (Johnson, 2015). To this end, the service sector and other industries should prioritise the delivery of personalised services to gain a competitive edge in the market. It is imperative that organisations and businesses thoroughly evaluate how the enhancement of their services will intricately influence overall business growth and advancement (Juanamasta, Wati, Hendrawati & Wahyuni, 2019).

The process of implementing a CRM system is how customer service endeavours to cultivate and uphold customer loyalty by providing high-quality service (Sam, Lye, Ohoibor & Umanailo, 2019). Communication with customers should be as effective as possible for the company to establish good cooperation with customers. Effective communication with subscribed customers can be facilitated through customer service, which encompasses all the actions a company takes to retain existing customers that frequently engage with the brand (Teixeira, Patrício, Nunes, Nóbrega, Fisk & Constantine, 2012).

Good communication to stakeholders will create a good impression and create a positive image of the company in the eyes of customers. Image, which is the impression an object has on another object, is formed by processing information at any time from a variety of reliable sources (Afandi & Umanailo, 2018). The function of customer relations is the prime contact with the external environment (Juanamasta *et al.*, 2019). For this reason, good communications between the UNISA call centre and the university's support departments will increase service delivery and feedback to students. However, the 2020 UNISA Student Satisfaction Survey recorded that students had expressed their dissatisfaction about the low level of support resulting from an inadequate TIS and the processes used to respond to student enquiries (DIR & DII, 2020).

The framework on a strategic concept of CRM identified several challenges and findings. One key issue highlighted was the critical role of employee engagement and change management in CRM implementation, which, if not adequately addressed, could lead to CRM failure. The framework also underscored the importance of aligning customer perceptions with actual product performance to meet evolving customer needs and market dynamics. However, the framework lacked specific guidance on

addressing potential barriers to CRM adoption, such as data privacy concerns and the need for continuous process improvement. Additionally, while the framework emphasised the benefits of CRM in reducing marketing and sales costs and increasing customer loyalty, it did not delve into potential risks or challenges associated with CRM implementation and sustainability over time.

3.5 Social customer relationship management

The essential variables utilised in constructing the conceptual framework are clearly defined, followed by a more in-depth exploration of the role of social media in managing customer relationships (Dewnarain *et al.*, 2018). In a more comprehensive way, Mohammed and Rashid (2012) define CRM as “a business strategy that also integrates technology in order to create superior relational outcomes in the hotel industry”. CRM is an iterative process through which firms review their objectives regularly to ensure CRM success either in the form of increased profitability, a higher level of customer satisfaction, new customer acquisition, brand loyalty or positive word of mouth (Tillmanns, Hofstede, Krafft & Goetz, 2017).

The proliferation of social networking platforms like Facebook, Twitter (now X), and YouTube, along with online review sites such as Trip Advisor, has given rise to a new concept called Social Customer Relationship Management (SCRM) or CRM 2.0. This refers to a business strategy that actively engages customers through social media to foster trust and brand loyalty (Greenberg, 2010; Li, Teng & Chen, 2020; Moro & Rita, 2018). SCRM essentially adapts traditional CRM strategies to the online customer landscape by shifting its focus (Dewnarain, Ramkissoon & Mavondo, 2018).

Migrating from CRM to SCRM necessitates a new mind-set that starts by considering customers as co-creators of brand experiences (Dewnarain *et al.*, 2018). For example, in the past, a customer’s personal details were registered on a database upon check-out from a hotel. This information was subsequently used by marketers to reconnect with such customers to build a one-on-one relationship. In the 21st century, hotel customers are tech-savvy and the focus has shifted to co-creation, customisation and digital innovation (Dewnarain, Ramkissoon & Mavondo 2019; Hu & Yang, 2020; Zhang, Kim & Goodsir, 2019).

While extensive research exists on customer engagement on social media platforms, there is a need for further exploration of its antecedents and outcomes (Dolan, Conduit, Fahy & Goodman, 2017; Li *et al.*, 2020; Touni, Kim, Choi & Ali, 2020). However, as argued by Reinartz *et al.* (2004), CRM consists of three main processes, namely the establishment of a relationship with a customer, maintaining a relationship with the customer and ending the relationship with the customer (Dewnarain *et al.*, 2018).

3.5.1 Customer interaction and satisfaction

Vivek, Beatty and Morgan (2012) define customer interaction as the power of involvement and communication of people with an organisation or with organisational activities. Both the customer and organisation can initiate the interaction, and such interaction grows cognitively, emotionally, behaviourally or socially. This definition shows that this concept needs to evolve a model that examines and consider more aspects when customer interaction is studied (Hamidi & Safareeyeh, 2019).

The concept of customer interaction has shown that the competitive advantage of an organisation lies within the development of a multifaceted relationship with customers. CRM is investigated as a potential tool to increase consumer interaction (Hamidi & Safareeyeh, 2019). At UNISA, the SRM system was introduced to improve the university's relationship with its students and to enhance student accessibility to the university whenever academic and administration needs arose (UNISA, 2021).

3.5.2 Customer engagement and social media

Following the growth of social media technology and its potential for a higher-level of interactions, industry practitioners are seeking new approaches to meet customer expectations in an effective way (Maecker, Barrot & Becker, 2016; Pappu & Quester, 2016). The capability of social media to facilitate relationships can assist firms greatly to deliver on the promise of the marketing concept, market orientation and relationship marketing. The reason is that social media provide the tools to increase customer satisfaction and build customer engagement (Dewnarain *et al.*, 2019). In the case of UNISA, the use of social media to voice complaints and discuss other issues was noted when students raised complaints about UNISA's inadequate student support on

Facebook (UNISA, 2019). The power of social media cannot be underestimated if UNISA wishes to be globally competitive and relevant in the market.

In developing the customer engagement process, Sashi (2012:260) formulated a seven-stage customer engagement cycle encompassing connection, interaction, satisfaction, retention, commitment, advocacy, and engagement. Progression through these stages depends on factors such as the product or service nature and the level of familiarity with the brand. A significant advantage of customer engagement is evident when issues arise in a relationship, as customers are more inclined to discuss problems rather than expressing frustration in public spaces, thereby contributing to value creation (Abu Amuna *et al.*, 2017).

The advent of social media has brought about a paradigm shift in the operations of hospitality businesses, affecting areas such as customer services, sales, marketing, human resource management, and finance (Aral, Dellarocas & Godes, 2013; Guha, Harrigan & Soutar, 2018). Operating within a highly competitive environment poses a substantial challenge for hotel companies. The interactive nature of social media, fostering real-time interactions with customers, undoubtedly provides a competitive advantage for proactive service providers (Chathoth, Ungson, Harrington & Chan, 2016).

3.5.3 UNISA Social Media Reports on student support

According to UNISA (2019), social media trends in May 2019 outlined some of the following service delivery concerns of students:

On student support services

Issue: *Students complain when we focus on events and not on their needs. This is an ongoing issue with our students. The unresponsive nature of the institution is hampering our brand.*

- *Student I... Perhaps find some more selfless individuals to manage your widely marketed new Toll-Free line. I have been trying for weeks to just get an answer from ANY UNISA phone number. I am beyond disappointed.*
- *Student X... Exceptionally depressing experience.*

- *Student Y... I have applied at UNISA on 9 May 2019 for Higher Certificate using the printed form received from UNISA officials, but till today when I check the application status, I find this: You do not have a current application record for this academic year. My daughter is desperate to start with her studies next semester; can someone please assist.*
- *Student G... UNISA is a definition of incompetence, poor service delivery and all of nothingness.*
- *Student J... I am still waiting for my laptop monthly allowance.*
- *Student C... What about our book allowance?*
- *Student E... Your service is **** ... All you care about is our money.*

On application

Issue: *Since the close of the application [process] on 13 May 2019, we see a few students who are frustrated by not receiving feedback.*

- *Student N... YOO UNISA, I applied, and they did not send anything to me but if I check application, they say I have already applied for admission, but they didn't even send me a single email or an SMS. No student number nothing.*
- *Student A... University of Confusion in South Africa. Out of all the institutions I applied at and studied at. I had that person who will return to my emails. We paid for applications (Now the system says we already applied for 2019). Then we told to go to campus to fix it. How we applied at UNISA because we are working therefore, we do not have that time to go to Campus. My 3rd application tried 2017, 2018 now 2019.*

3.6 Argument for a conceptual framework in a qualitative study

In this study, a conceptual framework was employed in qualitative research because it offers practical guidance for organising and structuring complex qualitative data. Conceptual frameworks provide a visual representation of key concepts, relationships, and variables, aiding researchers in understanding the theoretical underpinnings of their study (Gregory, 2020). Since this study focuses on developing a model or theoretical framework to explore and analyse the phenomenon under investigation, a conceptual framework was deemed essential. It helps in framing research questions,

identifying relevant variables, and establishing connections between different aspects of the study, thereby enhancing the coherence and depth of the qualitative analysis. Ultimately, utilising a conceptual framework in qualitative research facilitates systematic inquiry, theory development, and a deeper understanding of the research subject (Gregory, 2020).

3.7 Digital transformation and sustainable business

This convergence of interests and benefits is a crucial consideration. CRM serves as a vital tool for fostering business model innovation, steering the endeavours of small and medium-sized enterprises (SMEs) toward economic, social, and environmental sustainability (Gil-Gomez, Guerola-Navarro, Oltra-Badenes & Lozano-Quilis, 2020). In contemporary firms, customer knowledge management and innovation stand out as pivotal drivers, shaping a set of effective strategies for survival, growth, and development, ultimately enhancing business efficiency, performance, and sustainable competitive advantage (Zhang, Kim & Goodsir, 2019).

According to Prahalad and Ramaswamy (2004), customer collaboration serves as a contemporary linchpin in customer knowledge management and innovation. It provides a pathway for successful organisations to glean insights from their customers' needs and demands, facilitating improved performance. The call to consolidate and integrate their collaboration with customers and improve their knowledge about customer needs is what CRM seeks to respond to as both a strategic tool and a business philosophy (Gil-Gomez *et al.*, 2020).

Wali and Andy-Wali (2018) define CRM as an integration of processes, human capital and technology seeking for the best possible understanding of a company's customers. If the focus is placed on customer retention and relationship management in particular, CRM is the most recent integrational approach available for relationship management (Gil-Gomez *et al.*, 2020).

The combination of current exploitation and prospective exploration serves as the foundation for sustainable business models and is the essence of modern, dynamic enterprises. Within this context, the focus of the present study is evident. It aims to demonstrate that CRM is an effective technological solution that assists companies

not only in the current exploitation of their resources but also in exploration and innovation across all facets, leading to sustainable economic and financial growth (Gil-Gomez *et al.*, 2020). CRM is an integral component of a broader suite of management software tools and solutions that encompass data mining (Gil-Gomez *et al.*, 2020).

The ongoing trends of globalization compel leading companies to confront new competitive challenges, highlighting the imperative to prioritise the management of customer relationships, with a special emphasis on customer satisfaction, as a primary means of survival and revenue maximisation (Secreto & Pamulaklakin, 2015). In response to these contemporary challenges, prominent firms have embraced a customer-centric orientation (McNally, 2007), placing relationship marketing at its core. This evolution signifies a shift from the transactional focus of traditional marketing to the relational emphasis of the modern discipline (Gil-Gomez *et al.*, 2020). Leading organisations turn to CRM software systems to monitor and analyse customer-related information, recognizing that improved customer relations can be achieved through its strategic use (Karimi, Somers & Gupta, 2001). Successful companies have mastered the art of optimising their marketing efforts by tailoring strategies to customers generating high revenues, making customer-tailored approaches indispensable (Gil-Gomez *et al.*, 2020). CRM systems deliver substantial benefits to overall customer service experiences, marketing, and sales (Lia, Huang & Song, 2019). Positioned among various enterprise systems, CRM systems are deeply embedded in firms' business processes related to customers, such as marketing, customer service, and customer data analysis. The implementation of CRM is a pivotal step in any CRM strategy, and its successful execution yields improved performance (Lia, Huang & Song, 2019).

Given this, corporate managers must possess a profound understanding of the primary objectives, necessary conditions, and evaluation methods associated with CRM implementation. In practical terms, scholars in marketing research and information systems have posed a specific research question pertaining to the business value of CRM (Reinartz *et al.*, 2004; Richards & Jones, 2008). This question centres on the performance outcomes of CRM implementation and the factors influencing such outcomes (Lia *et al.*, 2019).

The fulfilment of promises is the basis for relationships to strengthen. CRM encompasses having knowledge about customers to manage and serve them better. This customer-centric approach is an integral part of business (Ryals, Knox & Maklan, 2017). Misunderstanding CRM as a software would be a blunder as it is a business process or strategy driven by IT to derive business value (Yerpude & Singhal, 2018). The three basic pillars of CRM, i.e. relationship marketing, information technology and changing customer behaviour, create a customer-driven business. Enablement of a customised solution becomes the single-point agenda of organisations, which can then focus on internal efficiencies (Yerpude & Singhal, 2018).

Modern organisations gain a competitive edge by delivering a seamless customer experience across all interacting channels (Hartikainen & Hallavo, 2017). The role of data is quite vital for the successful implementation of CRM. Creation, collation, collaboration and the transfer of data are the different steps on a data journey that is enabled by the internet. The internet facilitates the transfer of data between the different entities that could be miles apart from each other, and also proves to be the fastest medium available for this task today (Tolia, Kaminsky, Andersen & Patil, 2017). Real-time information on a customer in the possession of an organisation becomes one of the significant driving principles for focusing on a customer-first philosophy (Yerpude & Singhal, 2018). The fundamental benefits identified as the core value drivers for CRM include the following (Richards & Jones, 2008).

- Functionality and visibility to enable the sales force to target profitable customers.
- Comprehensive customer data to facilitate cross-selling through multiple integrated channels.
- Increased sales force efficiency because it has the necessary data at its fingertips.
- A high degree of personalisation in customer messaging.
- Customisation of products and services to meet customer requirements in a system that is highly customer-centric.
- Increased service efficiency and effectiveness.
- The availability of dynamic pricing options (Yerpude & Singhal, 2018).

Customer experience takes the front seat for driving an organisation's goals. Whenever customers interact with an organisation in any form, the responses received by them contributes to the customer experience (Yerpude & Singhal, 2018). CRM creates a win-win situation. It is becoming clear that the role of the salesperson is changing. Traditionally he was the spokesperson and the brand ambassador but in today's scenario this no longer seems to be the case. The customer comes with a specific mindset after a lot of thought has gone into the process of selecting a particular product or service (Yerpude & Singhal, 2018).

CRM is continuously evolving as far as managing the relationship with customers to whom a product or service is being sold. There have been various trends and milestones in this evolution journey of CRM, giving rise to different types of CRM (Yerpude & Singhal, 2018). By implementing CRM, organisations achieve a win-win situation as the customer and organisation benefit equally. The customer benefits from increased customer satisfaction because of the high-quality of service provided, while the organisation realises higher customer retention, wins back previous customers and increases revenue not just from the sale of products but also from cross-selling and up-selling (Yerpude & Singhal, 2018).

3.8 Student support model within ODeL

CRM assisted me to come with a model that is specific to supporting distance students. The ICT revolution experienced over time has presented both opportunities and threats. In the 4IR, students must have a variety of technological skills to be able to excel academically and UNISA's educational programmes must be in line with the 21st century job market (Baloyi, 2021:3). Although UNISA students were satisfied with academic support, ICT support and administrative support systems were found to be unsatisfactory. The findings of this organisation a year later also indicated students' dissatisfaction with ICT and administrative support services (DIR & DII, 2020). To achieve its strategic goals, UNISA administrative support must be better equipped and supported by ICT for easy accessibility.

If UNISA is to accomplish its mission of being a university that is student centred (UNISA, 2022), it is of pivotal importance that its students find it easier to access information systems that assist in making informed study decisions. Knowing which

technologies students have access to and how best to design the call-routing telephone system will assist UNISA with the planning and improvement of its TIS and related processes, as integrated into the SRM system, and cater for its students' needs with minimal difficulties.

3.8.1 Development of a student support model

A framework developed by Tait (2000:290) for the development of a planning tool for student support services is built around six core elements, namely:

- Student characteristics
- Course demands
- Geography
- Technology
- Scale
- Management systems

Tait (2000:291) explored the diverse factors integral to the planning of student support in open and distance learning systems. These factors stem from student characteristics, academic program demands, course requirements, geographical considerations, technological infrastructure, program scale, and management requisites. Figure 3.8 visually depicts the intricate interplay of these factors, emphasising their complex interactions. Within this dynamic, each element holds significance, and none can be universally prioritised. The elements exhibit a tension, necessitating trade-offs, which collectively embody the central management accomplishment in shaping such systems.

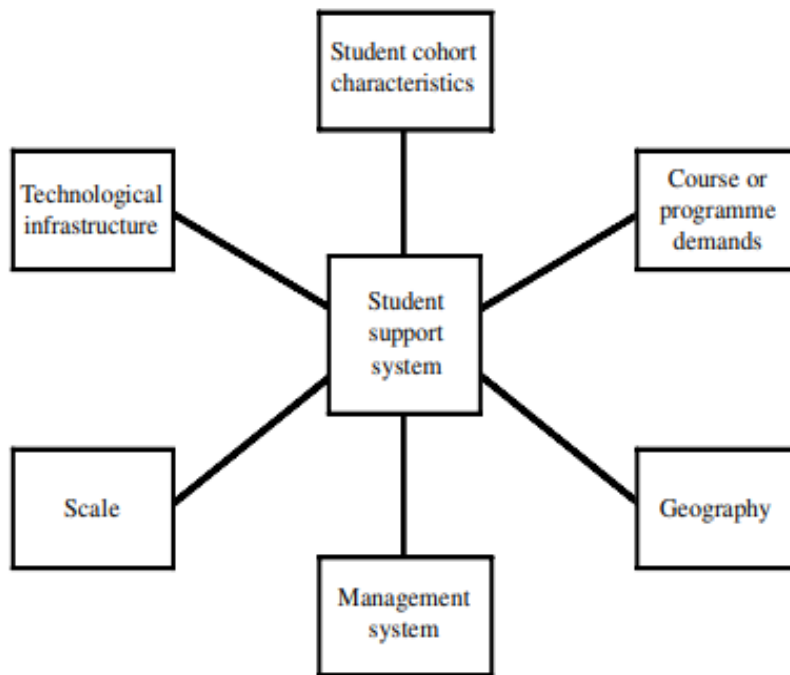


Figure 3.0: Framework for the development of a student support system

Source: Tait (2000)

The model examines critical factors influencing the design and implementation of effective student support systems within the realm of ODeL (Tait, 2000):

Student characteristics: Drawing from practices well-established in service industries, it is imperative that aspects of client or customer-centricity are infused into strategies when dealing with learners, who traditionally held the more modest title of "student". Indeed, all the elements that make up this planning tool must relate in part at least to student needs and capacities.

Technological infrastructure: In evaluating the technologies suitable for delivering student services, a crucial distinction lies in the accessibility of technologies for students and those available to the institution or organisation. For instance, due to the absence of a reliable postal system in rural areas of South Africa, traditional mail services are impractical for reaching students in these regions. Alternative methods, such as truck delivery to remote villages, must be employed (Tait, 2000:292).

Course or Programme Demands: The initial element in designing student support often stems from the specific demands of a course or program. Teaching and assessment form the core of these requirements. Key decision points include determining whether the assessment will be continuous, final, or a blend of both. In

the case of continuous assessment, further decisions arise regarding oversight by core teachers or academics versus part-time teachers or tutors. Additionally, considerations extend to whether the emphasis is on teaching and grading through continuous assessment or if this solely applies to grading.

Scale: This aspect of the framework pertains to the intended volume of activity and significantly influences the construction of the student support system. For example, an institution planning to enrol 80 students in an ODeL course will necessitate a different system compared to an organisation dealing with over 100,000 learners.

Such variations impact the extent of investment in course materials, regardless of the medium chosen, and also affect the investment in organising student support. The question arises whether students can be adequately supported within the available time of full-time teachers on the core staff or if the volume of students requires recruiting teachers or tutors externally, likely on a part-time basis and distributed across the country for proximity to students. Furthermore, the scale dimension influences the organisation of inquiries and admissions, as well as the need for local facilities like regional offices or study centres.

Geography: The geographical context within which an institution and its students operate holds a crucial role in shaping the delivery of student services. In the early stages of distance education in Canada and Australia, the primary aim was to extend educational opportunities to individuals isolated by considerable distances from HEIs. The advent of the new ICT environment significantly mitigated geographical constraints, allowing students from different continents to access education. Nevertheless, when considering the diverse types of second-generation ODeL and institutions straddling the second and third generations, substantial variations exist in service delivery, as seen in countries like Norway or Hong Kong.

Management Systems: The management of student support systems involves grappling with several significant issues. Firstly, the centre-periphery dynamic in small-scale ODeL systems, where services are predominantly delivered away from a central location or campus, plays a crucial role in organisational and management considerations. Hierarchical characteristics in a centre-periphery model can pose

challenges, but a collaborative partnership model, emphasising a "distributed model," may be preferred, leveraging the opportunities offered by ICT. Secondly, effective delivery of quality services to students hinges on the management and utilisation of information. Monitoring student progress and introducing support services rely on robust information management. The assessment of services is intricately tied to the information collected. Ensuring a smooth flow of information to and from peripheral elements, with regular updates as a core task at both the centre and the periphery, stands as a central element in the overall management of information.

3.8.2 Affective, Reflective, Cognitive, Systematic, Gender Model (ARCSG)

The Systematic Student Support for Distance Learners model, as depicted in the Figure 3.9, encompasses five fundamental pillars of support. These pillars are designed to empower distance-learning students, facilitate their academic journey and overcome various challenges.

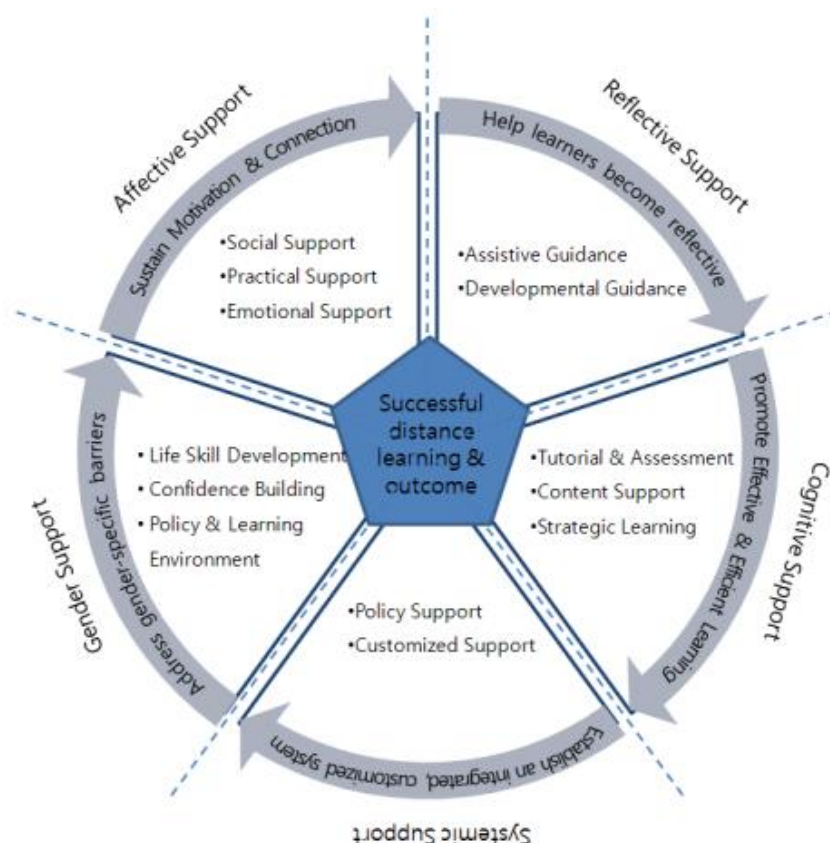


Figure 3.8: A model of systematic student support for distance learners
Source: Jung and Hong (2014)

The figure shows the key features of the five components of this model:

- Affective support helps distance-learning students to stay connected and motivated while studying, and to become more effective independent students.
- Reflective support allows distance students to think about academic and non-academic issues.
- Cognitive support promotes effective and efficient learning by providing relevant assessment, content, findings and theories.
- System support is provided by organisational systems and policies for all learners and custom-made support at the personal level.
- Gender respect removes social and economic, cultural and educational barriers that prevent women from partaking and succeeding in higher education.

Social upliftment and awareness are considered to be the most important form of support required. Social presence, the student's sense of belonging to the student community and having tutors and instructors who care for them can be enhanced by providing, for example, chat sessions, virtual spaces, social networking messaging applications, student profiles and video/audio introductions that give the opinions, stories and ideas of instructors, using emotion and humour. These interventions will help students to learn from their peers and involve themselves in the curriculum (Aragon, 2003). Cognitive presence, "the degree to which students can create and reinforce meaning through continuous reflection and discussion in key areas" (Garrison *et al.*, 1999:9) can encourage student participation in learning, allowing them to pose key questions, integrate interactions and collaboration into the DE programme and organise discussions and answer meaningful questions, thereby guiding students to seek answers and reach consensus (Simpson, 2012).

In a contemplative environment, the most important support for distance students will be guidance about personal and career development. As mentioned by Rovai and Downey (2010), most distance education students in Asia are from the lower or middle classes and have no academic experience, so DE helps them to progress in their careers. DE should provide clear and positive advice and information about opportunities, job transfer, promotion, internships and employment. This scenario is synonymous with the African context, especially that in South Africa.

In the field of cognition, the main support is to help students improve their learning methods. This requires proper supervision from the start of systematic training, meetings at each phase and discussions, training and technical advice throughout the entire study period. It is important to develop the cognitive skills needed by students to expand the ability to review, organise and preview content for independent or limited learning objectives, using in-depth strategies for gaining a deeper understanding of different contexts and applying this to the variety and meta-cognitive skills required to plan and monitor learning progress and learning strategies in accordance with their learning styles and contexts (Jung & Hong, 2014). There is also a need to improve time management skills as this is an important skill for distance students who often need to cope with multiple tasks (Levy, 2007).

In an organised environment, DE institutions should strive to provide an inclusive, supportive and flexible learning environment for all their students, regardless of location or situation. This should include easily accessible and friendly learning tools, communication methods, e-libraries, 24/7 telephone or online services, online payment systems, help desks and social media and almanac learning opportunities (Jung & Hong, 2014:180).

In the context of gender, care is needed to define gender inequality, both for males and females. For example, while both males and females may need financial assistance or a flexible payment system, in some parts of Asia this may be more important for men than for women since a man may have financial responsibilities not just to his family but to an extended family as well (Jung & Hong, 2014:181–182).

3.8.3 Functions of student support

While learning, teaching and student support play an important role in shaping academic learning outcomes and supporting student achievement, a professional approach provides the highest level of understanding needed to create and manage learning, teaching and student support strategies in ODeL institutions. Given the freedom to choose and represent student needs, the ways to support independent learning and theories that support assessment and success can be explored. Disparities in student needs, as opposed to commonalities, not only defy the principle

of evolution but also pose a fundamental challenge to the notion of equality (Tait, 2018a:13).

ODeL institutions need to provide in-depth skills that allow students to succeed and maximise their potential. It has been suggested that among Tait (2018a)'s views on higher education there may be:

- The ability to practice self-reflection in creative interactions, independence of thought and self-fulfilment.
- The ability to lead a life that aligns as much as possible to the first element.
- The ability to function fully and equally as a citizen.

At an organisational level, it is possible to initiate the assessment presented here by examining work, curricula and strategies for teaching, learning and supporting students. Thus, the goal of social uplift and change is related to the functioning of the entire organisation and the problem of organisations operating at the same level of rhetoric can be reduced (Tait, 2018a:14).

3.8.3.1 Management of student enquiries

Numerous open universities share a commitment to the vision of online education and digital student management support, yet their individual journeys have taken diverse paths (Tait, 2018b:17). Certain universities are ready to make a clear commitment to promote mobile learning. Some of them are advanced in the study of analytics, while others are striving for it. Nsamba (2019:71) concluded that even though *myUNISA* is the backbone of e-learning at UNISA, a number of respondents indicated that they sometimes use it, while a few indicated that they do not use it at all.

3.8.3.2 Introduction of MyMoodle

In 2022 UNISA introduced *MyMoodle*. Modular Object-oriented Dynamic Learning Environment (MOODLE) is a free and open-source learning management system written in Hypertext Preprocessor (PHP) and distributed under Gnu's Not UNIX (GNU) General Public License (UNISA, 2022). *MyMoodle* is reset using the old *MyUNISA* platform. However, students must first use an updated *MyUNISA* platform by visiting

<https://www.UNISA.ac.za/sites/myUNISA/default/>, logging in with their username and password. Then students should select the *MyMoodle* 2022 tab to access both their 2021 project sites and 2022 module sites.

Some of challenges faced by students on *MyMoodle* include:

- Access to the site.
- Inability to log in to my module.
- Linking of registration modules to *MyMoodle*
- Difficulty in accessing assignments.
- Inability to view dashboard.
- Unavailability of tabs.
- *MyMoodle* is always offline.
- Inability to upload and submit assignments.
- Difficulty of using draft assignments while submitting an assignment for grading.
- Inability to participate in discussion forum activities (cannot find the discussion forum tab).
- Inability to view announcements for registered modules.
- Difficulty in accessing study material tab.

3.8.3.3 Importance of feedback on student support

ODeL is a multifaceted concept that links economics, time, society, geography, levels of communication and education between courseware, students and institutions and students and their peers (UNISA, 2014). Its aim is to remove barriers to learning, provide flexibility in the delivery of learning, student support and curricula development with the hope that students will succeed (Letseka & Pitsoe, 2014:194).

Understanding how students learn to navigate can go a long way in providing adequate feedback during learning. To create a student support system, Qakisa-Makoe (2005:54) state that UNISA must:

- Identify student needs.
- Create a student support system tailored to meet student needs.
- Execute extensive research on the subject.

- Accept student support as a vital element of the tertiary education system.
- Recognise the role of students and educators in relation to student support.
- Avail support through the practical courses taken by students, e.g. vocational courses, university education and school administration.

It becomes easier to decide on the services an institution can offer the learner once it is known who its students are. Support mechanisms should ensure the active participation of students, especially adults, in the learning process (Qakisa-Makoe, 2005:54). Learners need someone who can help them to plan, examine and navigate their study material.

3.8.3.4 Management of information for student support

Advances in ICT have had a significant impact on ODeL at the macro, optical and micro levels. For example, on a macro scale, ODeL performance has reached a global audience that encourages new plans and practices for organisations. Concrete examples of organisational response can be considered open online learning, which has become a new tradition (Zawacki-Richter *et al.*, 2020:323).

The increased employment of ICT at open universities is related to both the interpersonal and the interaction with content, software use, audio-visual resources, the internet and CMC resources via email and conferences. Open university courses now include websites and one-way courses. A growing number of open universities are integrating e-learning into the distance learning process (Thorpe & Godwin, 2006:206). Available literature shows that UNISA students feel at home with the latest electronic tools and social media. For this reason, it may be a serious disservice should the university fail to grasp the ODeL model (Ngubane-Mokiwa & Letseka, 2015:10).

Internet: Distance learning takes place online and requires a computer and the internet. Computer skills and a knowledge of flawless administration is also a requirement (Lumadi, 2021:122). Students have expressed their displeasure at the time it takes the administration to respond to administration needs. Student experience shows that student support is inadequate. Lumadi (2021:122) notes that effective student support should benefit all students, irrespective of their social or economic status.

3.9 Gaps in literature

While the existing literature on frameworks provides valuable insights into SRM and TIS that supports distance education students, there are still notable gaps that need further exploration. These gaps include insufficient research on the core aspects of the objectives of this study. Addressing these gaps will contribute significantly to the advancement of knowledge in this field and provide a more comprehensive understanding of SRM and TIS that can enhance student support services for UNISA distance students.

3.10 Conclusion

The exploration of the conceptual framework in this chapter has unveiled the intricate tapestry of concepts that form the bedrock of the research discussed in this paper. The profound significance of SRM emerges as a guiding principle, steering the course of effective student support services. Through an in-depth understanding of SRM, the study seeks to harness its potential to enhance communication, engagement and the overall satisfaction of students within HEIs. The contextualisation of SRM within UNISA's call centre administrative student support provides practical insights into the amalgamation of technology and communication to facilitate seamless student interaction. The examination of various perspectives on CRM underscores the dynamic nature of student-institution relationships, emphasising the role of technology in shaping these dynamics.

As digital transformation sweeps across the higher education landscape, its nexus with sustainable business practices becomes increasingly vital. The integrated approach to student support within the realm of ODeL hinges on the harmonious integration of digital innovation and environmental responsibility. This chapter serves as a foundational springboard, propelling the research into the realm of methodology. The insights gleaned from the conceptual framework provide the guiding threads that will weave through subsequent chapters, illuminating the path towards the development of a model that seamlessly integrates student support services within the dynamic landscape of ODeL.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Chapter overview

The research methodology chapter serves as the compass guiding the journey of this study, ensuring that our exploration of integrating the SRM system with the TIS to enhance student support services at UNISA adheres to rigorous and robust research practices. This chapter is divided into several key sections, each contributing to the foundation of our study. The methodological journey starts by delving into the philosophical assumptions that underpin the research. Here, we articulate our ontological and epistemological stances, shedding light on the nature of reality and knowledge that frame our study. These assumptions not only shape the research design but also influence the data generation process and our approach to data analysis. Second, the research design chosen to investigate the integration of the SRM and TIS systems at UNISA is outlined. The discussion covers the rationale behind selecting a qualitative research design and exploring how it aligns with the research objectives. Third, the exploration of the research population and sampling techniques is discussed. The target population is identified with the focus on call-centre consultants who have extensive experience with the use of the SRM and TIS systems. Fourth, the rationale for the purposeful sampling and detailing of the criteria used to select the research participants is elucidated.

The fifth section delves into the intricacies of the data generation process. The choice of face-to-face interviews as the primary method for gathering rich, context-specific insights is discussed. I explore the interview structure, the development of open-ended questions and the interview protocol, all of which were tailored to elicit comprehensive responses from the participants. Sixth, the trustworthiness of the findings is explained. The strategies employed to enhance the trustworthiness of the study are extensively explored. I highlighted the iterative nature of data generation and analysis, participant feedback and the use of external peer debriefing to bolster the credibility of the research. Lastly, the ethical principles guiding the study, including informed consent, participant anonymity and data confidentiality are discussed.

4.2 Introduction

The research methodology is regarded as a holistic planning process to achieve the goals and objectives of the study. There are three main factors to consider when understanding research methods, namely the analytical philosophical point of view, the reasoning and the data required (Ponterotto, 2005). This creates the information needed and clarifies how the data is to be analysed. A good understanding of the philosophical issues underlying in research is essential. Thus, the method used is an epistemological questionnaire that gives me the opportunity to challenge the validity and usefulness of the chosen method (the rationale of the methodology) (Golafshani, 2003).

As professionals and researchers, we must be sensitive to the current environment and use the information we have obtained to conduct important social research. The choices we make in our research should be respectful and appropriate to our current situation and help us conduct research effectively (Shannon-Baker, 2016).

4.3 Philosophical assumptions

It is important to consider how scholars reflect on their philosophical positions when conducting research. Easterby-Smith, Thorpe, and Jackson (2008) outlined a concise history of paradigm conflicts across three distinct time periods. These periods include the post-positivist war spanning from 1970 to 1990, the conflict among competing post-positivist, constructivist, and critical theory paradigms from 1990 to 2005, and the ongoing war between evidence-based methodologists and the mixed methods, interpretive, and critical theory schools since 2005. In essence, scholars employ the terms "paradigm" or "worldview" to capture a meaningful understanding of specific research domains.

Kuhn (1977:37) defined a paradigm as "a research culture with a set of beliefs, values and assumptions that a community of researchers has in common regarding the nature and conduct of research". A paradigm is also defined as "a model or framework for observation and understanding, which shapes both what we see and how we understand it" (Babbie, 2007:73). It can also be viewed as a framework that researchers use to comprehend their research areas (Sobh & Perry, 2006). It is

generally accepted that the selection of a research paradigm is based on the complexity of the research area and the researchers' worldview (Alvesson & Skoldberg, 2000). Basically, a research paradigm describes a worldview informed by philosophical assumptions on the nature of reality (ontology), followed by how the relationship between me and the reality (epistemology) and the techniques are used to discover reality (Sobh & Perry, 2006).

4.3.1 Interpretivism and Positivism

A positivist perspective will use quantitative terms to explain how variables relate, shape events and cause outcomes. Positivism refers "to a set of scientific research practices" (Riley, 2007). A major tenet of logical positivism is that the nature of reality, which informs the researcher, is deductive and is separate from the objects that are the subject of observation (Johnson, Onwuegbuzie & Turner, 2007). The socio-scientific inquiry should be objective, while the ontology of interpretivism is meant to seek out meanings and interpretations of people's experiences.

In this research, the investigator will adopt an interpretivist perspective, establishing a collaborative relationship with study participants to gain insights into multiple social and organizational realities. This approach aims to cultivate a deeper understanding of the context under investigation. The interpretivist *modus operandi* recognizes the inherent challenge of achieving true objectivity and conducts research within its natural setting, interpreting phenomena based on the meaning individuals attribute to them (Towers & Chen, 2008). The interpretivist research paradigm is characterized as *emic* and *idiographic*, embracing subjectivism, in contrast to the *etic* and *nomothetic* nature of the positivist research paradigm, which reflects objectivism (Morrow, 2007).

Within the realm of paradigms, the qualitative paradigm, rooted in interpretivism (Onwuegbuzie & Leech, 2005; Tuli, 2010), diverges significantly from positivism in its approach to assessing research quality. While positivism adheres to criteria such as validity, reliability and objectivity (Shannon-Baker, 2016), interpretivism within the qualitative paradigm prioritises trustworthiness and credibility as the key evaluative factors. Qualitative researchers gauge the sufficiency of their data by employing concepts like data redundancy and theoretical saturation (Morrow, 2007), while quantitative researchers in the positivist tradition lean heavily on statistical procedures

(Onwuegbuzie & Leech, 2005). Notably, interpretivism, which is integral to the qualitative paradigm, revolves around the interpretation of social realities and operates independently of statistical data, distinguishing it from the quantitative paradigm's reliance on numerical analysis.

The qualitative methodology employed in this study is grounded in interpretivism, as suggested by Onwuegbuzie and Leech (2005) and Tuli (2010). When assessing research quality, interpretivism relies on criteria such as trustworthiness and credibility, as highlighted by Shannon-Baker (2016). Qualitative researchers gauge the sufficiency of data through concepts like data redundancy and theoretical saturation (Morrow, 2007), whereas quantitative researchers employ statistical procedures (Onwuegbuzie & Leech, 2005). Interpretivism is primarily concerned with interpreting social realities and does not rely on statistical data.

Research paradigms are foundational frameworks that guide the way researchers approach their studies and investigations. These paradigms are shaped by three core philosophical components: ontology, epistemology, and axiology. In this discussion, the key distinctions between ontology and epistemology within the context of research paradigms will be explored.

4.3.2 Ontology

Ontology refers to the nature of reality and how we perceive it (Lawson, 2019). Ontology, as a fundamental aspect of research paradigms, delves into the philosophical assumptions on the nature of reality. It asks questions such as "What constitutes reality?" and "What truly exists in the world?" Researchers adopt various ontological perspectives that shape their understanding of what they are studying. For instance, realism posits that an objective reality exists independently of human perception, whereas idealism suggests that reality is shaped by human consciousness and may not exist apart from our thoughts. On the other hand, constructivism argues that reality is socially constructed through shared meanings and interpretations. Ontology, therefore, concerns itself with how researchers conceptualise the nature of the reality they aim to investigate, laying the foundational groundwork for the entire research process. In this study, a relativist ontology is adopted, which acknowledges that reality is subjective and can be interpreted differently by individuals or groups.

This approach recognises that different perspectives exist, and there is no single absolute truth.

4.3.3 Epistemology

In contrast, epistemology within the context of research paradigms revolves around philosophical assumptions about the acquisition of knowledge and my relationship with reality. It raises questions like "How do we come to know what we know?" and "What qualifies as valid knowledge?" Researchers adopt various epistemological stances, each emphasising different sources of knowledge and methods for attaining understanding. Empiricism, for example, places significant importance on sensory experience and observation as the primary sources of knowledge. Rationalism, on the other hand, highlights the role of reason, logic and deductive reasoning in gaining knowledge. Social constructivism proposes that knowledge is socially constructed and influenced by cultural and societal factors. Epistemology, thus, concerns itself with how researchers position themselves in the pursuit of knowledge and the criteria they use to determine what is considered knowledge or truth. The study acknowledges the subjectivist epistemology, which suggests that knowledge is constructed based on individuals' subjective experiences, beliefs, and interpretations. This perspective values personal experiences and insights in generating knowledge.

4.3.4 Axiology

Axiology addresses the researcher's values and their impact on the research process. In this study, both emic and etic perspectives are considered (Moroi, 2021). The emic perspective focuses on understanding phenomena from within the cultural or social context being studied, taking into account the values, beliefs, and experiences of the participants. In contrast, the etic perspective involves an external or outsider view, often guided by universal principles or standards.

While ontology is the nature of reality, epistemology is the relationship between the nature of reality that informs the researcher, while axiology pertains to the values and ethics guiding the research (Sobh & Perry, 2006; Savigny, 2007:36; Morrow, 2007; Tuli, 2010). Eriksson and Kovalainen (2015) define ontology broadly as "the ideas about the existence of and relationship between people, society and the world in general". Therefore, the researcher has to answer the question "What is the nature of

reality” (Creswell, 2013). Epistemology, on the other hand, defines the way a researcher looks at the world with a view to making “sense” of it. Furthermore, epistemology deals with the essence of knowledge, its prospect, extent and “legitimacy” (Ponterotto, 2005). Epistemology asks the following question: “What is the relationship between the researcher and that which is being researched” (Creswell, 2013).

To conduct a study, a researcher needs to comprehend the connection and interaction between ontology, epistemology and axiology in the process of generating new knowledge (Ponterotto, 2005). In this research, qualitative design was adopted to investigate the research problem on how UNISA’s TIS and processes used to manage student enquiries can be integrated effectively into an SRM system for improved student support services. This section addresses how I maintained the three dimensions that underpin the different philosophical assumptions.

4.4 Research design

According to Yin (2009:26), research design is “a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered and there is some set of conclusions (answers) about these questions”. Creswell and Plano Clark (2011) defined a research design as strategies for gathering, breaking down, translating and detailing information in research. A research design is an approach that combines ideas for research with empirical research (Creswell, 2007). A research design also is the process by which a researcher collects and evaluates the information needed to answer a given research question (Rowley, 2012). The meaning of the method of interpreting the theory of knowledge and understanding the questions it aims to answer in this study underlies the type of design chosen for this study and the drive behind choosing a given frame or design.

According to Polit and Beck (2010), the quantitative research method paradigm is built on positivist worldviews. The underlying ontological assumptions of quantitative research methods is that they are only a single objective reality. As such, positivists measure the degree of a particular aspect within a phenomenon and describe the association between the factors by measuring causalities (Santos & Brito, 2012).

Therefore, quantitative researchers aim to reduce data into numbers and use statistical data analysis techniques (Malhotra, Hall, Shaw & Oppenheim, 2004).

4.5 Methodology

Since paradigms focus on worldviews, methodology refers to “the overall approach to the research process, from the theoretical underpinning to the collection and analysis of the data” (Lobe, Morgan & Hoffman, 2020:55). These are techniques that I used to discover the nature of reality. Towers and Chen (2008) explicitly defined the research method as the practical framework within which research is being conducted. In this study, qualitative methodology has been adopted to explore how the SRM system is used to support students administratively within an ODeL institution, while qualitative methodologies were used to explore the experiences of call-centre consultants.

The study did not use quantitative methodology as a stand-alone, but quantitative study was used as a basic data set that assisted me to give context to the qualitative data. This methodology is used when observing situations that affect students. Quantitative research, according to Tuli (2010), is focused on quantifying data and applying a form of statistical analysis.

4.5.1 Research methods

As per Frost (2021), research methods refer to the techniques employed by researchers in their practice. These methods lack independent existence and only come to life when utilised by researchers in real studies (Sandelowski, 2010). Williams (2007) argues that the descriptive research method is a fundamental technique that looks at the situations and the circumstance in their current state. It includes the identifying qualities of a specific phenomenon dependent on an observational basis or the investigation of the connection between at least two phenomena (Williams, 2007).

Research methods can either be instruments used for gathering questionnaires, interviews, observations or tools employed for examining data. These may be numerical techniques from unstructured data or refer to aspects of the research process, such as sampling techniques (Frost, 2021; Rice & Ezzy, 1999). Prior to

gathering data by means of interviews for this study, formal procedures were necessary to execute the research, including obtaining ethical approvals and informed consent from participants. Quantitative methodologies aim to depict the general characteristics of a population, often overlooking specific details of individual elements studied (Hyde, 2000). In contrast, qualitative methodologies concentrate on utilising small samples.

Qualitative evidence typically employs words to portray situations, individuals, or circumstances related to a phenomenon, while quantitative evidence relies on numerical counts or measurements to add precision to a set of observations (Remenyi & Williams, 1996). Qualitative methods facilitate the development of concepts that enable researchers to understand social phenomena in "naturalistic" settings, emphasising the meanings, perspectives, and experiences of participants (Powell & Single, 1996). Qualitative research is more suited for addressing why and how questions (Harrison & Reilly, 2011). It can be employed to delineate the parameters of a research question and to obtain in-depth information about the nature of interactions (Martin & Guerin, 2006).

Qualitative techniques can also be used to investigate factors that are not actually identifiable and have not yet been distinguished (Tuli, 2010). Qualitative research is a multi-strategy that comprises both interpretivism and realism techniques to deal with a particular research topic (Towers & Chen, 2008). In addition, qualitative researchers identify the limits of research and generate in-depth data about the nature of relations (Martin & Guerin, 2006).

Researchers often overlook the fact that both qualitative and quantitative traditions contribute to each (Shannon-Baker, 2016) and that there are more similarities than differences between them (Onwuegbuzie & Leech, 2005). For example, both quantitative and qualitative approaches utilise observations to investigate research questions, employ research techniques to validate their data, and utilize data reduction methods to analyse the data (Onwuegbuzie & Leech, 2005). Quantitative and qualitative research can therefore not be regarded as incompatible (Frost, 2021). The following parts of the two approaches can be mixed in a single research project: the conceptual framework, research paradigms, methods of data generation, data

analysis, research design, and the discussion of research conclusions are all addressed in the study (Shannon-Baker, 2016).

This study started by analysing call-centre metrics with the aim of shedding light on the dynamics of incoming calls, trends over the years, abandoned student calls and the percentage of these abandoned calls. The comparison of incoming calls between the years 2020 and 2022 presented an opportunity to gauge the evolution of the system's use and effectiveness over time. The examination of abandoned student calls and the corresponding percentage of abandonment further illuminated potential areas of concern that require attention in the ongoing improvement of student support services.

This initial process was followed by interviews conducted with call-centre consultants to explore their experiences. The purpose of collecting data from the consultants was to gain a deeper understanding of the participants' experiences on the use of the SRM system in support of UNISA distance students. The next section discusses the population and sampling steps used in the study. Population, sample frame, sample unit, sampling methods and sample size should be clearly defined.

4.6 Population and sampling techniques

Data was collected from call-centre participants. A sampling technique was used to identify potential participants. Sampling is a technique used to represent the general population, called a sample, that makes the research cost-effective, accurate and rich (Islam & Aldaihani, 2022). This study adopts the use of purposive sampling to respond to the objectives of the study. Omona (2013) notes that non-random sampling aims not only to create a population size but also to obtain information about phenomena or people. In this study, topics and/or sequences have been purposefully chosen to facilitate this understanding by means of a purposive sampling design or approach. Gay and Airssian (2003) suggest that purposive sampling will take place when the sample is based on the knowledge of individuals in a group. I sampled ten of thirteen consultants with more than six years of experience in using the SRM system to support UNISA distance students. The consultants were selected for the interviews as they were the only officials within UNISA who dealt with student enquiries ranging from applications to graduation. The purposive sampling was considered relevant because

information was gained from officials who had relevant and intensive knowledge, experience and understanding of the phenomenon being studied.

4.6.1 Demographic profile of the participants

Table 4.1 depicts the profile of participants, including their gender, their experience using the SRM system and their qualification status.

Table 4.1: Profiles of participants

Participant numbers	Gender	Experience with the SRM system in support of students	Educational qualification
Participant A	Female	Eleven years	Senior National Certificate
Participant B	Female	Eleven years	B-Tech in Contact Centre
Participant C	Male	Eleven years	Senior National Certificate
Participant D	Female	Eleven ears	Senior National Certificate
Participant E	Male	Eleven years	National Diploma in Human Resource Management
Participant F	Female	Eleven years	Senior National Certificate
Participant G	Female	Eleven years	Honours in Communication Science
Participant H	Female	Eleven years	Senior Certificate
Participant I	Male	Ten years	Senior Certificate
Participant J	Female	Six years	Bachelor of Science in Agriculture

4.7 Data generation process

Data was collected using call-centre statistical data and face-to-face interviews. In examining the extent to which the SRM system and the TIS was used, it became imperative to delve into the realm of call-centre statistical data, which presents a detailed analysis of critical metrics, shedding light on the dynamics of incoming calls, trends over the years, abandoned student calls and the percentage of these abandoned calls. By examining of these quantitative data points, valuable insights, which align with the research objectives, were provided, ultimately contributing to a comprehensive evaluation of the integrated support system's efficacy in addressing the needs of distance learning students at UNISA.

A comparison of incoming calls between the years 2020 and 2022 presented an opportunity to gauge the evolution of the system's usage and effectiveness over time.

The examination of abandoned student calls and the corresponding percentage of abandonment illuminates potential areas of concern that require attention for the ongoing improvement of support services.

Interviews were used to address one of the objectives of exploring the experiences of participants when using the SRM system to receive, respond to and transfer telephone enquiries. The interpretivist paradigm uses interviews comprehensively to analyse and interpret people's thoughts and feelings, as it allows researchers to explore and refine questions, as well as to discuss with the research participants their understanding of issues. Creswell (2013) discusses the benefits of interviews. I can create additional questions and clarify questions that may be complicated. Semi-structured interviews were developed for the purpose of obtaining information and summing up technical and investigative information (Wengraf, 2001).

Research interviews are characterised as in-person discussions during which the interviewer gathers information and gains insights from the participants (Rowley, 2012). According to Islam and Aldaihani (2022), interviews can also be defined as a data-driven discussion in which the interviewer asks questions and participants answer those questions. Qualitative interviewers engage interactively, employ sensitive language, and maintain a flexible agenda (Britten, 1995). Moreover, qualitative interviews empower researchers to gain more profound insights and information, particularly regarding perceptions, attitudes, and values (Partington, 2001). Additionally, interviews offer the flexibility for researchers to adjust their questioning pace and style to elicit optimal responses from participants (Hannabuss, 1996).

To gain a deep understanding of the utilisation of SRM based on the experiences of consultants providing support services to students, I utilised research interviews. While research interviews may be perceived as a less scientific research method, they can yield intriguing and preliminary findings in scientific inquiry (Kvale, 1994), especially when employed as guiding principles and procedural aids to assist a novice researcher in conducting interviews (Jacob & Furgerson, 2012).

4.7.1 Access to call-centre consultants

An email accompanied by a signed memorandum was sent to UNISA's Deputy

Registrar who is the custodian of the university's Call-Centre Division and students (see Appendix 2), The purpose was to obtain approval to conduct interviews with the consultants.

Prior the commencement of the interviews, approval to involve UNISA staff in the research was also obtained from the UNISA Research Permission Sub-committee (RPSC). The letter of approval was attached to my invitation to call-centre staff in which their participation in the interviews was requested. My request to be granted access to UNISA information/data, documents and archives, including UNISA administration reports, call-centre statistics/reports and UNISA Strategic Plan documents were also attached to the request.

Although approval was received in January 2023, I took into cognisance that January and February were UNISA's peak registration months when the research participants would be extremely busy. I also had to discuss logistics with the Acting Deputy Director of the call centre on how the interviews were to be conducted without interfering with the operations of the university. A subsequent meeting with the call-centre management team was also scheduled. Participants were supportive and excited about the study. They believed that the research findings would have the potential of assisting the university to respond to the issues of student support services.

Participant were interviewed one at a time to minimise the possibility of interviewees influencing each other's thinking during the process. The invitation email, to which was attached the ethical clearance certificate, the consent form and an information sheet, were then sent to the ten purposefully sampled participants who had more than nine years' experience of using the SRM system. The data to be obtained would prove to be invaluable in the formulation of a context-specific student support model.

This model developed for the research offered a comprehensive framework that would illuminates the intricacies of student support services within the realm of ODeL administration. Participants were willing to share their experiences and in addition volunteered to make themselves available should there be any need for follow up work. Each meeting was scheduled for a maximum of 30 minutes. All interviews were recorded electronically, and I also took physical notes to ensure that no important information was missed during the interview process.

4.8 Reflexivity

My exposure to UNISA's administrative support environment has stirred an interest in the pursuit of the research study. Since this study is qualitative, it is important to point out the contextual nature of research. All qualitative research is contextual as it occurs within a specific time and place between two or more people (Tuli, 2010). Objectivity is not present. In fact, it is often said that the researcher is the research instrument. The journey of discovering how researchers shaped and how they were shaped by the research process and the results is an iterative and empowering process. More so, when their positionalities are challenged and they acknowledge that reflexivity should be recognised as a significant part of the research findings (Teh & Lek, 2018).

Reflexivity involves researchers acknowledging the transformations occurring within themselves due to the research process and understanding how these changes impact the research itself. As a reflective process, reflexivity encourages introspection regarding the role of subjectivity in research. Researchers engage in ongoing reflection, considering their values (Braun & Clarke, 2006) and actively recognising, examining, and comprehending how their "social background, location, and assumptions influence their research practice." The researcher's positionality is not isolated from the research process, nor does it solely determine it. Instead, research should be viewed as a dynamic dialogue challenging perspectives and assumptions about both the social world and the researcher, thereby enhancing the research process and its outcomes (Teh & Lek, 2018). For this reason, it is important that researchers acknowledge their presence in the study. Although the researcher of this study had never been directly involved with UNISA's call-centre operations, continuous complaints raised during UNISA management meetings attended by the researcher had to some extent stirred a deep desire and passion to contribute meaningfully to student support within the administration of ODeL institutions, in this case UNISA.

The phenomenon to be explored in real life is the SRM system integrated with the TIS used by participants to receive, respond to and transfer telephone student enquiries within UNISA's administrative support environment. In this study, the following questions were used to determine student support within UNISA as an ODeL institution:

- What are the experiences of participants when using the SRM system to receive, respond to and transfer student telephone enquiries?
- How have the five options of the SRM telephone information system been integrated to enable participants to support UNISA ODeL students?
- What constitutes the effective integration of the SRM system with the TIS and processes for call routing in the call-centre environment?

According to Siggelkow (2007), the reality of a phenomenon being studied can be explored widely using a case study. A case study has the capacity to yield "high-quality theory" during an investigation. The choice of design was used to conduct a deep (but narrow) exploration of a phenomenon in which the interest is on small numbers carefully examined (Martin & Guerin, 2006). Thus, the design assisted in exploring an issue in which "little theory is available or measurement is unclear" (Kohn, 1997:3).

According to Stebbins (2001:14), social science exploration is "a broad-ranging, purposive, systematic, prearranged undertaking designed to maximise the discovery of generalisations leading to the description and undertaking of an area of social or psychological life. Such exploration is dependent on the standpoint taken, a distinctive way of conducting science – a scientific process, a special methodological approach (as contrasted with confirmation) and a pervasive personal orientation of the explorer. The emergent generalisations are many and varied; they include the descriptive facts, folk concepts, cultural artifacts, structural arrangements, social processes and belief systems normally found there." Stebbins further stated that researchers explore when there is little or no knowledge about particular processes and/or groups they want to examine. He indicates that it is of utmost importance for researchers to be "flexible" when looking at data and that they must have an open mind about where to find such data.

The exploratory research adopted in this study covered the real-life experiences of participants in the use of UNISA's SRM system in support of distance students, the focus being on the supporting telephone system and processes used for managing student enquiries within UNISA as an ODeL institution. The phenomenon being studied was defined as: "To what extent does the SRM system support the administration of telephonic student enquiries at the UNISA?" According to Babbie (2007:88), "Exploratory studies are most typically done for three purposes: (a) to

satisfy the researchers' curiosity and desire for better understanding, (b) to assess the feasibility of undertaking a more extensive study, and (c) to develop the methods to be employed in any subsequent study". In this study all three of the stated criteria for exploratory research were met.

This was achieved by understanding the participants' experiences while using the SRM system to support students administratively at UNISA and how the system is designed to manage the student call flow. Tait's (2000) model on student support and the UNISA Business Model were considered to explore the phenomenon being studied. The call-centre's telephone Management Information System (MIS) reports that give statistics on the total number of student calls, including those that were received, responded to and abandoned, as well as previous UNISA internal administration reports were studied to make a comparison of how student support services developed from 2020 to 2022. Up to this point, few studies had been conducted globally on how the SRM system is used to support students administratively within ODeL institutions, while at UNISA there has never been a study of this nature since the adoption of the SRM system.

4.9 Development of interview questions

The questions for the interview were developed taking into consideration the literature review and the conceptual framework of this study. In addition, I was guided by Tait's (2000) model on student support, the UNISA 2021–2025 Strategic Plan and SRM and CRM theories. The theories used to construct questions were in line with the research's main aims that eventually led to the achievement of the objectives set for this research study. The questions were refined to ensure that the research remained relevant to the research objectives of adding value to student support within ODeL institutions (Tait, 2000). The validity of the questionnaire was evaluated to determine whether it covered all variables it was intended to measure. The process involved:

- Checking whether all questions were relevant to members of the sample.
- Checking whether participants understood the questions.
- Checking whether the questions had double meanings or confused participants.
- Obtaining an indication of how long it would take to complete the questionnaire.

Furthermore, I designed criteria that were used to ensure the face validity of the research study questionnaire. The criteria used were as follows:

- I closely verified the relevancy of the questionnaire to the study at hand.
- Editing for consistency, grammar and spelling was undertaken by a professional editor.
- Terms relevant to the SRM system used for student support were used to erase confusion.
- Complex questions were rephrased to gather relevant data, without deviating from the study's focus areas.
- I guarded against a repetition of "ideas".
- The questionnaire was assessed to determine if it was still relevant to the variables extracted from research questions and objectives that emanated from Tait's (2000) student support model and the SRM and CRM theories.
- The questionnaire was submitted to the supervisor of this study for scrutiny, comment and approval prior to use.

Interviews can be conducted in person or by phone. The internet has also become a tool for interviews, especially following the lessons learnt during the recent COVID-19 crisis. With the growth of the digital community in the digital era, people have adapted to various online platforms to simplify their daily interactions. The same is also happening in research (Lobe, Morgan & Hoffman, 2020). To mitigate the potential risks of delays and disruptions, the interviews were conducted in a face-to-face format. This approach was chosen deliberately to ensure minimal interruptions during the interviews, particularly considering the ongoing and persistent challenge of prolonged load shedding in South Africa. Power-supply interruptions have become a significant concern, affecting various operational processes. Therefore, by conducting face-to-face interviews, the aim was to create an environment conducive to focused and uninterrupted discussions, safeguarding the quality and depth of the collected data.

4.9.1 Semi-structured interviews

The main aim of selecting semi-structured interviews was for the to understand fully the phenomenon being studied from the participants' point of view, rather than gaining

a generalised understanding of a phenomenon (Adeoye-Olatunde & Olenik, 2021). This method of collecting data allows participants to freely express their own experiences about using of the SRM system in student support. According to Creswell (2007), semi-structured interviews permit me to ask questions that provide an opportunity to learn more about the in-depth experiences of the participants. The objectives also examined the extent to which students are supported administratively at UNISA.

4.9.2 Structuring of the interview questions

It is pivotal to quantify the research study by adopting a framework relevant to the study being conducted. For this reason, the relevant literature was carefully analysed for this study. During the formulation of research questions, attention was given to ensuring that the questions addressed the various aspects of using the SRM system in support of distance students. The research questions were developed with the intention of exploring the experiences of participants with the SRM system. Questions used during interviews included:

- What are your experiences with the use of the SRM system?
- Have you used the SRM system in other universities? If yes, how was it used?
- What challenges did you encounter when using the SRM system?
- How were you trained to use the SRM system at an ODeL institution in order to support students?
- Do you have any suggestions for improving the SRM system?
- Would you like to add anything else?

4.10 Data analysis

Data collected through interviews was analysed using thematic analysis. At its core, thematic analysis involves the identification, analysis and interpretation of recurring themes within the data. The process begins with familiarisation, where researchers immerse themselves in the data to gain a holistic understanding of its content (Maguire & Delahunt, 2017). This step is followed by generating initial codes, which involves breaking down the data into discrete units and assigning descriptive labels or codes

to capture the essence of those units. These codes serve as the building blocks for subsequent analysis.

After generating the initial codes, researchers proceed to search for overarching themes. Themes are patterns of meaning that cut across the dataset, capturing salient aspects of participants' responses (Braun & Clarke, 2006). This phase involves sorting and collating codes that share commonalities and crafting them into potential themes. These themes are reviewed and refined, ensuring they accurately represent the data and capture its complexity.

The next steps in thematic analysis involve defining and naming themes and subthemes. This process requires researchers to critically examine the themes by considering how they relate to each other and how they reflect the research question. Themes are then systematically organised into a coherent and logical structure, creating a framework that highlights connections and patterns within the data (Kiger & Varpio, 2020). The analysis is not solely focused on describing the data but also involves interpreting the underlying meanings and implications of the themes in relation to the research question.

Thematic analysis is not a linear process; it is iterative and reflexive. Researchers continuously move back and forth between data, codes and themes, ensuring a comprehensive exploration of the material (Kiger & Varpio, 2020). This iterative approach allows for the refinement and development of themes as new insights emerge. Researchers critically engage with the data and the evolving themes, challenging assumptions and exploring alternative interpretations.

4.11 Research validity and reliability

Ensuring the validity and reliability of research findings is a cornerstone of rigorous scientific inquiry (Xuan, Williams & Peat, 2020). Under this aspect, I embarked on a critical examination of the measures and strategies employed to uphold the trustworthiness of the research. Validity and reliability are not merely methodological buzzwords; they are the guardians of a study's credibility and the key to unlocking meaningful insights (Köhler, González-Morales, Banks, O'Boyle, Allen, Sinha, Woo & Gulick, 2020). As the study traverses the complex landscape of qualitative research

into the integration of the SRM system and the TIS, it strives to demonstrate the robustness and accuracy of the findings. By scrutinising the steps taken to ensure the validity of the data and the reliability of the research process, the foundation upon which the study stands is fortified with the aim of providing a sound basis for interpreting and applying the results.

As a qualitative study, the focus shifts from reliability and validity to the concept of trustworthiness (Köhler *et al.*, 2020). Trustworthiness in qualitative research involves establishing credibility, transferability, dependability, and confirmability (Amin, Nørgaard, Cavaco, Witry, Hillman, Cernasev & Desselle, 2020), ensuring the integrity and authenticity of the study's findings (Kyngäs, Kääriäinen & Elo, 2020). In this context, the research aims to demonstrate the trustworthiness of the data and the research process, enhancing the study's credibility and contributing to the meaningful interpretation and application of the results (Amin *et al.*, 2020).

4.11.1 Trustworthiness

Anney (2014) related the term trustworthiness to credibility, transferability, dependability and conformability, which are the key principles for the determination of trustworthiness in a qualitative study (Lincoln & Guba, 1985, cited in Polit & Beck, 2018).

- *Credibility* means trust in the truth of data and its interpretation (Lincoln & Guba, 1985, cited in Polit & Beck, 2018). Researchers maintain expertise during presentations, which reduces participant stress in the researcher. The data was cross-checked by repeated transcript readings and comparisons with audio-recorded information, which guarantees the accuracy of the data. A participant check was also performed when I reviewed the summary data for the participants to ensure that the data was collected accurately.
- *Dependability* refers to the stability of data over time and context (Lincoln & Guba, 1985, cited in Polit & Beck, 2018). The same interview was used for all participants to ensure that they were asked important questions at different times of the interview sessions. The method of analysis was supported by an audio-recorded interview and a written transcript. These could be configured at any time to display the data.

- *Confirmability*. Lincoln and Guba (1985, cited in Polit & Beck, 2018) saw this as possible in the correlation between two or more independent parties about data accuracy and its value and significance. As mentioned, under *dependability*, I aimed to develop and maintain an audit trail to determine the confirmability of data by reviewing and interpreting all retrieval methods and ensuring that data was stored securely and was available when needed. The data of this researched study is stored in a secure place protected by a password known only to the researcher. Verbatim copies of the data were made to show the neutrality and objectivity of the data.
- *Transferability*, as defined by Polit and Beck (2018), pertains to the applicability of research findings in different contexts. Qualitative results, often intricate, can be made more transferable through detailed descriptions. Hence, I offered a comprehensive account of the research process, allowing fellow researchers to make informed judgments about its relevance to their own studies.
- *Authenticity* is the standard by which a qualitative researcher faithfully and fairly points out specific differences in the gathering, analysis and interpretation of data (Polit & Beck, 2018). I followed the principles of the study throughout the study, using the quotes of the participants directly when providing the data and being frank in the analysis and interpretation of the data.

4.12 Triangulation

Triangulation refers to the use of multiple methods or techniques in qualitative research to gain a deeper understanding of a phenomenon (Patton, 1999). This researcher used interviews to develop a comprehensive understanding of a phenomena. To gain a holistic perspective, I used the literature review, the interview findings and information gathered from UNISA's internal administrative records to gain deeper understanding of the phenomena being studied, namely how the SRM system is used to support distance students administratively. Participants were interviewed with the intention to explore, understand and gather information on how they use and have experienced the SRM system while supporting UNISA distance students through the management of the student enquiry processes. The information gathered during field work provided me with a complete picture of how UNISA's TIS integrated with the SRM automated system's programmed options to provide student support.

Gaps identified from research findings were carefully and systematically analysed with a view to table all challenges experienced by participants with regard to student support. I then carefully drew from the literature review the SRM system's theories and best practices employed in other institutions with the intention of addressing gaps identified in UNISA's student support services. Data collected from the field work was used to closely identify student support gaps. For triangulation, the related literature review and data findings were thus incorporated with a view to quantify the findings that were used to develop the model that was proposed to integrate the SRM system with the TIS and its processes that were used for student support within UNISA as an ODeL institution. It is believed that this approach will enhance the validity of the study. Triangulation is seen as way to assess the validity through information convergence from different sources. In social research, the term "triangulation" refers to observing research problems from at least two different points of view (Schründer-Lenzen, 1997). Patton (1999) identified four types of triangulations: (a) theory triangulation, (b) source triangulation, (c) method triangulation and (d) investigator triangulation.

The concept of triangulation has great potential for integrating qualitative and quantitative approaches and allows the various functions of integrating methodologies in research to be described better. Triangulation can be understood in different ways depending on the research questions, research design and results by examining the results from one point of view or adding different points of view to summarise the purpose of the study (Schründer-Lenzen, 1997).

4.12.1 Triangulation as a validation strategy

To answer the question about the experiences of call-centre consultants when using the SRM system, in-depth interviews were conducted. This qualitative data source allows for a rich exploration of their experiences and insights, providing a comprehensive understanding of the issues they face. To understand how the SRM and TIS support call-centre consultants when assisting ODeL students, both interviews and document analysis was used. This multi-method approach allows for the cross-referencing of information obtained from interviews with documented practices and procedures.

To address the question about the effective integration of the SRM system with TIS and call routing processes, document analysis and case study investigations were employed. By examining documents and analysing real-life case studies, a holistic view of the system integration was developed. Triangulation in this study ensures data validity and reliability. Multiple data sources and methods were employed, enhancing the robustness of the research findings and contributing to a more comprehensive understanding of the SRM system's role in managing telephonic student enquiries at UNISA.

4.13 Ethical considerations

Neuman (2006:129) defines ethics as that which is or is not legitimate to do, or what moral research procedure engages. Research studies not only require expertise and diligence but also honesty and integrity (Creswell, 2013). Before collecting data for the study, the ethical issues involved were considered in order to recognise and protect the rights of participants. The following ethical considerations were adhered to during data generation:

- *The right to privacy, anonymity and confidentiality:* All data collected from participants were held in confidence and used for research aims only. Participants were assured of their right to remain anonymous, the rights to privacy and the non-use of personal identities through the non-disclosure of names on questionnaire or research reports, and by detaching the written consent form from the questionnaire. The right of participants to privacy was observed throughout the research process.
- *Benefits:* The aim and benefits of the study were clearly explained to participants before they answered the questions. My full contact details were provided to participants for enquiries, follow-ups with regard to the results and the findings of the study.

4.14 Conclusion

The methodology employed in this study has been carefully designed to provide a robust framework for data generation and analysis, facilitating a comprehensive investigation into the integration of the SRM system and the TIS to support UNISA

distance students. The utilisation of structured interviews as the primary data generation method allowed for a focused exploration of the experiences and perspectives of the call-centre consultants who play a crucial role in the student support process. The interviews were conducted face-to-face, a choice informed by the intention to mitigate potential interruptions caused by ongoing challenges such as frequent load shedding in South Africa. This approach ensured that the participants' insights were captured with depth and nuance, contributing to the richness of the data collected.

CHAPTER 5

DATA ANALYSIS

5.1 Introduction

This chapter delineates the intricacies of the procedures and methodologies harnessed for the collection and subsequent analysis of qualitative data. The research ambit encompasses the comprehensive exploration of data acquired from proficient participants adept in the daily utilisation of the SRM system to engage with, address and redirect student enquiries to various support departments or back-office entities within the intricate milieu of UNISA. This support mechanism, as per the taxonomy outlined by Tait (2000), encapsulates the crucial realm of administrative support tailored for students enrolled in distance education programmes.

By delving into the nature of human-technology interaction and its impact on educational processes, the study aims to uncover deeper insights into the ontological aspects of these phenomena. This philosophical inquiry is essential for understanding the complex dynamics between human agency and technological mediation, which can inform future developments and strategies in ODeL institutions. The multifaceted data generation facet, the study under scrutiny adopted a judicious approach of soliciting first-hand experiential insights from seasoned study participants. The choice of participants was driven by their intricate involvement with the SRM system, rendering them adept repositories of knowledge on its functioning and the intricate orchestration of student enquiries within the UNISA administrative landscape. The SRM system, as a conduit for engagement and assistance, assumes paramount importance in ODeL institutions and warrants a thorough investigation of its operational dynamics.

Through the systematic exploration of the statistical indicators, this section sets the stage for a data-driven analysis that elucidates the practical implications of the integrated support system. By contextualising the research objectives within the realm of real-world call-centre operations, this analysis strives to provide valuable insights that can inform strategic decisions aimed at enhancing the overall student experience and promoting successful distance learning at UNISA.

5.2 Call centre data analysis

To examine the extent to which the SRM system and the TIS is used. The information analysed included the UNISA call-centre telephone MIS reports that gave the total number of students' calls received, responded to and abandoned. I closely analysed these reports to bring the information into context with existing theory to reveal how it corroborates existing knowledge or brings new understanding to the body of knowledge (UNISA, 2012; 2014; 2015; 2017; 2018; 2021). I looked for "emerging patterns, concepts and explanations in the data to interpret analysed data" (Creswell, 2013). The aim of analysing the call-centre reports was to understand SRM best practice, the TIS, the processes and call flow and/or call routing, and the role these played in assisting distance students. This information included: (a) the number of calls received from UNISA students, (b) the number of student calls that were successfully responded to by call-centre consultants, (c) how a call was transferred to a relevant support department when a call-centre consultant could not respond to the student query due to its complexity, (d) why the SRM system could not assist the call-centre consultant to transfer the student to a desired destination quickly, and (e) what the patterns were and how the call flowed from the call centre to other support departments for resolution.

In addition, the total number of abandoned student calls were analysed to identify information gaps and processes in the call centre SRM system, the Avaya IP Solution 6.3 Version TIS and the process call flow (UNISA, 2023). Abandoned calls are calls made by UNISA students that never arrived or went unanswered until the student dropped the call. The UNISA 2030 Revised Strategic Plan (UNISA, 2022) was also interrogated with a view to seeing if the SRM system is fulfilling its purpose of supporting UNISA distance students.

It was imperative to delve into the realm of call-centre statistical data. This requires a detailed analysis of critical call-centre metrics, which will shed light on the dynamics of incoming calls, trends over the years, abandoned student calls and the percentage of these abandoned calls. Through an examination of these quantitative data points, this section aims to provide valuable insights that align with the research objectives, ultimately contributing to a comprehensive evaluation of the integrated support system's efficacy in addressing the needs of distance-learning students at UNISA. I

accessed the call-centre statistical data to assess how student calls are managed using the SRM system. Call Centre telephone statistics were used to give context to the qualitative data used and that was gathered through the interviews.

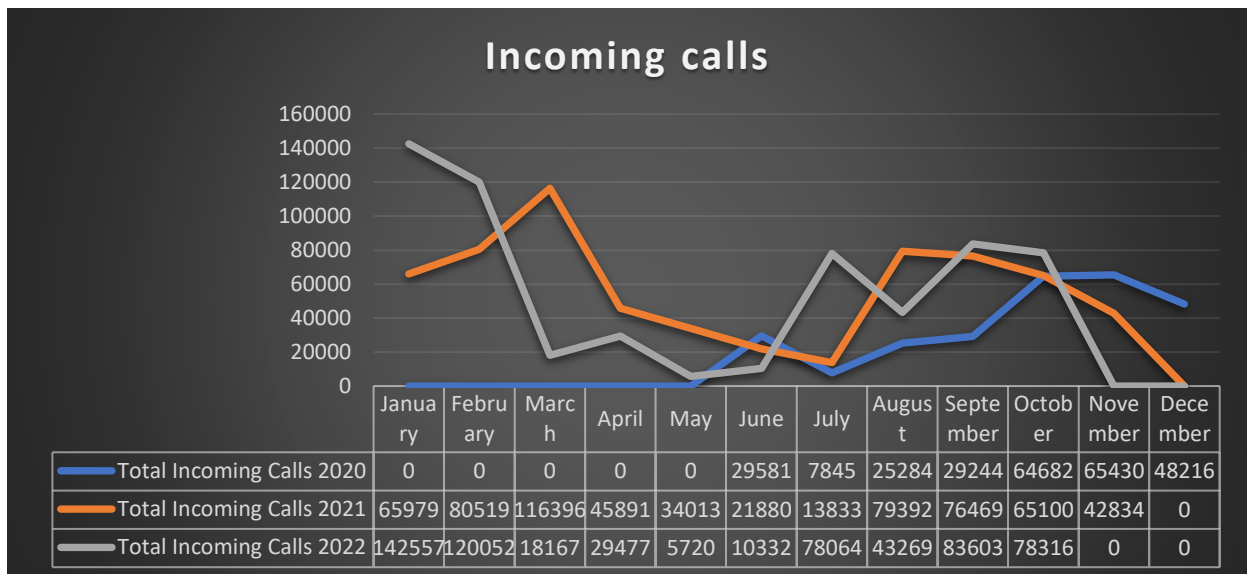


Figure 5.1: Call centre incoming calls

Figure 5.1 shows the total number of incoming calls received by the call centre. There are no statistics for the months of January to May 2020, which was the year when the COVID-19 hard lockdown was announced across the world and most of UNISA's activities were suspended. The lockdown challenged most HEIs to revisit the technologies used by them to provide services. The question arises whether the absence of five months of 2020 call-centre telephone statistics indicate a gap of how the SRM system was implemented. This could be a topic for future research.

During the lockdown, when call-centre consultants were working from home, UNISA's ICT department supplied them with programmed laptops. Prior to COVID-19, consultants only used desktop computers. At the same time, the telephone system was integrated with the SRM system to enable consultants to work remotely. However, student support services' employees reported that there were connection difficulties with the TIS system while consultants were working remotely.

The recording of calls only started in June 2020, when 29 581 calls were recorded by the system. The peak of calls in that years was in October and November. The call

total dropped again in December, which may have been the result of UNISA being in recess that month. The total number of calls received in 2020 amounted to 270 282, which is concerning in the light of the number of registered students that rely on the telephone system to get their administrative enquiries resolved.

5.2.1 Comparison of incoming calls per year

Fewer calls were received by the call centre in 2022 than in 2021 with 609 557 calls received in 2022 compared to 642 306 in 2021. The year 2020 was not analysed in details as telephone statistics were not recorded fully (Table 5.1). The high number of student calls received by the call centre in 2021 may have been due to the fact that UNISA’s peak registration period for undergraduates and post-graduates students occurs from January to March, as well as follow-up student enquiries during and after the COVID-19 lockdown.

Table 5.1: Comparison of incoming calls between 2020 and 2022

2020 incoming calls (January to December)	2021 incoming calls (January to December)	2022 incoming calls (January to December)
270 282 during the COVID-19 lockdown	642 306	609 557
	Difference between 2020 and 2021 (642 306 minus 270 282 = 372 024) 372 024 more student calls were received in 2021 than in 2020 during the COVID-19 lockdown	Difference between 2020 and 2022 (609 557 minus 270 282 = 339 275) 339 275 more student calls were received in 2022 than in 2020.

Looking at the high number of student calls received in 2021 just after COVID-19, it is clear that the SRM system integrated with TIS for student enquiries and/or student support was put on trial during that period. Considering the total number of student calls received in 2020, 2021 and 2022 in comparison to the fact that UNISA has around 400 000 registered students, must result in a great concern about student support services in UNISA’s administrative environment.

Figure 5.1 gives a clear picture of incoming student calls to the call centre for the years 2020 to 2022. In terms of administrative student support services, 2021 started with 65 979 calls received in January, followed by 80 519 calls in February and then recorded the highest calls received by the call centre in that year at 116 396 in March during UNISA peak registration period. Between February and March calls rose by 35 877 (116 396 minus 80 519 = 35 877). This is a concerning increase in calls for March. Could this rise of student calls in the month when UNISA registration closed be an indication of students' desperation to get their administration enquiries resolved before the registration period closed? Following closure of the registration period, the number of incoming calls started to drop. The lowest number of calls received was in July when the call total was just 1 383. Based on the above, (Figure 5.1) students seem to be relying on UNISA telephone services to get their registration enquiries resolved prior commencement of academic activities.

In the year 2022, the highest number of calls received by the call centre was 142 557 in January, when the university started with registration, followed by a lower 120 052 calls in February and even lower 18 167 calls in March. The lowest monthly call total received was in May with 5 720 calls. It is interesting that in January of 2022, student calls were higher than for the same month in 2021. Did UNISA students call the university earlier to avoid delays in their enquiries to be resolved before the academic year commenced?

When comparing the years 2021 and 2022, we note that the highest number of student calls received during the registration period was 142 557 in January 2022, followed by 116 396 calls in March 2021. More calls were received in January 2022 compared to March 2021 at 26 161 calls (142 557 minus 116 396 = 26 161 calls). The lowest number of student calls, 5 720, were recorded in May 2022 after registration closed, followed by 13 833 in July 2021. The high number of students calls recorded for year 2021 and 2022 prove that UNISA distance students still rely on the SRM system integrated with TIS to get their enquiries resolved. As there were no incoming calls recorded for the months of December 2021, November 2022 and December 2022, these months were excluded from the telephone trend analysis. Based on the trend analysis above, it is evident that there should be strong interaction and collaboration between the call centre and the registration directorate in order for student enquiries to be resolved on time and successfully. It appears that an increasing number of

students are encountering difficulties when trying to access UNISA for the resolution of their administrative enquiries via telephone.

5.2.2 Unattended/abandoned student calls

Figure 5.2 indicates the number of students who accessed UNISA telephone lines provided for student support services but could not get through to call-centre consultants for support services. In 2021 the number of dropped calls increased from 47 250 in January to 57 980 in February. The number of abandoned calls in March 2021 was around 100 000 calls. The number of abandoned calls totalled 111 339 in January 2022, dropped to 91 433 in February and to 14 090 in March 2022. The abandoned peak calls occurred from July to October 2022. As there were no call records for the months of November and December 2022 analysis could not be conducted for those months.

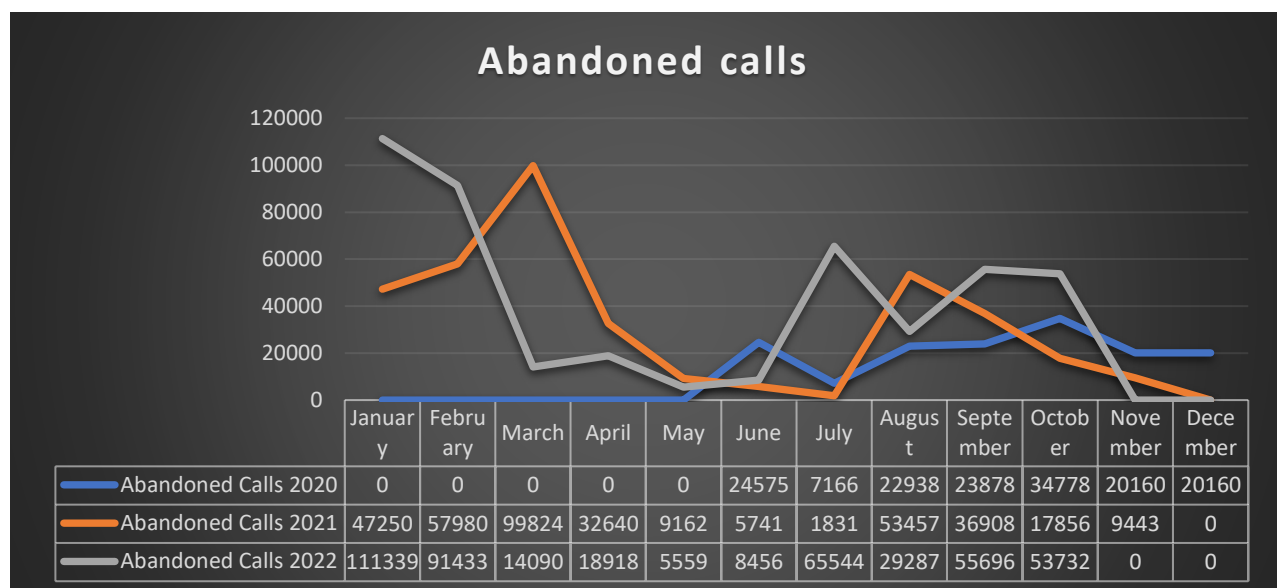


Figure 5.2: Abandoned student calls

The reasons for the high abandoned call rate were not provided to me, except to say that call-centre consultants convert student calls to email format to escalate complex enquiries to support departments for further analysis and resolution/response. It is a common knowledge that transferring a call takes few seconds (the press of a transfer button) while writing an email that takes longer. Student calls waiting in the SRM system telephone queue for assistance by the call centre could be dropped while consultants are still converting student calls to email format for escalation. This might

be one of the reasons for the high abandoned student call rate. In 2020 no emails recorded until May but in the following month 7 230 emails were received. The highest number of emails received in 2020 was 69 048 in November and the lowest number was 3 378 in July. In 2021, consultants received a total of 351 261 emails (Figure 5.3).

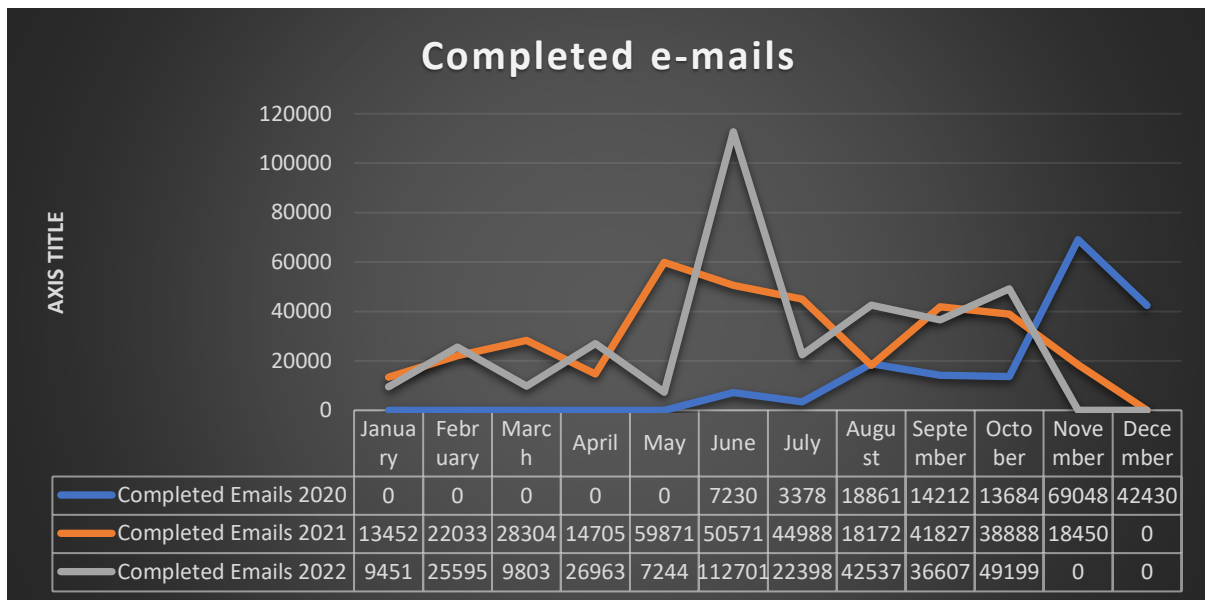


Figure 5.3: Email trends

The highest number of 38 888 arrived in October and the lowest number of 13 452 in January. In 2022, a year later, a total of 342 498 emails were received at the call-centre during the period January to October, with November and December figures not being recorded. The highest number of emails received was 112 701 in June and the lowest 9 451 in January 2022.

There were no abandoned call records for January to May 2020 during the start of the COVID-19 pandemic. For June 2020, we notice a concerning high number of calls that were abandoned. A total of 24 575 calls were dropped in that month. The number of dropped calls improved to 7 166 in the following month, while in August a shockingly high number of 22 938 dropped/abandoned calls was recorded. The difference between the number of abandoned calls from July to August 2020 was 15 772 (22 938 minus 7166 = 15 772).

5.2.3 Percentage of abandoned call-centre calls

The number of abandoned calls follow a similar pattern to the total number of incoming calls received by the call-centre (Figure 5.4). It was worth analysing the number of abandoned calls as the proportion of total incoming calls received.

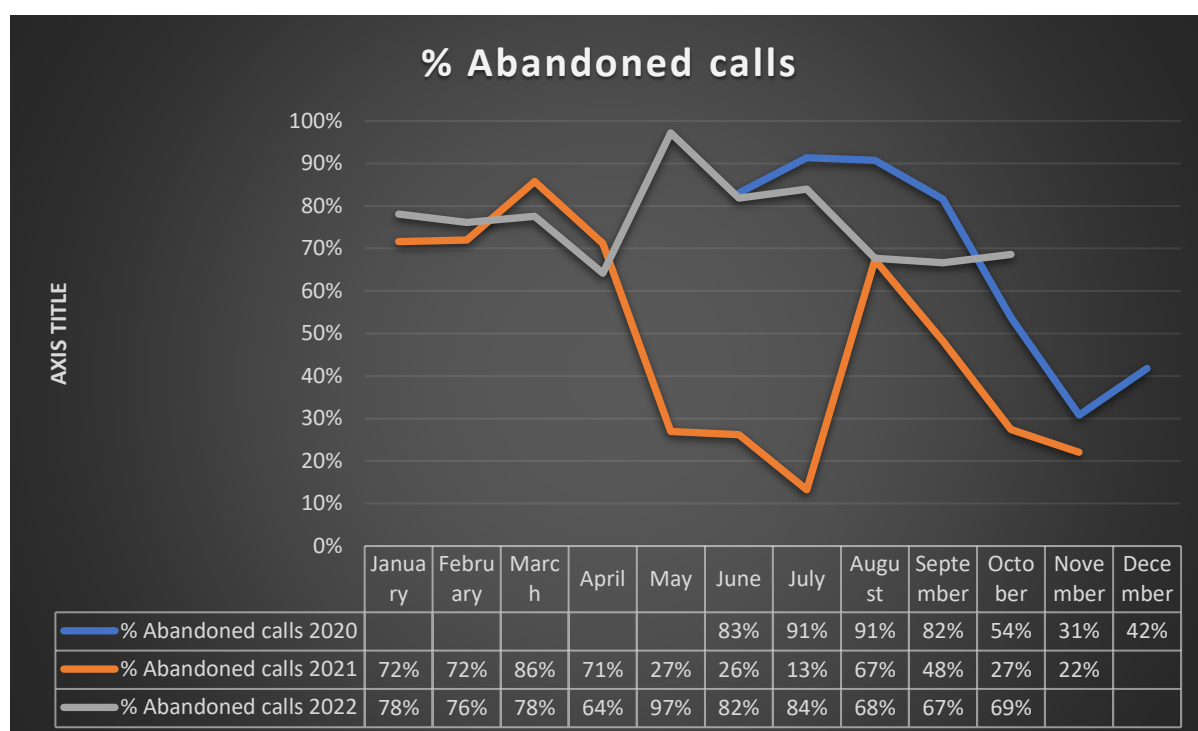


Figure 5:4: Percentage of abandoned student calls

The percentage of abandoned calls is calculated as the number of abandoned calls to the total number of incoming calls. Abandoned calls ranged between 31 per cent and 91 per cent in 2020, with the highest percentage being recorded in July and August and the lowest percentage in November. This means that in July and August the number of calls being processed was lower than the number being abandoned. This was the case, in fact, for the vast majority of months in 2020.

In 2021, the worryingly high percentage of abandoned calls lay between 72 per cent and 87 per cent during the January to March registration period. The percentage was 72 per cent in each of January and February, but 86 per cent in March when registration was about to close. The lowest abandoned call rate was 13 per cent in July 2021. For the year 2022, the abandoned call rate was 78 per cent in January, followed by 76 per cent in February and 78 per cent in March. However, there was a shocking abandoned call-rate spike of 97 per cent, the highest rate in the year. In May 2022, a month after

registration had closed. The lowest abandoned call rate recorded in 2022 was 64 percent in April. What might have triggered the high abandoned call rate a month after registration had closed? Could it be that UNISA distance students were still making follow-ups on their unresolved enquiries after registration had closed? This question could be explored further in the future research.

Comparing the years 2021 and 2022, we notice that the highest abandoned call rate for 2021 was 86 per cent in March and 97 per cent in May 2022, making 2022 the worst year for telephonic student support. The lowest abandoned call rate in those years was 13 per cent in July 2021 and 67 per cent in September in 2022. The call totals reflected by the figures above clearly indicate that distance students depend on administrative support to plan their academic activities. The TIS is obviously the preferred mode of communication at UNISA. For this reason, the high percentage of calls being abandoned by students is very concerning.

It must be noted that, during the field work for this research project, the telephone statistical record was not available on the system for 2019, the year in which the call centre was re-introduced at UNISA following its closure in July 2011. The telephone trends for the first five months of 2020 could thus not be analysed for this study, even though I had planned to compare how calls were managed by the call-centre prior to COVID-19.

5.2.4 Call trend results

The trend analysis has revealed that the highest number of calls are received by UNISA during the months of January to March and July to November each year. The same trend is reflected in the abandoned calls figures. Can this be an issue of capacity or is it an ineffective SRM system during the peak application and registration periods? It is further noted that there were a number of students who diverted to using the webchat communication platform to contact UNISA (Figure 5.5). Could this be the result of UNISA's inaccessibility on the SRM telephone information system?

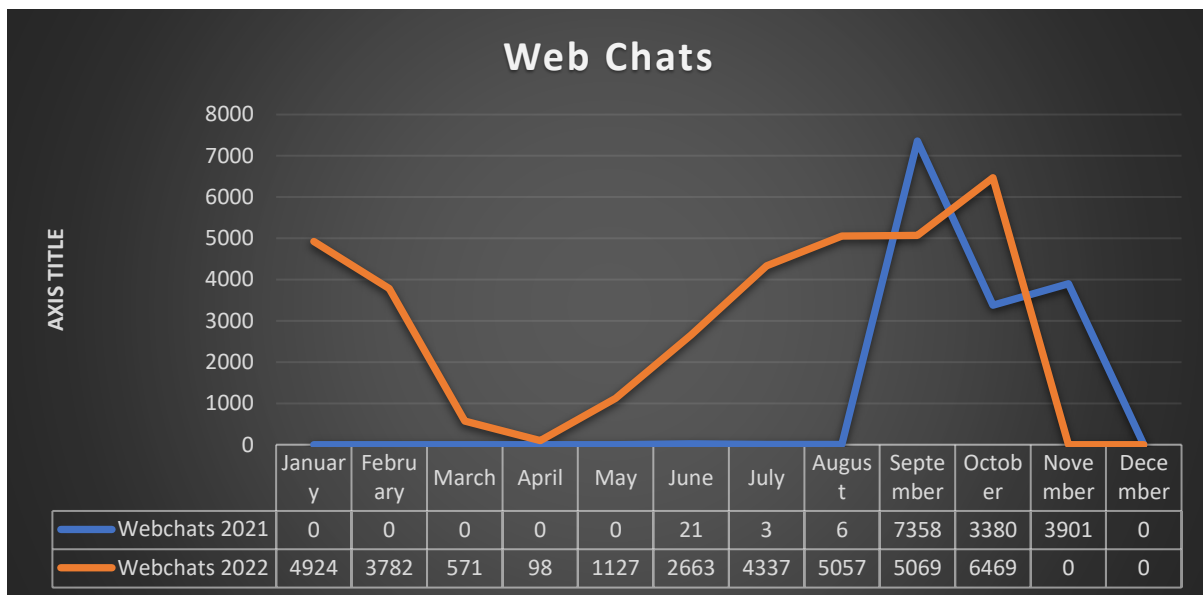


Figure 5.5: Webchat trends

Considering the increase of the number of webchats received in 2021 and 2022, the question that can be recommended for future research is: “Were call-centre consultants able to respond to student inquiries received via webchats?” The records indicate (Figure 5.5) that webchats started slowly with total of 21 chats in June, dropping to only three chats in July and six chats in August 2021. In September 2021, three months after chats had been introduced at UNISA’s call centre, chats ramped up to a high level during the months of September, October and November 2021, dropping to nought in December. In September 2021 there were 7 358 chats, in October 3 380 chats and in November 3 901. In 2022, during the start of registration, 4 924 chats were recorded in January, 3 782 in February and 571 in March. The highest number of chats processed in 2022 were 6 469 in October 2022, while April had the lowest number with 98 chats.

It is interesting to note that the highest number of student calls were received in 2021 before the webchat communication platform was introduced within the call centre. In 2022, the number of student enquiries by webchat increased from 14 669 in September to 34 097 in October, a notable difference of 19 428. This increase may have been caused by the high abandoned call rate of 67 per cent in September and 69 per cent in October of the same year. In fact, it seems that when consultants process student enquiries on webchats and by email because of SRM system challenges, a high abandoned call rate is experienced by the call centre. This issue

was raised by participant C, who mentioned that it does not help to add more communication platforms when there are still challenges with the SRM system.

The high number of student enquiries received by telephone at the call centre in 2021 and 2022 proves that distance students still prefer to contact the university by telephone, even though the UNISA introduced a webchat platform as another means of communication and challenges were experienced with the SRM integrated with a TIS system. Telephonic enquiries from January to November 2021 totalled 642 306. There was no record for December. Between January and October 2022, a total of 609 557 student calls were received. There were no records for November and December. Is the call reduction in 2022 the result of call-centre consultants focusing their attention on responding to enquiries received via webchat and converting student calls to email format? This question can be proposed for future research.

In 2021, the abandoned student call rate was low at 48 per cent in September and even lower at 27 per cent in October. However, there was a concerningly high 67 per cent of abandoned calls in September 2022 and a shocking 69 per cent in October. Participant D indicated that delays in the system owing to the generation of One-time Passwords (OTPs) resulted in a high abandoned call rate. Drawing from the aforesaid, call-centre consultants seem to be struggling to support UNISA's distance students effectively and efficiently, but also appear not to be able to bring a balance between using the call centre's communication platforms and systems. It must be acknowledged that ICT plays a pivotal role within ODeL institutions, as posited by Tait (2000), who maintains that ICT in distance education enables students access information. Therefore, revisiting the role of ICT in UNISA in support of the call centre is suggested as a topic for future research.

5.3 The analysis of data

To explore Call Centre consultants' experiences with the SRM system, interviews were analysed using thematic analysis. According to McMillan (2014), qualitative data analysis is a process of organising data into categories and identifying patterns and relationships among categories, then drawing conclusions from the collected data. Thematic analysis was selected as the analytical approach, aligning with the qualitative nature of the research and facilitating the identification of patterns, themes

and meanings within the interview data. The systematic organisation of the responses of the participants into themes enabled a comprehensive exploration of the research questions and facilitated the extraction of significant insights from the collected data. The rigorous application of thematic analysis allowed for a nuanced understanding of the challenges, perceptions and recommendations related to the integration of the SRM system and TIS for student support.

This chapter underscores the rigor and appropriateness of the chosen approach for this study. The combination of structured interviews with thematic analysis provides a deep and multifaceted understanding of the phenomenon under investigation. All the data were transcribed for thematic analysis. After viewing the codes, manual coding may be performed, if necessary. From the generated codes, categories (themes) and subcodes (subthemes) were created, followed by a visualisation of the data using diagrams to depict how the codes are distributed across the sample. In the last step, the analysis was summarised in a report. In this research study, data analysis was carried out manually by applying thematic analysis.

The chronological order is maintained by using a labelling method, which makes it easier to interpret the data during analysis. The qualitative and systematic analyses used in this study was supported by a thematic data analysis. According to Maguire and Delahunt (2017), thematic analysis is the process where a researcher identifies patterns and themes inside qualitative data. In thematic analysis, the researcher usually gives themes because they do not “emerge” from the data (Braun & Clarke, 2006). In addition, thematic analysis holistically awards a researcher a way to “summarise or represent” qualitative data. Braun and Clarke (2006) have provided a useful six-phase framework for conducting thematic analysis. The phases unfold as follows:

- Step one: the researcher becomes familiar with the data.
- Step two: the researcher generates the initial codes.
- Step three: the researcher searches for themes.
- Step four: the researcher reviews the themes.
- Step five: the researcher defines the themes.
- Step six: the researcher writes up the research.

All data collected during the interviews, all notes taken throughout the interviews and all secondary data from UNISA's internal administrative reports on student support, UNISA's Strategic Plan (UNISA, 2021) and other ODeL documents with information relevant to the study was processed and coded.

5.3.1 Presentation of findings: semi-structured interviews

Although all ten were interviewed, the study reached its saturation point with participant E, even though participants F and G were added. Data saturation is a recognised and accepted "methodological standard", according to Saunders, Sim, Kingstone, Baker, Waterfield, Bartlam, Burroughs and Jinks (2018). Saturation is the borderline position where a researcher reaches a conclusion to stop sampling as no new data is being found and I was confident that the properties of the categories can be developed from existing data. Figure 5.6 shows the time taken to conclude the six-question interview by selected participants.

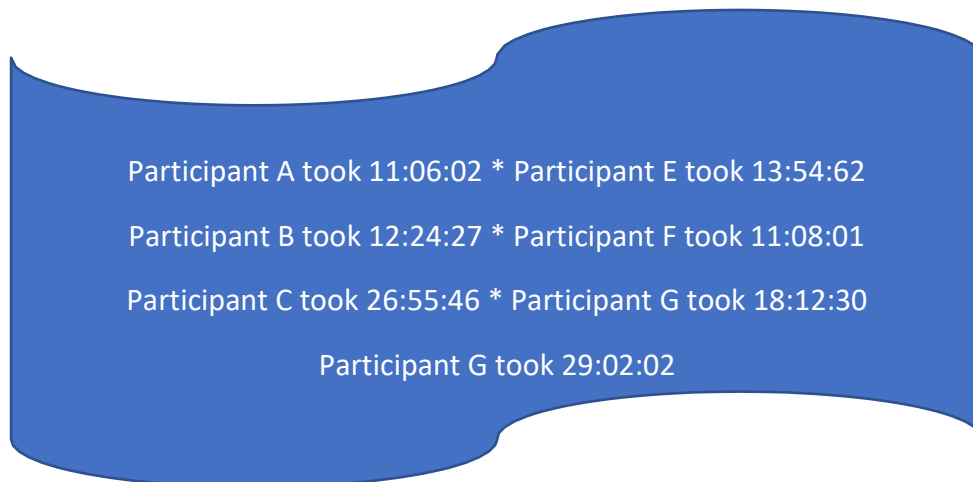


Figure 5.6: Interview time by selected participants

The average time taken to interview each participant was 18 minutes and three seconds, which was within the estimated time of 30 minutes. Data emanating from the interviews was not analysed for the last three participants H to J (Otmar, Kotowicz, Nicholson & Pasco, 2011). Following the completion of face-to-face interviews, I meticulously reviewed and revisited the interview notes, transforming them into comprehensive sentences and coherent textual narratives. Data analysis was conducted in tandem with the data generation process, a strategic measure to

mitigate the risk of data inundation being impeded thorough analysis (Lacey & Luff, 2001). This methodological approach sought to strike a balance between data generation and analysis, preventing an overwhelming volume of data from hampering the analytical process. I repeatedly perused the interview notes, closely examined the audio recordings of the interviews and scrutinised the interview transcripts multiple times. This practice is in line with Griffie's methodology (2005:36) and enhances my familiarity with the collected data.

Step 1: Becoming familiar with the data

It is recommended that the data analyst immerses herself in the data with a view to getting a sense of understanding the study data by reading and rereading (Polit & Beck, 2010). The electronic recorded interviews were thus revisited and transcribed into a hard-cover book to enable me to conduct analysis (Braun & Clarke, 2006). According to Lapadat and Lindsay (1999), at the time a researcher is familiarising herself with data, meanings are created, rather than the focus only being on writing what was spoken by participants. Therefore, I carefully listened to each interview while transcribing what participants had said during the interviews. This gave me the opportunity to internalise all responses and/or data prior to generating codes. Each word was transcribed verbatim.

Braun and Clarke (2006) consider that the time the researcher spends transcribing data is crucial as it informs the early stage of analysis and that it provides the researcher with insightful information that assists in the phase of generating initial codes. By transcribing data during the first phase, I get an in-depth understanding of data across the study.

5.3.1.1 Transcribing the field notes

The verbatim transcription of the participants' responses appears in Appendix 11. I generated an initial list of ideas contained in the data and identified what is of interest (Braun & Clarke, 2006). Although the process of manually transcribing data might be time consuming and demanding, it is a stimulating journey worth travelling during the research study. The verbatim account of the raw interview data for participants A to G depicts how spoken texts were transcribed into written texts.

The hard copy text, electronic or soft copies are securely stored, with access restricted to me. Additionally, the USB, hard drive and hard copy texts are safeguarded in a protected location and their access is controlled by a password known exclusively to me.

Step 2: Generating initial codes

I submerged myself in the data text transcribed under each of the six questions, then identified codes by using a highlighter (Braun & Clarke, 2006). This assisted in reducing the data into small parts of meaning (Maguire & Delahunt, 2017). Three different colours were used to identify responses from the seven participants in order to identify important meanings. Participants' responses on the experiences they had while using the SRM system were marked in blue. Participants' challenges encountered while using the SRM system were highlighted in orange. Suggestions to improve student support were highlighted grey. According to Vaismoradi *et al.* (2016:104), coding in qualitative research involves the reduction of raw data to that which is relevant to the research question. This takes me to "high-level insights" for the development of the theme.

Tables 5.2 and 5.3 highlight the information that is useful and relevant to the study at hand.

Table 5.2: Coded Interview Text 1 (Participants A – G)

<p>Interviewer: What are your experiences with the use of the SRM system?</p>
<p>Participant A: <i>My experience with the SRM system is, it was supposed to help students to get assistance, actually us, call-centre consultants to assist students with immediate effect because the students call the university and sometimes they do not get help. The system was supposed to help us, call-centre consultants, to resolve student enquiries within 48 hours as the university stipulates, that's what the system was supposed to do.</i></p>
<p>Participant B: <i>The SRM system at UNISA is not enough. Students lack information. There is no interaction with other departments. Example: all-centre consultants will only hear about the university's information from the students when they call the call centre – this shows to me there is no relationship between the call centre and other departments. UNISA students do not get full information, however, when they call the call centre, consultants also have no</i></p>

information on some of the changes within UNISA.

Participant C: My understanding with SRM system is that it is a software solution. It is a collaboration between the students, UNISA management and the contact centre. The SRM system stores data. Example: the communication between the student and the contact centre.

Participant D: I can say the SRM system is not user friendly especially to students. The students will call in order to speak to exams or registration but could not get hold of those departments. Students' calls will continuously ring without an answer until the student is redirected to the call centre. Unfortunately, as call-centre consultants we can only view on the student system, we cannot amend anything. Students need to send an email to the call centre, then we escalate the complex query to the relevant department for assistance. Unfortunately, students do not get feedback on time due to the high volume of calls and e-mails.

Participant E: My experience using SRM system was not a good one. When they introduce SRM system we thought it is the system that will help us resolve all student enquiries. In the beginning, we were given eight to nine options on the SRM system AVAYA telephone for student support – option zero was for the call centre. However, all options were not working except those zero for option, which is the call centre. Therefore, we end up receiving calls for all departments. When we try to get assistance from other departments on complex student enquiries, we are not winning. So, my experience is a bad one because there is no support from other departments.

Participant F: What I came across is that, amhhhh, the options on the telephone system don't go where the queries are supposed to go. For instance, if you select a specific number for registration or application, it still comes back to the contact centre. There are no warm bodies on the other side to resolve student meaning. Those options that are there, yaa, it still comes back to the contact centre.

Participant G: I have been exposed to the system since 2015, so it will be from then until now, which will be seven years. My experience with the system till to date, I do not understand why the university procured it, because I do not see what is currently edifying to our processes within the contact centre. The only thing that it does is that it has been designed to have a couple of options on it. For example, you have option that says application, registration, MyUNISA, MyLife, these options are meant to guide students to be able to select where they want their calls to be routed to, which is dependent on their enquiry. If it is an application enquiry, they will select application. So why do I say I do not see the use of the options? It is because on these options, the options give an impression to the caller that when you select application for

an example, or registration, you are going to be directed to application department or registration department, which is not the case. It is directing the students still to contact centre, where we are working, where there's no specialisation, in terms of knowledge and processes, and system functionalities that would be expected from one who is working at application department. So once that call is routed, then, if we cannot assist, we have to now escalate the query not even by call because those support departments do not take calls, so we actually have to escalate that, or convert that query into an email form, by emailing that query, but it is first escalated within the contact centre, who then, when they receive it, if they cannot resolve it, then that is when they will escalate it.

Now, my problem with that process is that it affects when the student query is going to be responded to, because I feel the query moves around the contact centre first, whereas it was established from the get-go that it is a complex enquiry that need the relevant people from relevant department who have the relevant skills and systems to be able to assist the student immediately. The other problem that I have with that is that gives the students the impression that whoever is going to answer is skilled and has got the functionality to it close the query and this create a problem wherein we are dealing with angry students who will then say I clicked an application, what do you mean you are not in application? Why can't you solve my query? Now we have to waste time conversing with that student explaining, no, you are still at contact centre, then I will escalate your enquiry.

The other problem that I find with that process is, as SCSC we do not have Service Level Agreement, at least one that is communicated or we as staff know about, so, as a result, the enquiries that are escalated, they are either escalated to the general inboxes of the colleges or you find that at times some consultants or acting supervisors have got relationships in a sense that they have friends who work in a particular department who can take their call and then that person will assist, and that is outside SCSC formal processes ... and then assist them to assist that student or who they can send an email to. It just comes out of someone's heavy heart to say, this is a serious issue, if it is not resolved, the student is going to lose a whole year of studies, so let me use my friend who works in that department, who can be able to assist me. So that has been my experience with the SRM system because outside of the voice prompt, I don't see what it is edifying to the university because that is what I feel it was introduced through the system.

Table 5.3: Coded Interview Text 2

<p>Interviewer: Have you use the SRM system in other universities? If yes, how was it used?</p>
<p>Participant A: <i>No, I am using it for the first time here at UNISA.</i></p>
<p>Participant B: <i>No, I started using SRM system at UNISA. When I look at it, the SRM system is good and is helping.</i></p>
<p>Participant C: <i>No, I did not use SRM before.</i></p>
<p>Participant D: <i>No, I am using SRM system for the first time at UNISA.</i></p>
<p>Participant E: <i>No, only at UNISA. My first experience using SRM system at UNISA.</i></p>
<p>Participant F: <i>No, it is my first time at UNISA.</i></p>
<p>Participant G: <i>No, I haven't, my first encounter was when I was working here at UNISA.</i></p>

Step 3: Searching for themes

Coding took place in Step 2, where I carefully went through the transcript of the interviews. The potentially interesting responses indicating the participants' challenges or that answered the main research question with phrases and sentences that matched the codes were highlighted using different colours. During the coding process, I examined the codes and most of them fitted together into one theme (Maguire & Delahunt, 2017:3356).

Several codes that related to the technical challenges of the SRM system were identified. In addition, the participants' experiences with the SRM system were also captured. I collated these into an initial theme called "inefficient call routing". More themes were also created manually from coded data. Braun and Clarke (2020) have reiterated that in a reflexive thematic analysis, codes are "conceptualised" by the researcher to create initial themes. Hence, I looked at the codes she created, identified patterns, grouped those that are similar and then came up with themes. Table 5.4 illustrates how detailed codes were assigned from the data analysis highlighted in Step 2.

Table 5.4: Participants' challenges with the use of the system and their support of distance students

Interview extract	Codes	Themes
<ul style="list-style-type: none"> • Call options that are frustrating students. • All options were not working except option zero, which is the call-centre option. • Options do not go where they are supposed to go. • Options do not take them there. • Selected option 1 for application and registration takes the student to option zero, which is the call centre. • Options ring continuously without an answer until the call is redirected to the call centre. • It still come back to the call centre. • It keeps ringing at all departments until the call goes through to the contact centre. • Until it was re-directed to call centre 	<p style="text-align: center;"><u>Inefficient call-flow routing</u></p> <ul style="list-style-type: none"> • Options programmed on the SRM system frustrate the students. • All options on the SRM system do not work except for option zero. • Selected options on the SRM system do not route the caller where they are supposed to go. • Options on the system do not route the students to support departments. • Option 1 for applications and registration support route the students back to the call centre. • Telephone calls ring continuously without an answer until re-directed to the call centre. • Unanswered student calls are re-routed to the call centre. • Telephone calls keeps ringing through different support departments until it is re-routed to the contact centre. • Call was not answered until it was re-directed to the call centre. 	<p style="text-align: center;">Inefficient call routing</p>
<ul style="list-style-type: none"> • Options must be scrapped. • Options are not working. • It is just sitting there dormant without it being optimally utilised. • I do not understand why the university procured it. • It is a wasteful expenditure. 	<p style="text-align: center;"><u>Inadequate system</u></p> <ul style="list-style-type: none"> • Options on the SRM system must be deactivated. • Options programmed on the SRM system are not functional. • The SRM system is not optimally utilised. • I do not understand why the university procured the system. • Options on the SRM systems are not linked for student support. • Wasteful expenditure. 	<p style="text-align: center;">System optimisation</p>

<ul style="list-style-type: none"> • I do not see its purpose. • Outside the voice prompt, I do not see what is edifying to the university. • I am not able to trace the student call for call-back. • Recording. • The line gets disconnected. 	<ul style="list-style-type: none"> • I do not see the use of the SRM system. • Except for the voice prompt in the SRM system, I do not see how the system is benefiting the university. • I am not able to trace student calls for call-back. • System inability to record students' calls. • Student calls get disconnected. 	
<ul style="list-style-type: none"> • Network problem. • Wait for an hour before an OTP is generated. • High number of calls abandoned by students. • It is not enough. 	<p><u>Technical issues</u></p> <ul style="list-style-type: none"> • Network challenge. • Consultants wait for an hour before the OTP is generated. • High number of abandoned student calls. • System inadequacy. 	<p>Insufficient support from ICT</p>
<ul style="list-style-type: none"> • They do not get help. • Students lack information. • Consultants also lack information. • It is not user-friendly. • No interaction with departments. • No relationship between call centre and other departments. • We do not have relationship with the back-office. • Additional platforms are not solving the problems. • Not having a Service Level Agreement. 	<p><u>Inadequate information</u></p> <ul style="list-style-type: none"> • Students do not get help. • Students lack information. • Not user friendly. • Call-centre consultants lack information. • There is no interaction with support departments. • There is no working relationship between the call centre and support departments. • Call centre does not have working relationship with back-office. • Additional communication platforms are not solving student problems. • Call centre does not have Service Level Agreements with support departments for resolution of student enquiries. 	<p>Inadequate information sharing</p>

<ul style="list-style-type: none"> • Contact centre cannot work in a silo. • There is no support. • Departments are not answering. • Problem is people who are supposed to answer the calls. • Call centre will have to be linked. • They are not linked. • Communication between the students and the contact centre. • It is collaboration between the students. 	<p><u>Lack of support from other departments</u></p> <ul style="list-style-type: none"> • Call centre should not work in isolation from support departments. • Call centre does not have support. • Support departments do not answer calls. • The problem is officials who are delegated to answer students' calls. • Communication. • Collaboration. <p><u>Unlinked options</u></p> <ul style="list-style-type: none"> • Call centre is not linked with support departments for telephone student support services. 	<p>Collaboration with departments</p>
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<ul style="list-style-type: none"> • Escalate the complex query to the relevant department. • On complex student enquiries, we are not winning. • Escalate to general inboxes of the colleges. • Students do not get feedback on time. • We cannot assist. • Not a good one. • We can only view. • Cannot amend anything. • It supposed to help the students. • To resolve student enquiries. 	<p><u>Inadequate escalation processes</u></p> <ul style="list-style-type: none"> • Escalation of complex student query to the relevant department. • On complex student enquiries, the call centre consultants are not managing. • Student complex enquiries are escalated to general inboxes of the colleges. • Students do not get feedback on time for their escalated enquiries. • Consultants are not able to assist the students. • Bad experience. • Consultants can only view information on the system. • Consultants are not able to make changes on the system for resolution of student enquiries. <p><u>Efficiency of the SRM system</u></p> <ul style="list-style-type: none"> • The system is supposed to help the students. • The system is supposed to help consultants to resolve student enquiries. 	<p>Efficiency and effectiveness of complex query handling</p>
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<ul style="list-style-type: none"> • Convert the query into an email. • It is first escalated within the contact centre. • This process affects when the student query will be responded to. • The time it takes before the query is answered. • The query first moves around the contact centre. • Calls cannot be answered by the call centre because of its complexity. 	<p><u>Call transfer processes</u></p> <ul style="list-style-type: none"> • Telephone student query is converted into an email for escalation to support departments instead of transferring the call. • The query is first escalated within the contact centre. • The contact centre's internal process affects the time it takes to resolve the student query. • The student query first rotates around the contact centre. • The call centre is not able to resolve complex student enquiries. 	<p>Purpose and functionality of the contact centre</p>
<ul style="list-style-type: none"> • We are led by people who do not have the skills set or knowledge that is required for the contact centre. • They do not have the knowledge or the necessary skill set. • There is poor management within the call centre. • We need the people with right skills to manage the call centre. • There is no specialisation. • Doing the same thing without any changes. • Many years later without any changes. 	<p><u>Poor management within the call centre</u></p> <ul style="list-style-type: none"> • We are led by officials without the skills set or the knowledge required to manage the contact centre. • Contact centre leaders do not have the knowledge or necessary skill set. • There is poor management within the call centre. • Call-centre consultants require leaders with the right skills to manage the call centre. • No specialisation. • Using the system, the same way without change. • There has not been any change in years. 	<p>Management skills</p>

<ul style="list-style-type: none"> • I am not sure if it is the one. • I do not remember receiving a proper training. • We did not receive the training. • I was not trained. • We were trained; I think it was five years ago. • No refresher training. • Give us continuous training like refresher training. • Using SRM for the first time at UNISA. • I started using SRM system at UNISA. • I did not use the SRM system prior to UNISA. • I am using the SRM system for the first time at UNISA. • I am only using it at UNISA. • It my first time to use the SRM system at UNISA. <ul style="list-style-type: none"> • Not a good one. • Is a bad one. • We are led by people who do not care. • Customer care. • Motivate workers. • Develop us 	<p style="text-align: center;"><u>Inadequate training</u></p> <ul style="list-style-type: none"> • I am not sure if I received the required training. • I do not remember receiving adequate training. • We were not provided with training. • I was not trained. • We were last trained five years ago. • There was no refresher training. • Give us continuous refresher training. <p style="text-align: center;"><u>No prior experience</u></p> <ul style="list-style-type: none"> • Using it for the first time. <p style="text-align: center;"><u>Lack of customer care</u></p> <ul style="list-style-type: none"> • Not a good one. • It is a bad one. • We are led by officials with no care. • Customer care. • Call centre consultants to be motivated. • Develop us. 	<p style="text-align: center;">Skillset and orientation to the system</p>
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<ul style="list-style-type: none"> • Collaboration between students. • Communication between students and the contact centre. 	<p style="text-align: center;"><u>Communication</u></p> <ul style="list-style-type: none"> • Collaboration. • Communication. 	<p style="text-align: center;">Interaction</p>
<ul style="list-style-type: none"> • One-point of contact. • First point of contact. • High priority. • Equivalent to academic support. • Invest in the contact centre as number one priority equivalent to academic. 	<p style="text-align: center;"><u>Ineffective contact centre services</u></p> <ul style="list-style-type: none"> • One-point of contact. • First point of contact. • High priority. • Call centre should be equivalent to academic support. • The university should invest in the contact centre as a number one priority equivalent to academic support. 	<p style="text-align: center;">First point of Contact</p>

Step 4: Reviewing the themes

Codes of the same nature were successfully identified and clustered together in Table 5.2. At the same time, as per Step 3, I identified possible themes from analysed and coded data as shown in Table 5.3. The themes created in the study were the result of “careful reading and re-reading of the data” (Rice & Ezzy, 1999:258). The clustered codes of Step 3 that speak together were then used to form one theme. I reduced the data and carefully examined themes of the same nature depicted across all data sets with the intention to consider unique themes from the participants’ interviews responses.

The standard used to reduce data had the intention of only merging themes that related to the research question to quantify this research study. All themes that did not meet the standard and those that were repeated were discarded during Step 4, bearing in mind the importance of keeping data sets that would strengthen the envisaged proposed conceptual model. Table 5.5 indicates how themes were created from codes from the previous step. Repeated codes were revised and merged to reduce their number.

Table 5.5: Revision and reduction of themes

Theme names	Challenges on student support services
<ul style="list-style-type: none"> • Inefficient call routing 	<ul style="list-style-type: none"> • The SRM system does not route students to selected options. • Options programmed on the SRM system keep students holding for a long time without an answer until the calls are rerouted to the call centre.
<ul style="list-style-type: none"> • System optimisation 	<ul style="list-style-type: none"> • The SRM system is not activated for recording students' calls for callback.
<ul style="list-style-type: none"> • Insufficient support from ICT 	<ul style="list-style-type: none"> • Calls get disconnected before a student's issue has been resolved. • Network challenges directly affect the call centre support services. • Long waiting time before the system generates an OTP for a call-centre consultant to access information to resolve student enquiries affects turnaround time on student support services. • The process of converting a student call into an email to escalate complex enquiries wastes time.
<ul style="list-style-type: none"> • Inadequate information sharing 	<ul style="list-style-type: none"> • The lack of a working relationship between the call centre and the support departments delays feedback on escalated complex student enquiries.
<ul style="list-style-type: none"> • Collaborations and interaction with departments 	<ul style="list-style-type: none"> • The lack of a Service Level Agreement between the call centre and support departments affects UNISA's specified 48-hour turnaround time set to resolve student enquiries.

<ul style="list-style-type: none"> • Efficiency and effectiveness of complex query handling 	<ul style="list-style-type: none"> • Although the inaccessibility of information does not affect students directly, it frustrates call-centre consultants when responding to student enquiries.
<ul style="list-style-type: none"> • Management skills 	<ul style="list-style-type: none"> • Lack of management skills affects the management of the call centre processes and operations. • Poor management has a direct negative impact on student support services.
<ul style="list-style-type: none"> • Skillset and orientation to the system 	<ul style="list-style-type: none"> • Lack of SRM training and refresher training results in call-centre consultants having limitations when providing support to UNISA distance students.
<ul style="list-style-type: none"> • First point of contact service • Purpose of the call centre 	<ul style="list-style-type: none"> • The call centre's lack of access to information from support departments frustrates UNISA distance students.

Step 5: Refining and naming the themes

In this step, I have carefully reviewed and revised the themes based on the perceived system challenges and experiences highlighted by the participants. The objective is to capture the expectations for adequate student support within the university's systems and processes. These revised themes aim to provide a clear and comprehensive understanding of the challenges faced by the study participants and the desired outcomes they expect of UNISA's student support services. By refining and naming these themes, we can now delve deeper into each area and identify specific actions and improvements that can be made to meet these expectations and enhance the overall student experience within ODeL institutions. Table 5.6 outlines the revised themes that emerged from the analysis, offering valuable insights into the expectations for adequate student support.

Table 5.6: Final themes

Final theme names	Expected support services for UNISA distance students
<ul style="list-style-type: none"> • Ineffective call routing • System optimisation 	<ul style="list-style-type: none"> • An effective call routing process to integrate the SRM system with the AVAYA TIS for the administration of distance student enquiries. • Options on the SRM system that route students to the relevant support departments where their enquiries are resolved quickly. • A streamlined SRM TIS for adequate student support services. • Trace functionality in the SRM system to enable call-centre consultants to call back students and access historic data. • Recording functionality of the SRM system for the effective administration of students' telephone enquiries.
<ul style="list-style-type: none"> • Insufficient support from ICT 	<ul style="list-style-type: none"> • A user-friendly system to enable call-centre consultants to effectively receive, respond to and transfer distance student enquiries.

<ul style="list-style-type: none"> • Inadequate information sharing • Collaborations and interactions with departments • Efficiency and effectiveness of complex queries handling 	<ul style="list-style-type: none"> • A working relationship between the call centre and support departments for the effective transfer of student calls. • Support departments to share new or updated student information with the call centre to enable the effective resolution of student enquiries. • A Service Level Agreement between the call centre and the support departments to regulate the timeous resolution of students' enquiries. • Call centre telephone lines linked to the support department telephone lines for effective and efficient support to distance students. • Clearly defined processes for the escalation of complex student enquiries from the call centre to support departments. • Call-centre consultants to be provided them with timeous feedback by support departments on escalated complex student enquiries. • Call-centre consultants to be given access to information to resolve students' enquiries within the university's set turnaround time.
<ul style="list-style-type: none"> • Management skills • Skillset and orientation to the system 	<p>Call centre consultants to be managed by managers who have the relevant skillset and knowledge to run the call centre effectively.</p> <ul style="list-style-type: none"> • Attention to be given to call-centre management and/or leaders for improved student support services. • The SRM system to be used optimally to benefit the university and its students. • Call-centre consultants to be provided with comprehensive and up-to-date SRM system training. • Consultants to be provided with refresher training to keep them relevant and effective in supporting distance students.
<ul style="list-style-type: none"> • First point of contact services 	<ul style="list-style-type: none"> • The call centre to be the first point of contact so that it can effectively receive, respond to and transfer telephonic student enquiries.

<ul style="list-style-type: none"> • Purpose of the contact centre 	<ul style="list-style-type: none"> • University management to prioritise the needs of the call centre to the same level of support given to academic departments. • Telephonic student enquiries to be attended to by support departments timeously. • A review of the call centre's internal processes so that student enquiries can be handled timeously.
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Step 6: Writing-up a report

Writing up a report refers to the process of documenting and presenting the findings, the analysis and the conclusions of a research study or investigation in a structured and comprehensive manner (Martinsuo & Huemann, 2021). It involves organising and synthesising the collected data, interpreting the results and providing meaningful insights and recommendations based on the study's objectives. Writing up a report is essential as it allows for the clear communication of research findings and their implications to relevant stakeholders (Zina, 2021). It serves as a record of the research process, providing transparency and accountability. Moreover, a well-written report enables other researchers, decision-makers and practitioners to build upon the findings and contribute to further knowledge and improvements in the field. Ultimately, the report serves as a valuable tool for decision-making, informing policy development and driving positive change within the academic institution or relevant context (Tait, 2018a).

At this point I combined and analysed the data and connected the study research to literature into one "output" that answers the research question and describes the research process that focused holistically on the research study (Vaismoradi & Snelgrove, 2019). Themes were fully worked out and the final themes were written up, ready for compilation of the research report (Braun & Clarke, 2006).

5.4 Discussion

The research questions focused on developing a model that integrates the SRM system with the TIS to enable participants to support UNISA's distance students. The interview questions were aimed at gathering information on the experiences of the participants regarding the use of the SRM system for supporting distance students.

The responses of the participants revealed mixed experiences with the system. Most of participants indicated a negative experience with the use of the SRM system; only a few said that SRM system is helpful.

The responses from the participants suggest that the SRM system has not been fully optimised to support UNISA distance students and respond to student enquiries effectively. There are issues with data collaboration, telephone system design, call routing, the processes used to escalate complex student enquiries from the call centre to support departments, and a lack of collaboration between the call centre and the support departments. These issues lead to frustration and delays when student enquiries are resolved, highlighting a need for system optimisation and improved collaboration between the call centre and other support departments within ODeL administrative support environment.

The themes identified in the study suggest that the SRM system should be designed with a focus on promoting easy access to information. Although the SRM system has some useful features, areas for improvement have been identified, particularly as regards call routing and query management. The lack of a formal Service Level Agreement and the ad-hoc management of escalated student queries are issues that should be addressed to improve the SRM system's effectiveness. This refers in particular to the effective and timeous routing of calls to support departments. These insights could inform the development of a model that integrates the SRM system with the TIS in support of UNISA's distance students.

Table 5.7: Theme categorisation

Final theme names	Theme category
<ul style="list-style-type: none">• Ineffective call routing• System optimisation	Student relationship management system challenges
<ul style="list-style-type: none">• Insufficient support from ICT	Student relationship management improvement suggestions
<ul style="list-style-type: none">• Inadequate information sharing• Collaborations and interactions with departments• Efficiency and effectiveness of complex query handling	Student relationship management usage
<ul style="list-style-type: none">• Management skills• Skillset and orientation to the system	Student relationship management of ODeL training
<ul style="list-style-type: none">• First point of contact services• Purpose of the contact centre	Additional related suggestions

5.4.1 Student relationship management system challenges

The successful implementation and utilisation of the SRM system may be challenging owing to a variety of factors (Wang & Lee, 2020). It is therefore essential to explore the problems call-centre participants encounter when using the SRM system to gain insight into potential areas of improvement. The findings should be valuable for institutions seeking to improve their SRM systems and student support services.

The successful utilisation of the SRM system is critical to ensure the effective delivery of student support services (Songsom, Nilsook & Wannapiroon, 2019). The effective use of this system may be hindered by various challenges that may include technical difficulties, insufficient training and ineffective communication. Technical difficulties such as slow loading times or system crashes can lead to frustration and impede the successful use of the SRM system. Insufficient training or lack of knowledge on how to navigate the system can also result in difficulties with the use of the system (Feary & Roth, 2014). Ineffective communication, whether it be with system administrators or support staff, can also pose a challenge for students.

The responses highlight the specific challenges encountered with the implementation of the SRM system at UNISA. These include problems with the SRM options, lack of knowledge about the SRM system and difficulties in transferring complex student enquiries. The responses suggest that there may be a need for more effective leadership, training and communication to ensure that the SRM system is properly implemented and utilised to support UNISA distance students.

- *Lack of knowledge and training:* Several participants pointed out that there is a lack of knowledge about and inadequate training among UNISA staff as regards the SRM system. This lack of understanding often leads to confusion and frustration for both call-centre consultants and students.
- *Technical issues:* Some participants reported technical issues with the SRM system, such as dropped calls, incorrect call routing and difficulties with the telephone system.
- *Inefficient call handling:* Participants noted that the SRM system is not always efficient in handling student call queries. They reported instances where students are routed back to the call centre instead of being routed to the selected options on the SRM system, or their calls not being properly transferred by the SRM system.
- *Personal relationships:* Participant G noted that consultants often rely on personal relationships with staff in other departments to resolve complex student queries. This indicates that the SRM system may not be fully effective in addressing all student needs.

The findings suggest that UNISA may need to invest in additional staff training and address technical issues with the TIS. They also suggest that the SRM system may need to be reviewed to ensure that it is routing student calls correctly and efficiently.

5.4.2 Suggestions for improving the SRM system

The SRM system has proven to be beneficial in providing support to students and it is now important to ensure that the system is improved continuously to meet the changing needs of distance students (Gholami *et al.*, 2018). Some participants

suggested improvements to the system's functionality, while others highlighted the need for better communication with different support departments and a more collaborative approach to addressing student enquiries.

The participants' responses also indicated that there is a need for more streamlined processes, better communication between different support departments and more skilled and knowledgeable staff to operate the SRM system effectively. The findings can help UNISA to improve its SRM system and better support distance learning students. By implementing the suggestions, the institution can improve its customer service, reduce waiting times and ensure that students receive the help they need in a timely and effective manner, which will improve student satisfaction and retention.

5.4.3 Employment of the SRM system

It is important to explore how SRM systems are being used in different universities and to understand the experiences of users in these institutions. The interview question, "Have you used the SRM system in other universities? If yes, how was it used?", was crucial for gathering insights into how SRM systems are being used in different contexts and how these experiences may inform the development and implementation of SRM systems in other institutions. By examining the experiences of users of SRM systems in other universities, it is possible to gain a better understanding of the challenges and opportunities associated with these systems and how they can be leveraged to improve student outcomes (Okoye, Arrona-Palacios, Camacho-Zuñiga, Hammout, Nakamura, Escamilla & Hosseini, 2020).

The responses to this research question suggest that none of the participants have used the SRM system in other universities. Only Participant G has had prior experience with SRM system, but that was at UNISA itself. Therefore, the responses provide limited insight into the use of SRM in other universities. However, this information can still help answer the research question as it provides a baseline understanding of the participants' experience with the SRM system. Knowing that all participants have not used SRM system in other universities suggests that they may not be fully aware of the potential benefits and limitations of the SRM system.

The findings suggest that the SRM system is a relatively new technology at the university participants have been part of and that UNISA may be one of only a few

universities that are currently implementing the technology in South Africa, perhaps even in Africa. The SRM system also seems to be meeting the needs of some research participants, considering the positive feedback from participants B and E. This emerging theme could be useful for policymakers and administrators who are considering the implementation of this technology within ODeL administrative support environments.

5.4.4 Training for the SRM system

Training is an essential component of ensuring that individuals are equipped with the necessary skills and knowledge to operate a system effectively (Popov, Yatsyshyn, Yatsyshyn, Kovach, Artemchuk, Gurieiev & Kovalenko, 2021). In the context of student support services, training on the SRM system is crucial to ensure that staff can effectively utilise the system to support students. Thus, understanding the nature and quality of the training received on the SRM system is crucial when evaluating the system's effectiveness (Woehr, Loignon, Schmidt, Loughry & Ohland, 2015).

This research evaluated the effectiveness of the training, the quality of the training materials and the training methods used to prepare call-centre participants for their roles in supporting distance students through the SRM system. In addition, the research explored how the quality of training affects the consultants' ability to support distance students effectively.

The responses from participants highlight the need for more comprehensive and consistent training for using the SRM system at the ODeL institution. The lack of training or outdated training may have contributed to the challenges encountered when using the system to support students. By identifying the training gaps, the institution can take steps to address them and improve the effectiveness of the SRM system.

The responses from the participants indicated several emerging themes related to the training provided for using the SRM system. The findings suggest that there is a need for more comprehensive and up-to-date training to ensure that staff members are equipped with the necessary skills and the knowledge to effectively support distance students.

5.4.5 Additional and related suggestions

The effectiveness of SRM systems depends on various factors, including the quality of the system, the training provided to users and the support offered to users when challenges arise (Wang & Lee, 2020). As such, it was important to evaluate the experiences of SRM system users to identify areas for improvement. The question, "Would you like to add anything related to SRM system at UNISA?", provided an opportunity to gather insights into the experiences of SRM system users at UNISA, as well as suggestions for improvement. The analysis of these responses will help UNISA to identify areas where the SRM system can be enhanced to support distance students more effectively and improve their overall university experience.

The emerging topics suggest that the university needs to focus on improving management, technology, communication, staff motivation and skills. The suggestions made by the participants can be used to develop a model that integrates the SRM system with the TIS to support UNISA distance students.

Responses to the question, "Would you like to add anything else?", provided additional insights into the participants' opinions and experiences related to the use of the SRM system and the TIS to support UNISA students. These responses helped to answer the research question by providing more detailed information on the challenges faced by the call centre, the support needed for the SRM system and the importance of investing in the call centre. Improving the management of the call centre and the SRM system is essential to ensure that distance students receive quality support.

5.5 Integration of call centre telephone trends

The exploration of call-centre telephone trends offered a valuable context to and insight into the subsequent thematic analysis. By understanding these trends, we gain a clearer perspective of the challenges faced by call-centre consultants in their use of the SRM system.

The analysis also revealed distinct patterns. Notably, the highest call volumes occurred during specific annual timeframes, primarily from January to March and July to November. Coincidentally, these periods also saw a significant rise in abandoned calls. This raises the crucial question: do these trends signify a capacity issue within the call

centre or point to shortcomings in the effectiveness of the SRM system, especially during peak student application and registration periods?

Moreover, it became evident that a substantial number of students opted to use alternative communication platforms, particularly webchats, to contact UNISA. This shift in student behaviour prompts an important inquiry: is this transition driven by perceived difficulties in accessing UNISA services through the SRM TIS? During the interviews with call-centre consultants, consistent challenges were reported in the use of the SRM system for transferring student calls to support departments to resolve complex student enquiries. This raises a pertinent question: are call-centre consultants sufficiently equipped to respond efficiently to student enquiries received via webchats, considering the evident shift towards this communication mode?

A striking observation arising from the data was the significant increase in webchat usage both during September and October 2021 and in 2022. The spikes correlated with a decrease in the number of telephone student enquiries during the same periods. Intriguingly, in 2021 a higher volume of student calls was recorded than in 2022, despite the introduction of webchat as a communication platform in that year. The shift towards webchats appeared to coincide with a higher rate of abandoned calls in September and October 2022, suggesting that when participants resorted to webchats and email to address student enquiries because of the challenges experienced with the SRM system, this was accompanied by an elevated rate of abandoned calls. This observation aligns with the feedback provided by participant C, who pointed out that the introduction of additional communication platforms can become counterproductive when the SRM system faces challenges.

Despite the challenges associated with the SRM system, it is noteworthy that a significant number of students still prefer to communicate with UNISA by telephone. This preference is evident from the substantial volume of telephonic enquiries recorded in 2021. However, the drop-in student calls in 2022 potentially resulted from consultants shifting their focus from handling student calls to responding to enquiries via webchats and converting calls into email format.

The introduction of webchats in 2021 did not significantly reduce the number of telephone student enquiries, which suggests that, despite the availability of alternative

communication channels, distance students continue to favour the telephone system when contacting UNISA. It is essential to underscore that ICT plays a pivotal role within ODeL institutions. This echoes Tait's (2000) assertion that ICT in distance education enables students to access information effectively. Consequently, the study calls for future research into the role of ICT within UNISA, particularly as regards its support for the call-centre functions.

In essence, these telephone trends contextualise the thematic analysis findings. They underscore the importance of addressing the challenges with the SRM system and ensuring that the integration of multiple communication platforms aligns seamlessly with the effective functioning of the call centre in support of distance students.

5.6 Conclusion

This chapter covered the thematic analysis, unfurling data collected from the interviews with call-centre consultants. The use of thematic analysis, as delineated by Braun and Clarke (2006), furnished a robust framework for unravelling the multifaceted nuances embedded within the participants' narratives. Through a systematic process of coding, categorisation and theme development, the narratives of the consultants were distilled into coherent patterns to unveil the intricacies of their experiences and perspectives regarding the SRM system and its integration within UNISA's administrative support framework.

The thematic analysis brought to light a spectrum of recurring themes that encompassed the gamut of student-staff interactions, technological integration and the broader administrative structure. The emergence of themes such as "Inefficient call routing", "Insufficient support from ICT", "Inadequate information sharing", "Efficiency and effectiveness of complex query handling", "Purpose and functionality of the contact centre", "Management skills" and "Skillset and orientation to the system" not only elucidated the challenges faced by the consultants but also offered profound insights into the overarching implications for ODeL institutions. This analysis, guided by empirical data, successfully illuminated the intricate layers of the SRM system's impact on the UNISA student support network.

CHAPTER 6

FINDINGS AND CONCLUSION

6.1 Chapter overview

This final chapter is the culmination of extensive exploration and analysis. It commences with a concise summary of the findings, encapsulating the salient points gleaned from the preceding chapters. This is followed by a review of the contributions this study offers to the existing body of knowledge, elucidating its significance in the realm of ODeL administrative support. Subsequently, recommendations stemming from the discerned implications of the research findings are provided, with emphasis on how these could potentially enhance the quality of student support services. This chapter also acknowledges the limitations of the study by recognising the inherent constraints and potential biases in the data generation and analysis processes.

A forward-looking perspective is given by exploring the potential avenues for future research. By identifying areas that remain uncharted or warrant further scrutiny, this study aims to inspire and guide future scholars and researchers. The chapter concludes with a summary of the key points unearthed by the study, reinforcing the significance of the research and reaffirming its relevance in the context of enhancing student support services in ODeL institutions.

6.2 Introduction

This study has been marked by exploration, discovery and the pursuit of a noble goal: to develop a model that seamlessly integrates the SRM system with the TIS to provide personalised and efficient support for UNISA's distance students. The journey commenced with the recognition of the pivotal role of student support in the realm of ODeL institutions, where the relationship between the institution and its students is unique and complex.

With a nuanced understanding of the challenges and opportunities within the ODeL sphere, the study ventured forth into the heart of UNISA's student support system. The critical role played by the call centre in student support services was explored with the

aim of improving practice by integrating the SRM principles into student support services. The conceptual framework laid the theoretical foundation for the research model, weaving together the threads of SRM, CRM, digital transformation and sustainable business practices.

This chapter summarises the key contributions of this study, emphasising the significance of the Integrated Student Support System (ISSS) model. The study underscores the importance of effective coordination among three essential entities: the call-centre department, support departments and the colleges at UNISA, all of which need to work in harmony to elevate student support services.

In an attempt to address the following research questions:

- What are the experiences of call-centre consultants when using the SRM system to receive, respond to and transfer student telephone enquiries?
- What is the extent in which the SRM system is used optimally?
- What constitutes the effective integration of the SRM system with the TIS and its processes for call routing in the call-centre environment?

The research questions posed in this study are intricately interlinked with the emergent themes from the findings, which provide a comprehensive view of the experiences and dynamics within the call-centre environment at UNISA. As well as the extent in which SRM system is utilised. The research questions of the study were aimed at understanding the experiences of call-centre consultants at UNISA when using the SRM system to receive, respond to and transfer student telephone enquiries. In addition, the study sought to explore how the SRM system's telephone-information options were integrated to support ODeL students, and to identify what constitutes effective integration of the SRM system with the TIS, especially in the context of call routing within the call-centre environment.

Question 1: Experiences of call-centre consultants: The first question had the aim of investigating the experiences of call-centre consultants when using the SRM system to manage student telephone enquiries. The findings from the study revealed several themes related to these experiences. The consultants reported both positive and negative aspects. Some of the positive experiences included efficient access to

student information, personalised support and the ability to transfer calls to relevant departments. However, challenges were also identified, such as technical issues, the need for better training and issues related to call-routing efficiency.

Question 2: Integration of the SRM system and TIS: This question sought to understand how the five options of the SRM system and TIS were integrated to support ODeL students. The study's findings indicated that while the SRM system had useful features, there were areas for improvement, particularly as regards the integration of call-routing options. The lack of a formal SLA and the ad-hoc management of escalated student queries were identified as issues that should be addressed to enhance the system's effectiveness. The findings suggested that seamless information sharing, staff training and ongoing support, and optimisation of the query handling process were essential for effective integration.

Question 3: Effective integration of the SRM system and call routing: This question aimed to identify what constitutes effective integration of the SRM system with the TIS and processes for call routing within the call-centre environment. The study's findings highlighted the importance of effective leadership, training, communication and streamlined processes. The challenges encountered with the SRM system, such as technical difficulties, lack of training and inefficient call handling underscored the need for improvement in these areas to achieve effective integration.

The research questions were answered by gathering data from call-centre consultants, analysing their experiences and identifying emerging themes related to the use of the SRM system and TIS at UNISA. The findings provided valuable insights that can inform the development of a model for integrating these systems to support distance students effectively. The identified challenges and suggestions also made it possible to make practical recommendations to UNISA and other institutions seeking to enhance their student support services through the integration of technologies and the improvement of processes.

6.3 Findings

This section delved into the practical implications derived from the findings of the study, offering actionable insights for improving SRM within ODeL institutions. The research objectives were to understand the experiences of call-centre consultants when using the SRM system, exploring the integration of SRM telephone options and identifying effective integration processes for call routing. As we examine the practical implications, we will address the key points that emerged from the study's findings. Each of these is uniquely focused to enhance the overall efficiency and effectiveness of student support services by the call centre.

6.3.1 Call routing efficiency

Call routing efficiency is a critical theme that focuses on the effectiveness and speed of directing incoming calls from students to the appropriate departments or the call centre. Participants in the study expressed frustrations with the current call-routing system, stressing issues such as incorrect routing, inaccessibility, multiple redirects and long waiting times. One participant stated: "Options do not go where they are supposed to go", emphasising the need for an improved call routing process.

To improve call routing efficiency, UNISA should consider adopting advanced call-routing technologies and strategies. This may involve implementing intelligent routing algorithms based on caller information or utilising IVR systems to accurately identify the purpose of the call and direct it to the most appropriate department or agent. In addition, proper training of call-centre staff on call routing protocols and effective communication skills is crucial to ensure a seamless service to students.

Implementing call-routing efficiency can have numerous benefits for students. First, it reduces the call handling time, enabling faster resolution of student queries and issues. This improves overall student satisfaction and reduces the frustration of being transferred multiple times. Second, efficient call routing ensures that calls are directed to the right department or agent with the necessary expertise. This will result in accurate and reliable information being provided to students. Finally, efficient call routing will optimise the productivity of the call centre, allowing staff to handle a higher volume of calls efficiently.

Literature supports the significance of call-routing efficiency to enhance customer satisfaction and operational effectiveness. Chen and Zhang (2022) emphasise the importance of implementing intelligent call-routing strategies to improve customer experiences and reduce call abandonment rates. Wali and Wright (2016) also discuss the impact of IVR systems on enhancing call-routing efficiency and improving customer service in contact centres. These studies provide valuable insights and best practices that ODeL institutions should adopt when implementing call routing efficiency in their student support services.

6.3.2 System optimisation

System optimisation refers to the process of improving and fine-tuning the underlying technology and infrastructure that supports student support services in ODeL institutions. It involves analysing the existing systems, processes and resources to identify areas of inefficiency and implementing strategies that enhance performance and effectiveness. Participants in the study highlighted various system-related challenges, such as slow response times, system downtime and limited system functionalities. Participant G expressed frustration, stating that "It is just sitting there dormant without it being optimally utilised". Implementing system optimisation requires a comprehensive approach and involves multiple aspects. First, institutions need to assess their current systems and identify bottlenecks or areas of potential improvement. This may involve conducting system audits, gathering feedback from users and analysing performance metrics. Based on these findings, institutions can make the necessary upgrades or modifications to the system's infrastructure, software and hardware to enhance reliability, speed and functionality.

Implementing system optimisation requires effective project management and change-management practices. This includes clearly defining objectives, allocating resources and engaging stakeholders throughout the process. It is essential to prioritise user experience and involve end-users in the evaluation and selection of system improvements to ensure that the implemented changes align with their needs and expectations. The benefits of optimising systems for student support in ODeL institutions are significant. First, it improves system reliability and performance, resulting in reduced downtime and faster response times for students. This enhances

the overall user experience and ensures that students can access the necessary support when they need it. Second, system optimisation can lead to cost savings and resource efficiencies by identifying areas where processes can be streamlined or automated. Finally, an optimised system can provide institutions with better data and analytical capabilities, enabling evidence-based decision-making and proactive identification of emerging student support needs.

Studies on system optimisation emphasise the importance for enhancing the efficiency and effectiveness of organisational systems (Touni *et al.*, 2020). The authors also discussed the role of system optimisation for improving business processes and operational performance. They highlight the significance of system optimisation in the context of HEIs, emphasising its impact on student satisfaction and organisational effectiveness. These studies provide valuable insights and frameworks that can guide ODeL institutions when implementing effective system optimisation strategies.

6.3.3 ICT infrastructure and support services

Technical support services play a crucial role in assisting with and resolving technical difficulties. These services encompass various aspects, such as helpdesk support, troubleshooting, software and hardware maintenance, and network management. Participants in the study expressed concerns about network problems, delayed OTP generation and poor feedback. One participant stated: "Students do not get feedback on time".

To bring about effective ICT support services, ODeL institutions need to establish a robust support infrastructure. This includes developing a dedicated helpdesk or support centre staffed by knowledgeable personnel that can provide prompt and accurate assistance to university staff and students. The implementation of a ticketing system or service request portal can help streamline the process of logging and tracking support requests, ensuring timely resolution. Regular training and upskilling programmes should be provided to ICT support staff to keep them updated on the latest technologies and best practices.

Furthermore, proactive monitoring and maintenance of ICT infrastructure are essential to minimise disruptions and ensure smooth operations. Regular system checks, software updates and the installation of security patches would address potential vulnerabilities and optimise system performance. ODeL institutions can also explore the use of self-help resources such as knowledge bases, Frequently Asked Questions (FAQs) features and online tutorials to enable students to find answers when ICT issues occur.

The implementation of effective ICT support services has several benefits. First, it enhances the overall student experience by ensuring that technical issues are addressed promptly, allowing students to focus on their learning activities. Timely support reduces frustration and anxiety related to ICT problems, promoting student engagement and satisfaction. Second, efficient ICT support contributes to improved productivity and efficiency among students and staff as technical issues are resolved in a timely manner, minimising disruptions to learning and administrative processes. Lastly, proactive ICT support can help identify and address systemic issues, leading to the continuous improvement of the ICT infrastructure and the services provided by it.

Liebenberg, Chetty and Prinsloo (2012) discuss the role of ICT support services to facilitate the adoption of new technology and its use in educational settings. They emphasise the need for responsive and efficient support to ensure the smooth functioning of educational technology. Lehong, van Biljon and Sanders (2019) and Singla and Arora (2021) concur and highlight the significance of proactive support and effective communication to enhance user satisfaction and resolve technical issues. These studies offer valuable insights into the implementation and benefits of ICT support services in the context of student support in ODeL institutions.

6.3.4 Information sharing

Information sharing is a critical aspect of student support in ODeL institutions as it ensures that students have access to the required information and other resources to navigate their academic journey effectively. Participants in the study highlighted the challenges of students lacking information and the poor interaction with the call centre

and other support departments within UNISA's administrative support space. One participant stated: "No interaction with departments". Effective information sharing involves the dissemination of relevant, up-to-date information to students that enable them to make informed decisions and seek appropriate support when needed.

For effective information sharing, ODeL institutions should establish streamlined communication channels and platforms that facilitate the dissemination of information. This can include utilising digital platforms such as learning management systems, student portals and online communication tools to share announcements, updates and student resources. It is essential that the information is presented in a clear and easily accessible format, using language and terminology that staff and students can understand.

Collaboration between the call centre and other support departments is crucial for efficient information sharing. This can be achieved by setting up communication channels, such as online meetings or forums where representatives from different departments can exchange information, address concerns and align their support efforts. By developing relationships between support-department and call-centre staff and establishing feedback mechanisms will help to identify areas where information-sharing can be improved.

The benefits of effective information sharing are manifold. First, it empowers students by providing them with the necessary information to navigate their academic journeys, reducing confusion and uncertainty. Timely and accurate information enhances the ability of students to make informed decisions, select appropriate courses and access support services tailored to their needs. Second, information-sharing promotes transparency and accountability within the institution as students become aware of policies, procedures and the resources available. This fosters trust and enhances the overall student experience. Lastly, effective information sharing contributes to a sense of community and belonging in the ODeL institution. Students feel connected and supported by having access to information that is relevant through collaborative communication channels.

This is supported by Hamed *et al.* (2015), who emphasise the importance of transparent and accessible information to support student success in online learning environments. They highlight the role of clear communication to reduce student confusion and frustration. Kim and Lee (2021) also discuss the benefits of effective information sharing to promote student engagement and satisfaction. Their study underscores the need for tailored and targeted communication strategies to reach diverse student populations effectively.

6.3.4.1 Collaboration and interaction with support departments

Collaborations and interaction with support departments plays a crucial role in enhancing student support in ODeL institutions. Participants in the study highlighted the lack of collaboration and interaction between the call centre and other support departments as being a challenge. One participant said: "No relationship between call centre and other departments". Interaction between departments is essential to ensure a holistic and coordinated approach to students.

To implement effective collaboration and interaction with support departments, ODeL institutions should foster a culture of establishing mechanisms for communication and cooperation. This can be achieved by regular meetings, joint training sessions, the creation of an internal UNISA web page for information sharing and the establishment of shared goals and objectives. By bringing together representatives from different support departments, including academic coordinators/advisors, IT support and Student Affairs (SRC representatives), institutions can leverage the expertise and resources available to provide comprehensive support to distance students. Gartner Inc. (2022) emphasises the significance of effective communication and collaboration within a contact centre since this facilitates a cohesive and student-centric support system.

Effective collaboration and interaction facilitate the sharing of information and best practices and resources between support departments. This promotes a seamless student experience, as students can receive timely and accurate support tailored to their needs. Academic coordinators can collaborate with IT support to ensure that students have access to the necessary technological tools and resources. Similarly,

collaboration between support departments and the call centre can ensure that students receive consistent and coordinated support of high quality for their academic and administrative needs. Rovai and Downey (2010) emphasise the importance of collaborative support structures in online learning environments. They argue that effective collaboration among support departments can result in improved student retention and success.

The benefits of collaboration and interaction with support departments are numerous. First, it enables a more holistic approach to student support as different departments can work together to address the various dimensions of student requirements. This can lead to improved student satisfaction, engagement and success. Second, collaboration fosters a sense of unity and shared purpose among support staff, creating a supportive and collaborative work environment. Rienties *et al.* (2012) highlight the role of collaboration between academic and support staff for creating a sense of belonging and engagement among students. Their study underscores the need for cross-departmental collaboration to provide holistic support to students. Finally, effective collaboration can lead to resource optimisation, as the call centre and support departments can leverage their strengths and expertise to maximise the impact of their support efforts.

6.3.5 Efficiency and effectiveness of complex query handling

The efficient handling of complex student queries is an essential requirement for providing effective student support in ODeL institutions. Participants in the study expressed concerns about the current manner in which complex student queries are handled, with one participant stating: "On complex student enquiries, we are not winning". The proper handling of complex queries ensures that students receive prompt and accurate responses to their enquiries, leading to increased satisfaction and a positive student experience.

To handle complex queries efficiently and effectively, ODeL institutions can employ several strategies. First, it is crucial to employ well-trained and knowledgeable staff who can understand and address complex queries effectively. In the context of UNISA, an understanding of how the process of student support, ranging from applications to

graduation, is managed, is pivotal. Training programmes should focus on enhancing problem-solving, communication and technical skills. In addition, a clear escalation processes with dedicated personnel to handle complex queries must be put into place. This can assist in streamlining the resolution process. Esteban-Millat, Martínez-López, Pujol-Jover, Gázquez-Abad and Alegret (2018) highlight the significance of timely and accurate responses to student queries in online learning environments. Their study emphasises that effective query handling contributes to student satisfaction, engagement and retention. Regular performance monitoring and feedback mechanisms should be in place to ensure continuous improvement to the query handling process.

The benefits of implementing an efficient and effective query handling process are multifaceted. First, it leads to improved student satisfaction and engagement. When students receive prompt and accurate responses to their complex queries, they feel valued and supported, which enhances their overall experience. Second, efficient query handling reduces the waiting time for students, minimising frustration and anxiety. This can positively impact student retention and success rates. Finally, the effective handling of complex queries contributes to the institution's reputation for quality student support, which in turn attracts new and retains existing students.

6.4 Integrated Student Support System model

Based on these findings, a model was developed to guide practices and to ensure that systems are in place for the efficient delivery of student support services. The ISSS model shown in Figure 6.1 presents a comprehensive solution designed to enhance distance education services and provide personalised support to students.

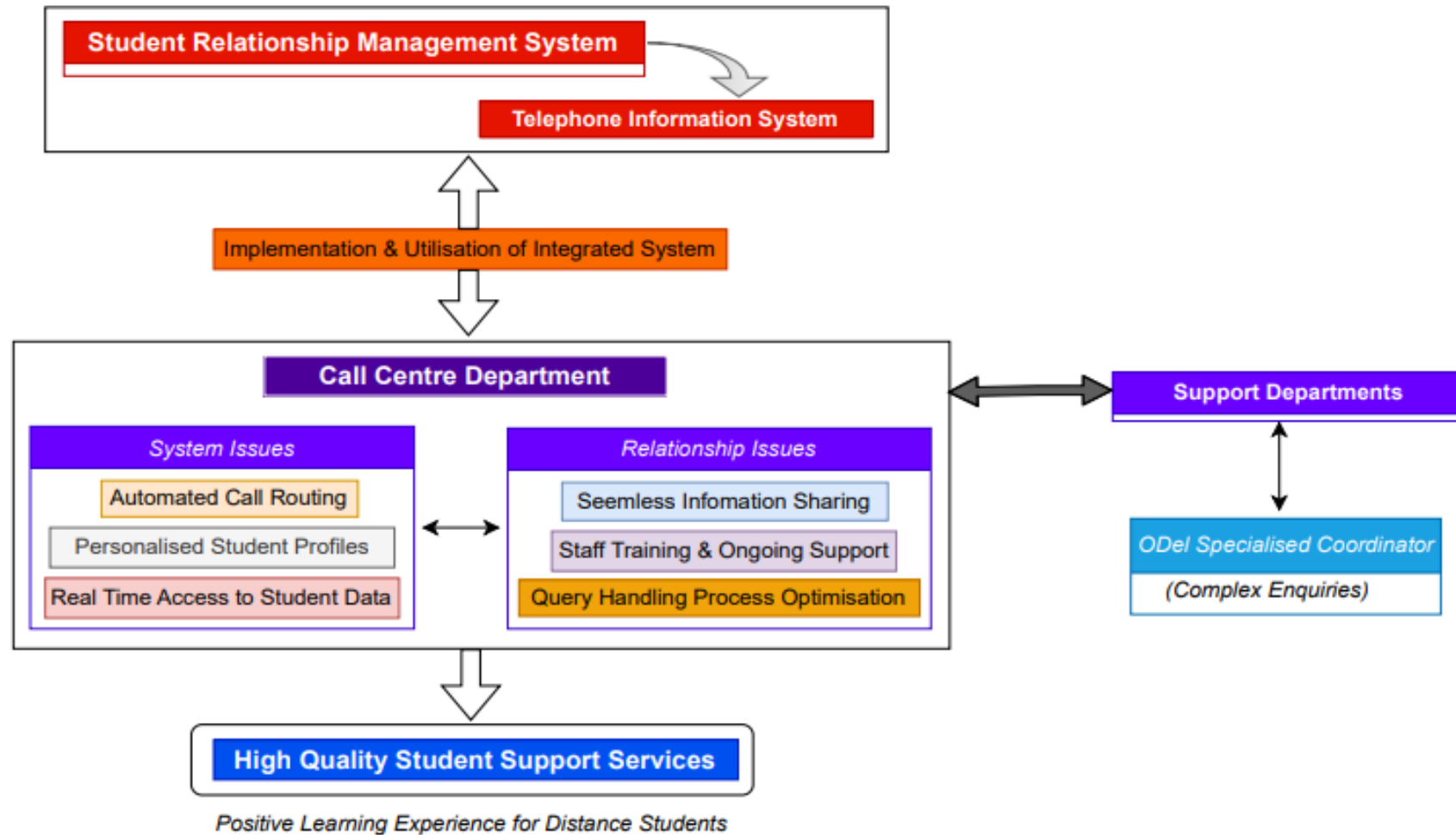


Figure 6.1: Integrated ODeL Student Support System: Enhancing distance education services for personalised support

The ISSS model illustrates the interconnectedness of various elements involved in delivering effective support services to distance education students at UNISA. This model seeks to streamline and optimise the integration of the SRM system and TIS within the context of the call-centre department with the aim of enhancing the overall student experience. At the core of the model is the integration of the SRM system and TIS, which serves as the technological backbone that enables seamless communication and data sharing between the systems. It facilitates real-time access to student data, the creation of personalised student profiles and the implementation of automated call routing.

The call-centre department is at the frontline in providing support to distance education students. It receives incoming calls and enquiries from students. Within the ISSS model, the call centre is influenced by two key factors: system issues and relationship issues. Another aspect that requires attention is the system issues focuses on the technical capabilities of the system. It includes automated call routing, which ensures that incoming calls are directed to the appropriate personnel or departments based on the nature of the enquiry. Automated call routing should be implemented efficiently to minimise call transfer times and provide quick responses to student queries. In addition, the personalised student profiles filed on the system and real-time access to student data empower call-centre consultants to provide tailored support. Effective communication and collaboration are of paramount importance to providing quality student support. Seamless information sharing promotes the exchange of crucial information between the call centre, support departments and colleges. Staff training and ongoing support ensure that call-centre consultants are well-equipped to use the integrated system competently. Furthermore, query handling process optimisation involves streamlining the procedures for addressing student queries, enabling efficient and accurate responses.

Complex student enquiries and issues may need to be escalated to specialised support departments within UNISA. These departments include the DSAR, DSAA and other relevant units. These departments play a crucial role in providing specialised assistance to escalated student enquiries by the call centre.

The ISSS model outlines a comprehensive approach to student support at UNISA, emphasising the importance of technology integration, efficient call routing and collaborative relationships. It envisages a system where students receive timely and personalised support that ultimately results in a positive learning experience and improved student satisfaction. Effective call routing is a critical component of this model, ensuring that student enquiries are directed to the right place at each stage of the support process. Call-routing implementation in the ISSS model should involve the following:

- *Call routing:* Automated call routing should be seamlessly integrated into the SRM system and TIS. This involves setting up rules and algorithms that route incoming calls to the appropriate call-centre consultants or other departments based on the nature of the inquiry. It should be designed to minimise waiting times and ensure that students are instantly connected to the right resources.
- *Relationship issues:* The call centre's ability to manage calls efficiently depends on the level of training of and the support provided by its consultants. Staff training should include a focus on effective call-routing procedures. Consultants should be adept at identifying the nature of each call and routing it to the correct destination within the call centre or the relevant support department.
- *Support departments:* These departments should have effective call-routing mechanisms in place to manage complex student enquiries escalated to them by the call centre. This should ensure that enquiries are directed to the appropriate personnel or coordinators who can provide specialised assistance to students.

6.5 Recommendations

For the successful implementation and utilisation of the integrated SRM system and TIS, it is imperative to train staff, automate and streamline query handling, and share information between all concerned. Henceforth, UNISA and other ODeL institutions are encouraged to:

- *Enhance staff training and development:* To ensure that call-centre consultants

and support departments are proficient in using the integrated system, there should be a comprehensive staff training programme that should not only cover the technical aspects of the system but also focus on interpersonal skills as effective communication with students is vital. Continuous professional development and training will empower staff to offer the best possible support to students.

- *Automate and streamline query handling:* The implementation of automated call routing is essential. This will significantly enhance the efficiency of query handling within the call centre. In addition, the streamlining of the query handling process within support departments will ensure that complex student enquiries are addressed promptly and accurately. Developing standard operating procedures for handling various types of student enquiries can help expedite this process.
- *Seamless information sharing:* All entities involved, including the call centre, support departments and colleges, must invest in systems and protocols that facilitate seamless information sharing. This will enable real-time access to student data and ensure that consistent, accurate and up-to-date information is provided to students, resulting in a more satisfying student experience.
- *Regular evaluation and feedback mechanisms:* Implement processes for the regular evaluation of the effectiveness of the ISSS model. Feedback should be solicited from students on their experiences with the integrated system and student support services. Such feedback will highlight areas requiring improvement and refinement.
- *Data security and compliance:* Given the sensitive nature of student data, it is imperative that data security is robust and that compliance measures are in place. Regular assessments and audits of data security protocols should be conducted to ensure that student information is safeguarded.

By adhering to these recommendations, UNISA can enhance the implementation and utilisation of the ISSS Model. This will ultimately lead to greater student satisfaction, student retention and academic success in the realm of distance education.

6.6 Limitation of the study

While striving to provide valuable insights into the integrated SRM system and TIS for student support at UNISA, this study, has several limitations that need to be acknowledged.

- *Limited data generation period:* One of the primary limitations of the study is the constrained period of data generation. The interviews with call-centre consultants were conducted over a limited period, as a result of which the entirety of their experiences or seasonal variations in their work may not have been captured. A longer data generation period could have provided a more comprehensive understanding of the challenges and nuances faced in different circumstances.
- *Data generation method:* The study relied on face-to-face interviews as the primary method of data generation. While interviews offer valuable qualitative data, they are inherently subjective and may be influenced by the interviewer's presence. The supplementing interviews by additional methods, such as surveys or direct observations, could have provided a more holistic view of the phenomenon under investigation.
- *Dynamic nature of technology:* Technology and systems are continually evolving. As such, the findings of this study may become outdated over time as new features, updates or changes to the SRM system and TIS are implemented.

While this study provides valuable insights into the integration of the SRM system and TIS for student support at UNISA as an ODeL institution, its limitations should be considered when interpreting and applying the findings. Future research could address some of these limitations by expanding the sample size, conducting comparative studies and exploring the impact of external factors and cultural considerations in greater depth.

6.7 Future research direction

Future studies in the field of student support in ODeL institutions, particularly those involving the integration of technology systems, could focus on several promising aspects, as follows:

- *Comparative institutional studies:* Conduct comparative studies across multiple ODeL institutions to assess the effectiveness of integrated systems like SRM and TIS. By examining the experiences of various institutions, researchers could identify best practices, common challenges and contextual differences.
- *Impact on student outcomes:* Investigate the direct impact of integrated communication systems on student outcomes, including academic performance, completion rates and overall satisfaction. This could involve quantitative analyses of student data to assess correlations.
- *Cost-benefit analyses:* Conduct cost-benefit analyses of implementing integrated systems such as SRM and TIS. Evaluate the financial investments required and the potential savings and benefits accrued over time, including the cost-effectiveness of various support strategies.
- *Exploration of emerging technologies:* Investigate emerging technologies that can enhance student support services. Such technologies could include the potential of artificial intelligence, chatbots and data analytics for improving the efficiency and effectiveness of integrated systems for student support.
- *Sustainable implementation:* Consider strategies for the sustainable implementation of integrated systems. Explore how institutions can ensure the longevity and scalability of these systems while adapting to changing student needs and technological advancements.

By addressing these research directions, future studies could advance the understanding of how integrated technological systems impact student support in ODeL institutions,

thereby ultimately contributing to improved educational experiences and outcomes for distance learners.

6.8 Conclusion

This study highlighted the importance of cross-institutional learning and collaboration in the implementation of the SRM system. As universities face similar challenges when it comes to improving student engagement and retention rates, there is much to be gained from sharing best practices and insights into how the SRM system can be effectively implemented and utilised (Khodakarami & Chan, 2014). By learning from the experiences of users of the SRM system in other universities, institutions can make more informed decisions about how to design, implement and manage the system to improve student support and outcomes. This question could also have opened up a broader discussion about the potential for standardising SRM systems across universities, and whether this would be beneficial to improving student support, student satisfaction, student outcomes and experiences.

The primary objective is to ensure that ODeL students are adequately supported as they go through their learning journey. The quality of student support achieved by providing timely, accurate and personalised assistance that would ultimately contribute to heightened student satisfaction, increased retention rates and improved academic outcomes.

The main contribution of the study is the development of a framework that integrates technical, academic and administrative support for ODeL students. The integrated systems can revolutionise student support in ODeL institutions such as UNISA. By emphasising coordination, collaboration and personalised assistance, the study should contribute to a broader discourse on enhancing student support services in the digital age.

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APPENDICES

Appendix 1: Permission Letter (Vice Principal – Academic & Research)



110 Apium Street
DOORNPOORT
PRETORIA
0186

Vice Principal: Academic and Research
University of South Africa
P.O Box 392
UNISA
0003

Dear Sir/Madam,

REQUEST FOR PERMISSION TO INTERVIEW UNISA STAFF MEMBERS WORKING AT THE UNISA CALL CENTRE

I, Nkhensani Faith Tshabalala, a UNISA PhD student enrolled under College of Education with student number: 57650241, wish to request your permission to interview eight to ten UNISA call centre consultants using the integrated SRM system incorporating five telephone options provided by ICT to route student calls between the call centre and other support departments, as well as the telephone information system Avaya IP Solution Version 6.3 and processes to receive, respond to and transfer student telephonic enquiries within the UNISA administrative support departments in the context of an ODeL Institution. The purpose of the interview is to collect data required for my research study project entitled: **Developing a Model that Integrates the Student Relationship Management System with a Telephone Information System to Support UNISA Distance Students.**

The study seeks to examine the extent in which the current SMR system, telephone information system and processes are used to receive, respond to and transfer student calls between the UNISA call centre Division and other support departments. The research was done with the aim of developing a model that could be used to integrate UNISA's telephone information system and processes used to support students

administratively. The ultimate objective is to improve student support by enabling easy and rapid accessibility to accurate and quality information, thereby enhancing the satisfaction of UNISA students and student retention by the university.

If risks are experienced during research, the researcher will try to mitigate such risks, deal with emanating risks accordingly and adhere to the policy. There was no reimbursement or any incentives for UNISA call centre consultants who participated in the research. Feedback procedure will entail final thesis that will be published on the University website. Results of the study will be presented at workshops, forums, colloquiums, seminars and in research journal articles.

Your co-operation in this matter will be greatly appreciated.

Yours faithfully,

Ms. NF Tshabalala (Student number: 57650241 – a researcher)

E-mail address: tshabanf@unisa.ac.za

Cell number: 082 573 4929

Signature: 

Ms. NKHENSANI FAITH TSHABALALA

Appendix 2: Permission Letter (UNISA Deputy Registrar)



110 Apium Street
DOORNPOORT
PRETORIA
0186

Office of the University Deputy Registrar
University of South Africa
P.O Box 392
UNISA
0003

Dear Sir/Madam,

REQUEST FOR PERMISSION TO DO INTERVIEWS WITH 8 TO 10 UNISA CALL CENTRE CONSULTANTS

I, Nkhensani Faith Tshabalala, a UNISA PhD students enrolled under college of education with a student number: 57650241, wish to request your permission to interview 8 - 10 UNISA call centre consultants assigned to receive, respond to and transfer student calls within UNISA administrative support departments. The purpose of the interview is to collect data required for my research study project entitled: **Developing a Model that Integrates the Student Relationship Management System with a Telephone Information System to Support UNISA Distance Students.**

UNISA call centre consultants were purposefully selected because they are the only employees within UNISA who deal with telephonic student enquiries ranging from application to graduation and have been using the SRM system. Documentation such as previous reports on the UNISA call centre telephone Management Information System (MIS) depicting the total number of student calls received, responded to, abandoned and transferred to other support departments within the UNISA administrative support was closely analysed to bringing the UNISA experience into “context with existing theory to reveal how it corroborates existing knowledge or bring new understanding to the body of knowledge”. The researcher will look for emerging patterns, concepts and explanations in her data to interpret analysed data.

Since the adoption of the SRM system by the University in 2012 and the establishment of UCC Division in September 2019 no study has been conducted for the purpose of examining the call centre Consultants' experiences with the use SRM system.

For this reason, the proposed study seeks to examine the extent to which the current SRM system, telephone information system and processes are used to receive, respond to and transfer student calls between the UNISA call centre Division and other support departments. The research aims to develop a model that integrates UNISA's telephone information system and processes used to support students with their academic planning. The ultimate objective is to improve student support by enabling easy and rapid accessibility to accurate and quality information, thereby enhance UNISA student satisfaction and student retention.

If risks are experienced during research, the researcher will try to mitigate such risks, deal with emanating risks accordingly and adhere to university policy. No reimbursements or any incentives will be made to participant in the research. The feedback procedure will entail a final thesis that will be published on the university website. The results of the study will be presented at workshops, forums, colloquium, seminars and in research journal articles.

Your co-operation in this matter will be greatly appreciated.

Yours faithfully,

Ms. NF Tshabalala (Student number: 57650241)

E-mail address: tshabanf@unisa.ac.za

Cell number: 082 573 4929

Signature:



Ms. NKHENSANI FAITH TSHABALALA

Appendix 3: Permission Letter (ODEL Student Support Services)

Request to be granted permission to do my research study - ODEL Student Support Services - Message (HTML)

File Message Help Tell me what you want to do

Ignore Delete Archive Reply Reply All Forward Meeting Share to Teams INBOX - Archiv... IS TEAM Reply & Delete To Manager Done Create New Rules Send to OneNote Move Actions Mark Unread Categorize Follow Up Select Editing Find Read Aloud Immersive Reader Translate Zoom Viva Insights

Request to be granted permission to do my research study - ODEL Student Support Services

Tshabalala, Faith
To Sepota, Moloko

You forwarded this message on 2023/01/19 21:26.
This message was sent with High importance.

Memo to the Deputy Registrar requesting permission to conduct the research study.pdf
95 KB

Ms NF TSHABALALA 2022 ETHICAL CLEARANCE CERTIFICATE.pdf
587 KB

RPSC Populated and Signed Application form- 57650241 - Faith Tshabalala.pdf
488 KB

Dear Prof Sepota,

I trust this email finds you well.

Herewith find on the attachment, memorandum for your consideration and approval.

Currently my application is awaiting the UNISA RPC review which will take place on Wednesday, 25 January 2023, however, the committee also need to know if your Office supports this study research to access information and/or archives from UNISA Call Centre.

I was requested to update the RPC administration office before tomorrow if your Office has granted me access to the information or not.

Lastly, kindly note that my study research was also rated low risk.

Your positive response will be greatly appreciated.

Best regards,

Ms Faith Tshabalala
Manager: Information Services Division (ISD)
Department of Student Affairs and Regional Services
Portfolio: The Registrar
Winnie Madikizela Mandela (WMM) Building –

Appendix 4: Permission Letter (RPSC & SRIPCC)



Permission Letter RPSC & SRIPCC.pdf

Appendix 5: Research Ethics Approval Certificate



Ethics Clearance Certificate.pdf

Appendix 6: Consent to Participate in the Study



Consent to participate in this study (Return slip)

I, _____, consent that I will answer the questions asked by the researcher (Nkhensani Faith Tshabalala) to the best of my knowledge. I also understand that my participation is voluntary, and I am free to withdraw at any time during the interview.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and that I am free to participate in the study.

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my identity will not be revealed to anyone.

I agree to the recording of the interview.

I have received and signed copy of informed consent agreement.

Participant name & surname (Please print) _____

Participant signature _____ **Date:** _____

Researcher name & surname: Nkhensani Faith Tshabalala (Ms)

Researcher signature: 

Date: 13 September 2022

Appendix 7: Participant Information Sheet



110 Apium Street
DOORNPOORT
PRETORIA
0186
13 September 2022

DEAR PROSPECTIVE PARTICIPANT (UNISA call centre Consultant)

**REQUEST FOR YOUR PARTICIPATION IN MY STUDY – RESEARCH TITLE:
DEVELOPING A MODEL THAT INTEGRATES THE STUDENT RELATIONSHIP
MANAGEMENT SYSTEM WITH A TELEPHONE INFORMATION SYSTEM TO
SUPPORT UNISA DISTANCE STUDENTS.**

My name is Nkhensani Faith Tshabalala and I am a researcher under the supervision of Professor M. Makoe. I am enrolled for a PhD study with UNISA under College of Education, my focus area is to examine the use of SRM system, five Options on telephone information systems and processes used to receive, respond and transfer student calls within the UNISA call centre (UCC) Division in the context of an Open Distance e-Learning (ODEL) institution. My research study topic is titled: **Developing a Model that Integrates the Student Relationship Management System with a Telephone Information System to Support UNISA Distance Students.**

You are invited because you have experience and knowledge of how the SRM system is integrated within the UNISA call centre telephone information system and processes used to receive, respond to and transfer students' calls. It is believed that your experiences working with the SRM system will add value to the improvement of UNISA student support, thereby, decreasing waiting time for responses on student enquiries. Your role in this study will be to answer interview questions based on how the SRM system, call flow, telephone information system and processes at the call centre assist you to support students administratively. Your responses will be recorded for ease of reference when analysing data. The interview will take no more than 30 minutes of your valuable time.

Participating in this study is voluntary and you are under no obligation to consent to participate. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason.

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and the researcher's team, will know about your involvement in this research. Your answer will be given a code number, a pseudonym and you will be referred to in this way in the data. Records that identify you will be available only to the researcher, to protect your identity. Data emanating from this study will be used only for the PhD thesis and research journal articles.

Hard copies of your responses will be stored for a period of five years in a locked cabinet, accessible only to the researcher and will, thereafter, be shredded. Electronic information will be stored in password-protected files and will be deleted after five years. The study has received written approval from the Research Ethics Committee of the University of South Africa.

No payment or reward will be offered, financial or otherwise.

If you would like to be informed of the final research findings, please contact Nkhensani Faith Tshabalala on **082 573 4929** or e-mail tshabanf@unisa.ac.za

Should you require any further information or to contact the researcher about any aspect of this study, please contact Nkhensani Faith Tshabalala at **082 573 4929**.

Should you have concerns about the way in which the research has been conducted, you may contact my supervisor Professor M. Makoe at **012 337 6183** or alternatively e-mail her on: Quakisme@unisa.ac.za.

Thank you for your time to read the information sheet and for participating in this study.

Signature: 

NKHENSANI FAITH TSHABALALA (Ms.)

Appendix 8: Participant Interview Guide



STUDENT: Nkhensani Faith Tshabalala

DEGREE: PhD (Education): Open Distance e-Learning (ODeL)

UNISA CALL CENTRE CONSULTANTS (UCC CONSULTANTS) INTERVIEW QUESTIONS.

1. What are your experiences with the use of the SRM system?
2. Have you used the SRM system in other universities? If yes, how was it used?
3. What challenges did you encounter when using SRM system?
4. How were you trained to use the SRM system at UNISA in order to support students?
5. Do you have any suggestions for improving the SRM system?
6. Would you like to add anything else?

Appendix 9: COVID-19 Check List



COVID-19 Check List

The researcher will use her personal money to ensure that the following will be secured prior the research interview sessions:

- a. Sanitiser will be stationed at the main entrance of the office for visibility and use.
- b. Not compulsory, however, to accommodate those who still use masks, a box of new masks will be provided for back-up purpose.
- c. Should one of the participants shows symptoms of fever, coughing and sneezing, such a person will not be allowed to enter the venue – to mitigate risk hazards.

COVID – 19 venue compliance

Items	Yes/No
Sanitiser	Yes
Box of masks	Yes
Clean dusk bins	Yes
COVID – 19 medic thermometer	No
COVID – 19 register form	No

COVID – 19 Checklist

Appendix 10: Student support for MyUNISA password resetting

Student enquiries include “I forgot my password and telephonic assistance with resetting my password”.

Call centre consultant do not reset password for students. However, they assist by directing students to where in the *MyUNISA* page they can go to reset the password themselves. *MyUNISA* reset password steps include:

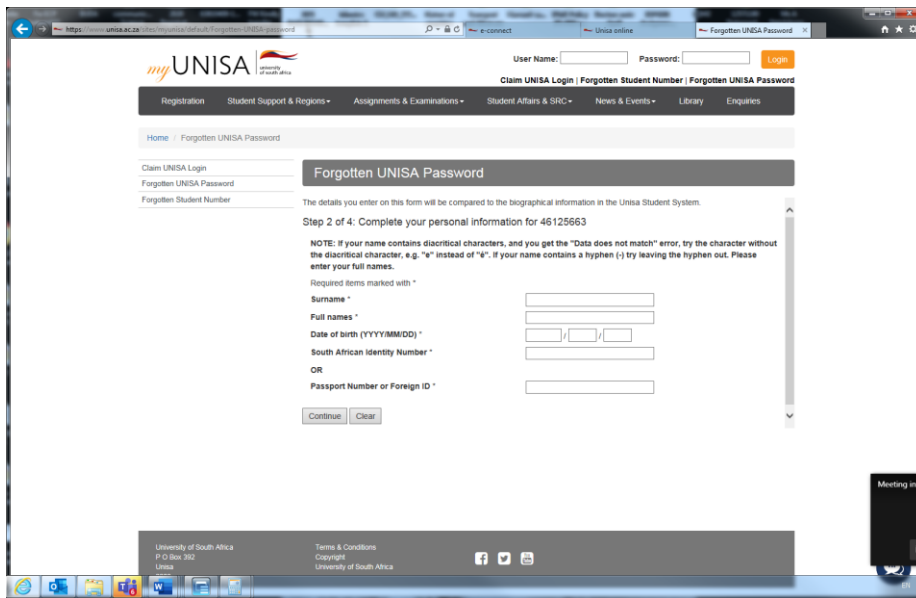
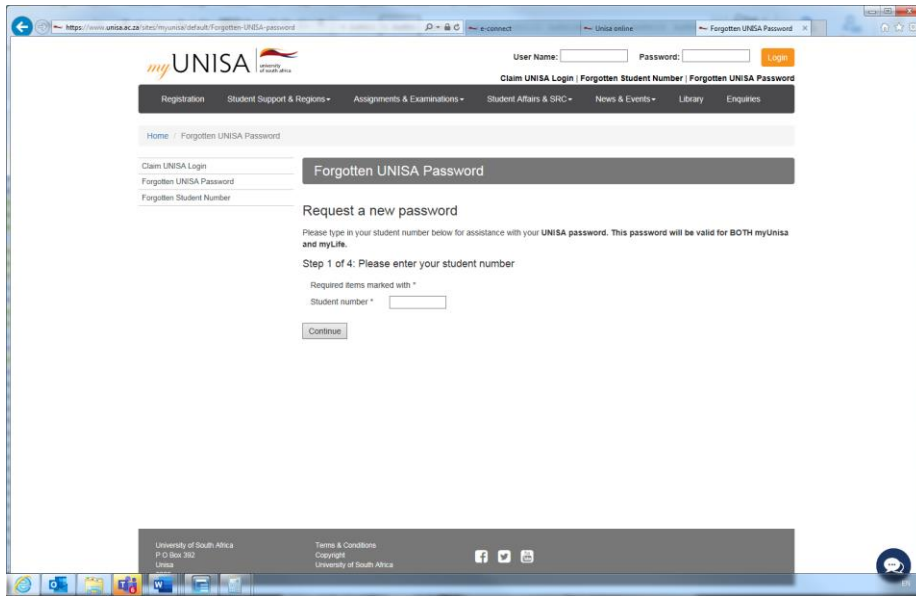
Step 1: Click on forgotten UNISA password.

Step 2: Follow the on-screen instructions.

The student is then informed that the new password will be updated both on his/her *myLife* and *myUNISA* accounts.

Students who enquire by email about a *MyUNISA* password reset link are referred to <https://www.UNISA.ac.za/sites/myUNISA/default/Forgotten-UNISA-password> and are advised to follow the on-screen instructions as per the screenshots below.





Some of the challenges encountered by students when resetting their *MyUNISA* password include the following UNISA responses:

- The surname you entered does not correspond with our records.
- The full names you entered do not correspond with our records. Please check and try again. If you are convinced you have entered the correct information,

please contact the myUNISAHelp@UNISA.ac.za to have your student record checked.

- The Identity Document (ID) you entered does not correspond with our records.

Quality checks on the *MyUNISA* password reset include:

- A call centre consultant does a verification check on function 93 (POPI Act) while the student is online.
- The consultant then checks where the discrepancy is (if it is a spelling error in the student's names or an ID/passport number change).
- If the latter, the student is requested to send a query by email to enquire@UNISA.ac.za with a request for their ID/passport to be updated. They must include a recent certified copy of their new ID/passport.
- Once the data has been updated, the student can reset the password.
- If it is a spelling error in the student's name/s, the student is provided with the name as misspelt so that they can reset the password themselves.
- The student is also requested to send an email to enquire@UNISA.ac.za requesting their name(s) to be spelt correctly. A recent certified copy of their ID/passport must be attached.

Appendix 11: Thematic Analysis: Step one (Verbatim Account)

Field Notes

Source: Developed by author

Field Notes (verbatim account)	Identified and typed field notes
<p>Interviewer: What are your experiences with the use of the Student Relationship Management (SRM) system?</p>	
<p>Res A: <i>My experience with SRM system is, it was supposed to help students to get assistance, actually us, call centre consultants to assist students with immediate effect because the students call the University and sometimes, they do not get help. The system was supposed to help us, call-centre consultants to resolve student enquiries within 48 hours as the University stipulates, that what the system was supposed to do.</i></p>	<p>Participant A: SRM system is supposed to assist call-centre consultants to assist students immediately. The system is supposed to assist the call-centre consultants to resolve student enquiries within 48 hours.</p>
<p>Res B: <i>SRM system at UNISA is not enough. Students lack information. There is no interaction with other departments, Example: call- centre consultants will only hear about the University's information from the students when the call the call centre – this shows to me there is no relationship between call centre and other Departments. UNISA students do not get full information, however, when they call the call centre, consultants also have no</i></p>	<p>Participant B: SRM system is not sufficient. Student has no access to information. There is no relationship between the call centre and other UNISA support departments. call-centre consultants have access to information to assist students.</p>

<p><i>information on some of the changes within UNISA.</i></p>	
<p>Res C: <i>My understanding with SRM system is that, it is a software solution. It is a collaboration between the students, UNISA management and the Contact Centre. SRM system stores data, Example: the communication between the students and the Contact Centre.</i></p>	<p>Participant C: SRM system is a software solution. The enables collaboration between the students, UNISA management and the contact centre. The SRM systems stores data. Communication between the students and the contact centre is stored in the system.</p>
<p>Res D: <i>I can say the SRM system is not user friendly especially to students. The students will call in order to speak to Exams or registration but could not get hold of those Departments. Students' calls will continuously ring without an answer until the student is re-directed to the call centre, unfortunately, as call-centre consultants we can only view on the Student System, we cannot amend anything. Students need to send an email to the call centre, then we escalate the complex query to the relevant Department for assistance. Unfortunately, students do not get feedback on time due to the high volume of calls and e-mails.</i></p>	<p>Participant D: SRM system is not user friendly to students. When students call the university, they are not able to access the departments intended to reach. Students continuously ring without an answer until the SRM system re-directs the student to the call centre, where there is limited information to assist the students. As a result, the call-centre consultant escalates students' complex enquiries to a relevant department for assistance. Students do not get feedback on time due to high number of calls and e-mails.</p>
<p>Res E: <i>My experience using SRM system was not a good one. When they introduce SRM system we thought it is the system that will help us resolve all student enquiries. In the beginning, we were given eight to nine Options on SRM</i></p>	<p>Participant E: My experience using SRM system is not good. I thought SRM system will assist us to resolve all student enquiries. When SRM AVAYA telephone system was introduced, it had nine options. However, other options are not</p>

<p><i>system AVAYA telephone for student support – Options zero (0) was for the call centre, however, all those Options were not working except for Option zero (0) which is the call centre, therefore, we end up receiving calls for all Departments. When we try to get assistance from other Departments on complex student enquiries, we are not winning, so my experience is a bad one because there is no support from other Departments.</i></p>	<p>working except option zero, which is for the call centre. As a result, all students calls are directed to the call centre. The call centre does not get assistance and support from other departments on complex student enquiries.</p>
<p>Res F: <i>What I came across is that amhhhh, the Options on the telephone system don't go where they are supposed to go. For instance, if you select a specific number for registration or application, it still come back to the Contact Centre. There are no warm bodies on the other side to resolve student queries, meaning those Options that are there, Yaa, it still comes back to the Contact Centre.</i></p>	<p>Participant F: My experience with SRM system is that telephone options do not direct students to their desired destinations. If one selects an option for registration or application, the number goes back to the call centre. There are no people to answer student calls.</p>
<p>Res G: <i>I have been exposed to the system since 2015, so it will be from then until now, which will be seven years. My experience with the system till to date, I do not understand why the University procured it, because I do not see what is currently edifying to our processes within the Contact Centre. The only thing that it does is that it has been designed to have couple of Options on it, for example, you have Option that says application, registration, MyUnisa, MyLife, these Options are meant to guide students to be able to select where they want their calls to be routed to, which is</i></p>	<p>Participant G: I have been exposed to the SRM system since 2015, which makes it seven years of my experience using the system. I do not understand why the university procured the system as it does not edify call centre processes.</p> <p>The SRM system has options that include application, registration, MyUnisa, MyLife that are supposed to guide students to select where</p>

dependent on their enquiry, if it is an application enquiry they will select application, so why do I say I do not see the use of the Options? It is because on these Options, the Options give an impression to the caller that when you select application for an example, or registration, you are going to be directed to application Department of registration Department, which is not the case. It is directing the students still to Contact Centre, where we are working, where there is no specialisation, in terms of knowledge and processes, and system functionalities that would be expected from one who is working at application Department, so once that call is routed, then if we cannot assist, then we have to now escalate the query not even by call because those support Departments do not take calls, so we actually have to escalate that, or convert that query into an e-mail form, by emailing that query, but it is first escalated within the Contact Centre, who then when they receive it, if they cannot resolve it then that is when they will escalate it.

Now my problem with that process is that it affect when the student query is going to be responded to, because I fill the query moves around the Contact Centre first, whereas it was established from the get-go that it is a complex enquiry that need the relevant people from relevant Department who have the relevant skills and systems to be able to assist the student immediately. The other problem that I have with that is, that it gives the students the impression that whoever is going to answer is skilled and has got the functionality to close the query and this create a problem wherein we are dealing with angry students who will then say I clicked an application, what

they want their calls to be routed to depending on the nature of their enquiries.

However, when students select “application” or “registration”, they have an impression that their calls are routed to their desired destination, but instead the call is directing students to the call centre where there is no specialisation, knowledge, processes, and system functionalities to enable a call-centre consultant to resolve application enquiries.

If call-centre consultants cannot resolve student enquiries, they must escalate a query to a support department by converting a call into an email because support departments do not take calls. However, such a query is first escalated within the contact centre, but if they cannot resolve the query, then they escalate it to the relevant support department. The problem with this process is that it affects when the student query will be resolved. Students are angry when they realise, they are at the contact centre where they cannot get assistance due to lack of skills and functions to resolve application enquiries.

The other problem is that the contact centre does not have Service Level Agreements that was communicated to contact-centre

<p><i>do you mean you are not in application? Why can't you solve my query? Now we have to waste time conversing with that student explaining, no, you are still at Contact Centre, then I will escalate your enquiry.</i></p> <p><i>The other problem that I find with that process is, as SCSC we do not have Service Level Agreement (SLA), at least one that is communicated or we as staff know about, so, as a result, the enquiries that are escalated, they are either escalated to the general inboxes of the colleges or you find that at times some consultants or Acting Supervisors have got relationships in a sense that they have friends who work in a particular Department who can take their call and then assist them to assist that student or who they can send an e-mail to and then that person will assist, and that is outside SCSC formal processes. It just comes out of someone's heavy heart to say, this is a serious issue, if it is not resolved the student is going to lose a whole year of studies, so, let me use my friend who works in that Department, who can be able to assist me, so that has been my experience with the SRM system because outside of the voice prompt, I don't see what it is edifying to the University because that is what I feel it was introduced through the system.</i></p>	<p>staff. As a result, student enquiries are escalated to general inboxes. Some of the consultants and acting supervisors use their relationships with friends from other departments to take their calls or emails to resolve student enquiries – this is done outside contact-centre formal processes.</p> <p>Consultants and acting supervisors at the contact centre use personal relationships to resolve student enquiries with an effort to assist students not to lose their academic year of studies due to non-resolved administration enquiries.</p>
<p>Field notes (Verbatim Account)</p>	<p>Identified and typed field notes</p>
<p>Interviewer: Have you used the SRM system in other universities? If yes, how was it used?</p>	
<p>Res A: <i>No, I am using it for the first time here at UNISA.</i></p>	<p>Participant B: No, I have not used SRM system in other universities.</p>

Res B: <i>No, I started using the SRM system at UNISA. When I look at it, the SRM system is good and is helping.</i>	Participant B: No, it is my first time to use SRM system at UNISA. ✚ Other responses were irrelevant for this question. Move to the next question.
Res C: <i>No, I did not use it before.</i>	Participant C: No, I have not used the SRM system before. It is my first time to use the system at UNISA.
Res D: <i>No, I am using SRM system for the first time at UNISA.</i>	Participant D: No, it is my first time to use the SRM system at UNISA.
Res E: <i>No, only at UNISA. My first experience using SRM system at UNISA</i>	Participant E: No, it is my first time experiencing the use of SRM system at UNISA.
Res F: <i>No, it is my first time at UNISA.</i>	Participant F: No, it is my first time to use the SRM system at UNISA.
Res G: <i>No, I haven't, my first encounter was when I was working here at UNISA.</i>	Participant G: No, I have not used SRM system in other universities. It is my first time using the system when working for UNISA.
Field Notes (Verbatim Account)	Identified and typed notes

Interviewer: What challenges did you encounter when using the SRM system?

Res A: *According to me, the SRM system is perfect and basically working fine because when we escalate the call goes through, but the problem is the people who are supposed to answer the calls. The other challenge with the SRM system is the Options on it, Example, there is Options for application and registration, however, when the student dial and select Option 1 for application, the SRM system will take back the student to Option zero (0) which is the call centre instead of the selected Option 1 for application, but I am not sure if those people answer or the SRM system put through back the student to call centre.*

Participant A: The SRM system is working, the problem is the people who are supposed to answer student calls.

The challenge with the SRM system is options for application and registration. When a student calls and selects option 1 for application, the SRM system takes back the call to option zero, which is the call centre. I am not sure if those people at application answer calls or if it is the SRM system that routes the student back to the call centre.

Res B: *What I have noticed is that most of the people at UNISA do not know about the SRM system. There is a lack of knowledge on what SRM system is at UNISA.*

Participant B: Staff members at UNISA do not know the SRM system. There is a lack of knowledge on SRM system.

Res C: *To me seems like we are failing students. Currently we have Option zero (0) – to the last one, but I do not know why we have to put those Options in the SRM system, because when student call the Toll Free number, Example: if the student select Option 1, instead of the student call going to where it was selected to, it comes to the Contact Centre, during that time, when the call-centre consultant is talking to the student via telephone, the student will be under the impression that he is at the right Department,*

Participant C: We are failing students. The SRM system has option zero to the last option, however, I do not know why the system has those options. When a student calls the UNISA toll-free number and selects option 1, the system does not route the student to the department she selected but re-directs the student to the contact centre.

<p><i>but only to find that they are at the Contact Centre. To me it seems that we are not helping the students, but failing them, then, why do we have to put those Options 1 SRM system? This tells me that we have people at UNISA who do not know how SRM system should work, hence initially I said we need the right people to manage SRM system. Students will always complain, stating that I thought I am at graduation, but only to find that they are at the Contact Centre. Another challenge that we have at the call centre is, instead of transferring a complex student query, within the call centre we are told to escalate the student query via email.</i></p>	<p>When the call centre consultant answers the student call, the student is under the impression that she is at the selected department, but later realised that she has been routed to the call centre. We are not helping the students but failing them. Why do we put option 1 on SRM system?</p> <p>We have people at UNISA who do not know how SRM system should work. We need right people to manage SRM system. Students always complain when the SRM system routes them back to the call centre instead of the graduation department, which they have selected.</p> <p>Another challenge at the call centre is that instead of transferring a complex student query, we are told to escalate a student query by email within the call centre.</p>
<p>Res D: <i>When students call the call centre, the phone cuts, but I do not understand why the calls cut because we are using Toll Free number, unless if the students do not know that it is a Toll-Free number. Another point is students are not supposed to have airtime in their phones because it will charge them although it is a Toll-Free number. I think students must be informed that when they call UNISA Toll Free number there must have zero balance on their phones. Sometimes when the student calls and I want to inform the student that it is a Toll-Free number, the line gets</i></p>	<p>Participant D: The call is disconnected when students call the call centre. I do not understand why calls get disconnected because we are using a toll-free number.</p> <p>Another challenge is that the call centre must have a recording. When a consultant answers a student call, the student will ask if he is through to the exams department, but when a consultant</p>

<p><i>disconnected, and I am not able to trace the student for call back. Another challenge is we must have recording. Students call the call centre and say, am I at Exams? And the call centre consultant must explain to student that he is through to the call centre not Exams Department, and student will say I was holding for Exams. My challenge as call centre consultant is, I do not know how the SRM system was designed and/or programmed because there are Options that were programmed to direct students to different Departments, like Exams, Application, Registration, Graduation, call centre etc., but always students end up in our Department - call centre, meaning the Departments are not answering the calls because we must always inform students they are through to call centre, not where they thought they are.</i></p>	<p>indicates to the student that he is at the call centre, the student will say I am still holding for the exams department, which I selected.</p> <p>My problem is, I do not know how the SRM system was designed and/or programmed. The SRM system has options that were programmed to direct students to Exams, Application, Registration, Graduation, call centre etc. However, SRM system always routes the students to the call centre, which means other departments do not answer students' calls.</p>
<p>Res E: <i>When I receive complex student enquiries, I have to use my personal relationship to get someone from other support Department to resolve student enquiries that I received within the call centre.</i></p>	<p>Participant E: I use my personal relationships I have with colleagues from other support departments to resolve student enquiries I received at the call centre.</p>
<p>Res F: <i>As I stated, the challenges are that the same thing that I stated, is that the Options they do not go where they are supposed to go.</i></p>	<p>Participant F: Options on SRM system do not direct students where they have selected.</p>
<p>Res G: <i>As consultants when we raise concerns to the next reporting lines, the way it</i></p>	<p>Participant G: When we as call-centre consultants raise concerns</p>

<p><i>is received, and it is treated, for me indicates that we are being led by people who do not have the skill set or knowledge that is required for the Contact Centre to be effective and efficient for us to serve UNISA students better, because this is old already and we are still doing the same thing without any changes and after consultants repeatedly raising that, these Options do not take them there, now we have to explain to students what really happen, and they get angry, and sometimes their communication will not be so pleasant because of these, and for it to be still be like this, many years later without any change to it, to the point of not having SLAs for me is an indication that we are led by people who do not really care about having things done properly and/or they do not have knowledge or necessary skills set to make the necessary changes when they have to.</i></p>	<p>on the reporting lines, the way it is treated indicates that the call centre is led by people who lack the skillset and knowledge to enable the contact centre to be effective and efficient for consultants to serve UNISA students better.</p> <p>We are still doing the same things without any changes. Consultants have raised it repeatedly that SRM system does not route students to their selected departments.</p> <p>Students get angry that SRM system is still the same, no changes after many years. Having no SLA for me indicates that we are led by people who do not care about things done properly and/or they do not have knowledge or necessary skillset to make necessary changes when they have to.</p>
<p>Field notes (Verbatim Account)</p>	<p>Identified and typed noted</p>
<p>Interviewer: How were you trained to use the SRM system at Open Distance e-Learning institution in order to support students?</p>	
<p>Res A: <i>I have received training on telephone etiquette, but I am not sure if that is the one is needed.</i></p>	<p>Participant A: I received training on telephone etiquette. I am not sure if I have received SRM training.</p>

	<p>✚ The first response was irrelevant to the question – Discard, it does not form part of the responses.</p>
<p>Res B: <i>I was told I must respond to calls immediately. I was also told I must respond to student calls within 48 hours. I was told to take notes of the students' needs when they call.</i></p>	<p>Participant B: I was told to answer calls immediately. I was told to answer student calls within 48 hours. I was told to take notes with student needs when they call.</p>
<p>Res C: <i>I do not remember receiving proper training on SRM system.</i></p>	<p>Participant C: I do not remember being properly trained to use SRM system.</p>
<p>Res D: <i>We did not receive the training. All we received was an A4 paper indicating the password on how to open the phone and the Options that were listed on the SRM system example: Exams, MyUnisa, call centre etc.</i></p>	<p>Participant D: We did not receive training on SRM system. I only received an A4 paper that had a password to use when I log-in to the phone. SRM system options were listed on the paper, <i>for example:</i> Exams, MyUnisa, call centre, etc.</p>
<p>Res E: <i>No, I was not trained. The only thing they did was to give us AVAYA and taught us how to log-in to AVAYA and we were given codes on how to take calls on AVAYA, so I was never given training.</i></p>	<p>Participant E: I was not trained in how to use SRM system. I was only taught how to log-in and use codes to take calls on AVAYA.</p>
<p>Res F: <i>Ohhh, how we were trained, I think it was five years ago. So, they did bring someone to come and assist us, wow, it's a long time ago, so I am not quite sure, but we were given a training on Options if I remember</i></p>	<p>Participant F: I was trained five years ago. Someone came to assist us and we were trained in options. No refresher training was provided to us in the last five years.</p>

<p><i>well, but no refresher training was offered since then.</i></p>	
<p>Res G: <i>There was no training that was provided when it was introduced. The only training that was offered was for the AVAYA landline telephone which is what we use to receive the calls and respond to calls, that was the only training I can say we got I terms of how to answer a call, how to call out, just basic functionalities of the AVAYA landline. The other thing was testing voice prompt, where we listened to different Options.</i></p>	<p>Participant G: The was no training when SRM system was introduced. We only received training on AVAYA landline telephone which is used to receive and respond to calls. We also tested the voice prompt where we listed to different options.</p>
<p>Field Notes (Verbatim Account)</p>	<p>Identified and typed notes</p>
<p>Interviewer: Do you have any suggestions for improving the SRM system?</p>	
<p>Res A: <i>Yaa, I think if SRM system can be fixed. Calls should be referred to where it should be referred, it will assist us to assist students with immediate effect.</i></p>	<p>Participant A: I think SRM system can be fixed. Calls should be routed to where the student needs, then this way it will assist us to respond to student enquiries immediately.</p>

<p>Res B: <i>Time Management is important. Student calls should be answered within three rings, at UNISA it just keeps ringing and ringing going through all Departments until it lends to Contact Centre, and the problem with this is that you find that, that query is not supposed to come to Contact Centre. The student calls were not answered by other Departments until it was re-directed to call centre, but still such calls could not be answered by the call centre due to its complexity. call-centre consultants ended up providing the students with direct e-mail address of such Departments and also take students numbers with a hope of bridging the information gap between Departments and students, however, the challenge with this approach it is the time it takes before the query is resolved – it is long.</i></p>	<p>Participant B: Time management is crucial. Students’ calls should be answered within three rings instead of a call keeping ringing on a queue from one department to another without an answer until it is re-directed to the contact centre where a student query was not selected to.</p> <p>Calls that were re-directed to the call centre could not be resolved by the call centre owing to the complexity of those student enquiries. Consultants bridge the gap by providing students with the email address of the department to get their enquiries resolved.</p> <p>This process takes time before a student query is resolved.</p>
<p>Res C: <i>We need the right people who will monitor SRM system risks on a full-time basis.</i></p>	<p>Participant C: There is a need for full-time people to monitor SRM system risks.</p>
<p>Res D: <i>Since other Departments are not answering student calls, it is better to put only One Option, which is a call centre. Minimising telephone Options on SRM system it will help the students not to hold for a long time on telephone without an answer or assistance from other Departments.</i></p>	<p>Participant D: I suggest that SRM system should only have a call centre option as other departments are not answering student calls.</p>

<p>Res E: <i>The first one will be support from other Departments.</i></p>	<p>Participant E: I suggest other departments support the call centre.</p>
<p>Res F: <i>My suggestion will be if there can be warm bodies from other Departments where a student can be transferred, because usually it comes back to the Contact Centre and if you tell a student we can't assist, they will say, but, we pressed the relevant Option, however, you still tell us you can't assist and by so, you cannot explain to the students the internal affairs that those people are not taking calls, or they are not linked , or they refuse to take calls, or to participate in this SRM, so my suggestion is they can have one-point of contact which is Contact Centre only, and not have all those other things because they are not working. Or if they give call centre functions to close those queries, if they are not able to link those Options.</i></p>	<p>Participant F: I suggest that other departments have warm bodies where students' calls can be transferred. I suggest that the university has a contact centre as one-point of contact instead of having all SRM options that are not working. call centre to be provided with functions to resolve student enquiries if they are not able to link those options.</p>
<p>Res G: <i>The first suggestion that I will have been obviously the system has its abilities that can enhance the support that we give to the students. The University might have procured it with lot of money, but currently I feel it is a wasted expenditure, so my suggestion will be to just zoom into or tap back into why the system was procured, so that there can be business analysis of how then it can be fully effective because I feel we just procured this thing and that is powerful and that can be able to help the institution, but it is just sitting there dormant without it being optimally utilised so that we can find ourselves giving our students great support, that will be my first suggestion, just to re-visit the system, why did we procure it? How can we then implement those things for the betterment of the support that we give</i></p>	<p>Participant G: The SRM system has its abilities that can enhance student support. My suggestion is "zoom" in and check why the SRM system was procured by the university. Do business analysis on how the SRM system can be used effectively.</p> <p>The SRM system is a powerful system that can help the institution; however, it is currently sitting dormant without being optimally utilised for excellent support to students. Check how can the SRM system be implemented to assist consultants to support students.</p>

the students, obviously that will lead to the SRM system for it to be utilised to its fullest capacity, it needs intellects, it needs people that are skilled, that have the right skill set, that have the right information, that have the right passion in terms of Customer Care and also the care of the consultants, because these are the people who will utilise the system to its potential, its fullest capacities, so it needs people that are skilled in knowledge of Contact Centres and this will also mean that people who will benchmark with other Universities that have used it so that we can be able to see its success stories and how they did it and how we can do it, or how we can do it even better.

The other suggestion that I have will be that, while the above will be happening, because currently what we have is frustrating the students, why do we still have it? Why do we still have these Options that are frustrating the students, that are frustrating the consultants? They must be scraped out, and it will then give that mentality to students or the caller, that when they call obviously I am at the Contact Centre, and whoever receives my call, if they cannot help me then they will direct it to the relevant Department, so that will be my third suggestion, we move students, it is frustrating students, and really I do not see its use because we do not have relationship with back-office.

My next suggestion will be that, Contact Centre cannot work in silos because the Contact Centre is just the first-point of contact for the outside world, for the students, so that means we need to have linkage or relationships with support departments, I mean UNISA is a very big institution and there

The SRM system needs intellects, skilled people that have the right information and passion for customer care, and care for call-centre consultants. People who have knowledge of the contact centre and can be able to benchmark with other universities that have successfully implemented the SRM system and hear their success “stories” of how they have done it and how UNISA can do it better.

Other options are frustrating students; I suggest they must be removed from the SRM system, except for the contact- centre option. Contact centre must not work in isolation. Work relationship is crucial, there must be an SLA between the contact centre and other departments for student complex enquiries to be responded on time and correctly.

<p><i>are so many different puzzles that make it to function so well, so the Contact Centre will have to be linked to these different pieces of the puzzle, and for me that will be through the Service Level Agreement, because that way, when enquiries are received, we will push it to where it is supposed to go, if the information that is required by the student is complex, then that way we can ensure that those enquiries are attended to on time and that the responses are correct responses because they are coming from the Departments that are the process owners.</i></p>	
<p>Field Notes (Verbatim Account)</p>	<p>Identified and typed notes</p>
<p>Interviewer: Would you like to add anything else?</p>	
<p>Res A: <i>Us staff members must work and do what we are supposed to do and what we are paid for. The system does not have a problem, the problem is with us people.</i></p>	<p>Participant A: Staff members must commit to work. The SRM system does not have a problem, the problem is with us staff.</p>
<p>Res B: <i>Within the Contact Centre they have to motivate the workers. They have to acknowledge workers. They have to research what the workers need. They have to motivate us to study. They must develop us so we can grow, not necessarily to be given money, but to be skilled consultants.</i></p>	<p>Participant B: Contact centre employees must be motivated. They must acknowledge employees. They must find out what are the needs of the employees. Employees must be motivated to study. Employee development programmes for career growth and for consultants to have skills should be encouraged above monetary incentives.</p>

<p>Res C: <i>There is poor management within the call centre. We need people with the right skills to manage the call centre in order to support students. The University is adding so many platforms like Chats, while SRM system is still used optimally to me additional platforms are not solving the challenges experienced on student support services. We can add another technology, but if they do not find solution, to me it is useless. Why do we have so many modes of communication that are not working? To me it is a wasteful expenditure. We are failing students with the SRM system.</i></p>	<p>Participant C: There is inadequate management within the call centre. The right skillset to manage the call centre for student support is recommended. Adding many platforms like chats does not solve problems, while SRM system is still not optimally utilised to resolve the challenges experienced on student support services. Additional technology that does not bring solution is not helpful. Additional modes of communication that are not working result in wasteful expenditures. We are failing students with SRM system.</p>
<p>Res D: <i>There seems to be a network problem with where call centre is operating from. Currently the University has introduced an OTP number, sometimes a consultant can wait for an hour before an OTP number is generated by the system. The challenge with a delayed OTP is when six call centre is waiting for OTP at the same time, it will mean six hours will be lost, and during this time there will be high number of abandoned student calls.</i></p>	<p>Participant D: There is a network problem at the call centre. Sometimes a consultant can wait for an hour before an OTP number is generated by the system to enable a consultant to assist a student, more especially when there are six consultants waiting for OTP at the same time. This creates a challenge for student support. As a result, a high number of student calls are abandoned.</p>
<p>Res E: <i>UNISA management as the call centre we are the first point of the University, they must take it into consideration that we are struggling and they must make sure they help the people who are running SRM to run smoothly so they can also communicate with other Departments to join-in so that the SRM is running smoothly and all enquiries that are coming to call centre are being resolved by those Departments, so actually they must</i></p>	<p>Participant E: The call centre is struggling. The people who are managing SRM system must be assisted so call centre can be able to work in collaboration with other departments. Staff who are managing the SRM system must have good relationship with other departments.</p>

<p><i>make sure that the people who are running the SRM they have good relationship with Departments. Support Departments are the ones who have power to amend or edit any information about the student. As the call centre we are only able to view the problem, but do not have the power to edit anything.</i></p>	<p>Support departments are the only employees who have access to amend and edit student information in the system. The call centre only has viewing functions.</p>
<p>Res F: <i>Yaa, my suggestion would be if they can give continuous support like refresher trainings. If people cannot hold on to information, saying is theirs. If students can have access to all those platforms, for example, if a call comes through to the call centre, I must be able to give the same response as the person from other Departments, people must not hold back to knowledge.</i></p>	<p>Participant F: I suggest refresher training should be provided to call-centre consultants. I must be able to provide the same information as that of the support departments. There must be knowledge sharing.</p>
<p>Res G: <i>The only other thing that I could add is, that the University needs to approach the Contact Centre as a whole in terms of the systems that are required for the consultants, the management that is hired with the Contact Centre as a high priority, not second to, but probably equivalent to academic support, because I believe a brand is very important and a brand can be tainted by that first-point of contact with the system, or that first-point of contact with the consultants who will be on the other side of the system in terms of the body of knowledge of the product and also in terms of the expertise, and in addition to that, that the Contact Centre should be led by management, this include at the team leader level, supervisor level, at management level and at Deputy Director level with people that have got the skill set that is required with the people that</i></p>	<p>Participant G: The university should communicate with the call centre regarding the systems that are needed for student support. Contact centre must be prioritised, equivalent to academic support.</p> <p>Inadequate call-centre student support can taint UNISA’s brand. The contact centre should be led by deputy director, supervisors, and team leaders with required skill set, who can benchmark the UNISA call centre with other institutions. The call centre need leadership that can make informed decisions.</p>

know what need to be done and need to be benchmarked. People who are constantly seeking ways to do things better. People that are constantly want to think out of the box, and that are quick to make the decision to change it, so then we can quickly move to something that could work, so in a nut shell, what I trying to say is that, the Contact Centre is important that there be a skill set audit, there be a process audit, and also that, there be an audit on the quality of the service that is coming out of the Contact Centre, and when I say quality of the service I mean in everything, the quality of the system, is the system assisting UNISA or is it frustrating its students? Is the system then leading to a bad reputation for the institution? Are people who are supposed to be the Executive Management, are they for the brand in terms of how they run it, in terms of strategies, in terms of processes, in terms of workflow, the skills and knowledge? Is what they are currently investing in beneficial for Unisa?

Because we are dealing with students, we are dealing with education, therefore, it means we are dealing with communities, we are dealing with households, and at the end we are dealing with the economy of the county, so one frustration by the system that does not work could discourage somebody to no longer want to study, or one frustration by incorrect response from consultant could send a student to a different direction, and that will affect their educational journey that could waste a student time because they were advised wrongly, so that what I could add on it, that UNISA needs to invest in the Contact Centre as number one priority equivalent to academic or curriculum support because both to me are equally important.

It is suggested that the contact centre should have skillset audit, a process audit and quality service, including quality of the systems used by the contact centre should be audited. There should be an audit to check whether systems are assisting UNISA or frustrating students. UNISA should invest in the contact centre as it does to academic support.

Appendix 13: Exporting thematic information from hard copy to soft copy

