

Investigating the factors affecting adoption of new technologies in mobile phone retail stores in the North West province

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Mini-dissertation accepted in partial fulfilment of the requirements for the degree *Masters of Business Administration* at the North-West University

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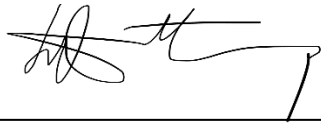
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DECLARATION

I, Moses Hartzenberg, hereby declare that this mini-dissertation entitled, **investigating the factors affecting adoption of new technologies in mobile phone retail stores in the North West Province**, is my own work and declare that, to the best extent possible, the work contained herein is my own.

The mini-dissertation is submitted in partial fulfilment with the requirements set for the degree Master of Business Administration (MBA) at the North West University, Business School, Potchefstroom Campus and have not been submitted for any degree or to any another university.



Signed

Date

07 December 2021

Moses Hartzenberg

DEDICATION

This research is dedicated to the following people that played a pivotal role in life, my upbringing and my education.

My grandmother Elsie Isaacs, who raised me and encouraged education, excellence and humility.

To my late father, Willem Hartzenberg,

To my mother, Cecilia Hartzenberg,

To my wife, Prudence Hartzenberg and

To my two sons, Joshua Hartzenberg and Carllyle Bostander

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ABSTRACT

Technology adoption might be a system of advantage for businesses, and more research is being undertaken to show that technology adoption would be beneficial for organisations. As a result, the purpose of this research was to look at the factors that influence the adoption of new technologies in mobile phone retail outlets in the North West Province. The study identified the challenges and obstacles that arose from innovation adoption that prevents organisations from capitalising on opportunities. The study used a qualitative research technique, balancing ethics and relying on the participants' subjective meanings based on their experiences with the event. Interviews were conducted with 10 participants across Vodacom's mobile retail stores in the North West Province and randomly selected, including store owners, managers, administrative staff, frontline staff, technical and sales staff. The study further followed an interpretivism paradigm based on the experience of individuals who work in Vodacom's mobile phone retail stores in the North West Province. The findings indicated that there was also agreement that technology enhances people's lives and improves business and operational efficiency. Lack of knowledge, training, and the number of new technologies released were all noted as negatives, especially given a little time allotted to use and optimise them.

KEY TERMS

Technology adoption, innovation, Vodacom' mobile retail stores, resistance to change, social norms, perceived usefulness, ease of use, 4IR, a competitive advantage and interpretivism.

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LIST OF ABBREVIATIONS

AI:	Artificial Intelligence	1
3D:	Three Dimensional	1
TAM:	Technology Acceptance Model/s.....	2
E-Commerce:	Electronic Commerce	3
M-Commerce:	Mobile Commerce	3
ICT:	Information and Communications Technology.....	3
COVID-19:	Coronavirus Disease of 2019	3
ZAR:	South African Rand.....	3
4IR:	Fourth Industrial Revolution	4
MIS:	Management Information Systems.....	17
HCI:	Human Computer Interaction	17
TRA:	Theory of Reasoned Action.....	17
IT:	Information Technology.....	18
ERP:	Enterprise Resource Planning.....	18
CRM:	Customer Relationship Management	18
HCM:	Human Capital Management.....	18
CM:	Change Management.....	19
TPB:	Theory of Planned Behaviour	28
IS:	Information Systems	28
BIS:	Business Information Systems.....	29
TELCO:	Technology Company	29

B2B:	Business to Business	30
TRI:	Theory Readiness Index	30
ICASA:	Independent Communications Authority of South Africa.....	31
ME:	Managing Executive (Regional).....	42
P1 to P10:	Participant One to Participant Ten.....	43
M2:	Morpheus Two	47
VPP:	Visitors Partner Portal	47
OTS:	Over the Shoulder	47
Q-Nomy:	Queue Management	48
OEM:	Original Equipment Manufacturer	55

CHAPTER 1: NATURE AND SCOPE OF THE STUDY

1.1 Introduction

The business environment, mainly in the digital and mobile industry, has become exceedingly competitive and constantly changing, driven by technology and innovation. As a result, technology has transformed the way organisations do business and influenced operational efficiencies, empowering consumers and has offered them options to select alternative products and services. In addition, general-purpose technologies have paved the way for new generation technologies, including artificial intelligence (AI) (Bresnahan, 2010), enabling connected vehicles, biometrics, and intelligent devices, creating momentum on global economic growth and inclusion thereof (Fuzhan, 2019:2). Furthermore, it is driving rapid change through the technology push, with online health services, where patients have the option of Three Dimensional (3D) online tours, assisted decision-making, and or online mental health services in the comfort of their home and the palm of their hand, thus delivering quicker access, self-care, improving the quality of life, and encouraging consumers to engage different technologies (Laing, 2017:3).

While change is natural and expected, resistance to change is equally natural to keep abreast with the ever-changing business environment. Various factors drive resistance to change and, in the case of technology adoption, work against the uptake of new technologies, limiting the adaptive capabilities of businesses (Fuzhan, 2019:7). Unfortunately, the mobile phone industry has not been spared from resistance to the uptake of new systems specially designed to improve operations and interactions between businesses and clients. Therefore, it was necessary to examine the factors slowing the acceptance rate and stalling the uptake of otherwise beneficial applications and systems to expedite the deployment of new systems.

The decision by persons (staff members or customers), to either engage or not to engage technology could mean various things, where non-engagement could mean never have been engaged or disengaged, including the disruption of prior engagement at various points (Laing, 2017:4). Further to this are the organisation-level characteristics that lead to failing innovations and people's reactions to different technology impacts (Liao *et al.*, 2015:834). Functional barriers also contribute significantly to innovation failures, leading to verbalised complaints, resulting in a word-of-mouth spread of resistance — further leading to non-adoption due to stereotypes, rumours, bad experiences, or indirect unobservable characteristics. In the South African rural context, status is associated with brand names, and cultural influences impact the adoption of various technologies. People only acknowledge a brand, technology or product, if it is in harmony with their self-image. This study also appreciates that the appropriate behaviour during and after

a technology launch by sponsors may encourage or discourage technology uptake (Liao *et al.*, 2015:836). Kleijnen *et al.* (2009) have referenced two barriers, addressing consumers' (and in this study, employees) psychological needs, mainly tradition and perceived image.

Converged solutions increase the capability of technology and computing devices, enabling organisations to increase profitability through an increase in the use of technology and innovation. The advent of mobile computing has also contributed to a broader reach, breaking geographical barriers and changing how people interact and do business. This new business channel drives up sales aggressively. Technology adoption in developed countries is continuously increasing, with emerging economies being the fastest growing in technology adoption. In addition, the Arab countries are considered the fastest growing regions in terms of mobile phone penetration, but appear to be slow in response with the adoption of m-commerce (Faqih & Jaradat, 2015:37). Furthermore, there has been a growing preference for innovation and innovative platforms in emerging nations in Asia, Africa, and the Middle East, when demand had previously come from established economies. Developed countries like America, demonstrate that students are more comfortable and favour innovative technologies, compared to less developed economies like Asia. This clearly demonstrates the importance of understanding the variables influencing technology adoption, comparing developed economies in relation to emerging economies (El-Masri & Tarhini, 2017).

The Technology Acceptance Models (TAM) form part of the theoretical framework for this research study, with a more significant focus on TAM 3, due to the advances made to its limitations. TAM 3 focus on various important issues, including, but not limited to, system characteristics, individual differences, the conditions for facilitating the new technology, and the impact of social influence (Faqih & Jaradat, 2015:38). The study adds to the body of knowledge through an empirical study that identified challenges in the adoption process, focusing on employees who work in the frontline of new technologies. This study aimed to understand the slow adoption of new technologies in mobile retail stores, specifically in the North West Province.

1.2 Background

The internet, data, innovation, and different technologies play an essential role in globalisation and in improving society. Furthermore, technology being at the forefront of globalisation, various systems, components, people and innovations, play an integral part in the successful rollout of different capabilities, ensuring that people around the globe can communicate, interact and do business (Obiso *et al.*, 2019:214). The rapid change in technological capabilities requires the constant introduction of innovation and new technologies. Hecklau *et al.* (2016) propose that employee qualifications should be streamlined to address the complex workplace problems,

allowing employees to take on more advanced roles, giving them complex decision-making capabilities. By integrating human capital and technology, organisations can offer improved customer services at breakneck speeds, allowing faster consumption and a rinse repeat formula that can drive up margins. In light of the above, technology enablers include Mobile, Cloud Computing, Data Analytics, Big Data, Machine to Machine, Robotics, E-Commerce, M-Commerce, and consumer Self Services (Almada-Lobo, 2015:16). All these require human interaction, albeit through setup, configuration or usage, thus streamlining employee roles.

Organisations have to take on bold steps to gain a competitive advantage through introducing new technologies. However, they are faced with difficulty introducing new information and communications technology (ICT) applications and systems on many occasions. Individual resistance to change affects the relationship between innovation, operational effectiveness, and efficiency through perceived risk (Röth & Spieth, 2019). These new systems and applications are designed to enhance efficiencies and effectiveness in operations (Prinz, 2018:21-26). However, technological interactions with clients have been resisted altogether, and the uptake rate by retail mobile businesses is anomalous. Furthermore, technology adoption requires new ways of working, making severe impacts on business models and the value chains, which discourages adopters or potential adopters (Obiso *et al.*, 2019:215, 234-235). The challenges presented by this predicament are three-fold: (i) on the part of the company, protracted market penetration reduces business profitability, (ii) retail business misses the benefits of timely deploying new business systems and applications, and (iii) the retail businesses slow in adapting systems face the risk of losing customers to business with streamlined systems, ultimately being outcompeted.

Despite the drastic change in the workplace and the Coronavirus Disease of 2019 (COVID-19), Vodacom South Africa has seen a rapid increase in online customer activity. It has recorded 39.4 million subscribers for the first quarter of June 2020, and indicated that all retail channels had become busy customer touchpoints over the last two decades. The mobile operator has declined one comma nine (1.9) million subscribers but grew in the average amount spent per customer (from 88.00 ZAR to 99.00 ZAR), indicating that data customers had increased by six comma five percent (6,5%) for the same period (Mckane, 2020). This means that although brick and mortar retail stores have seen a decline in sales due to COVID-19, customer activity online has increased, showing a higher propensity toward digital activity. Vodacom's strategic objectives are: achieving a differentiated customer experience on network performance, and offering the best value, including driving digital migration for employees and customers alike (Vodacom, 2016). Vodacom is constantly trying to improve the customer experience at these touchpoints, and one of the ways to address this is to introduce new technologies, new systems, apparatus, and

processes. With a differentiated customer experience and best value, technological advancements aim to service customers end-to-end in possibly under ten (10) minutes.

The constant change in customer expectations and consumer needs renders markets extremely volatile and market segments very complex. On the other hand, production, and manufacturing improve through the deployment of innovative technology systems to drive efficiencies and create the necessary flexibility and capacity. Moreover, they encourage human resources to employ improved qualification strategies and enable employees to become more strategic in order to meet the growing challenges in the digital age (Hecklau *et al.*, 2016). Further to this, the Fourth (4th) Industrial Revolution (4IR) encourages investment in technology through human capital and education, identifying a growing need to learn new competencies in line with 4IR (Kamaruzaman *et al.*, 2019:56-58). Therefore, this research ascertained the pertinent factors in the timely acceptance of new technologies to deal with them proactively and expedited the introduction and uptake of new systems and applications.

1.3 Problem Statement

The capacity of a company to adapt to an ever-changing business environment provides it with a significant competitive edge, especially in the mobile retail market. Rapid acceptance and deployment of new technologies, applications, and systems increase operational efficiencies and effectiveness. The slow adoption of new technologies have negative implications like loss of revenue, poor customer experience, delays on investment return and waste.

Developments in the telecommunications industry have had a major impact on telephony services, enabling users to exchange data, communicate, and use other services offered by providers like Vodacom South Africa. Mobile telecommunications services are technologies that users have accepted. At the same time, these users require a high level of quality, superior service and competitive pricing (Abatan & Maharaj, 2014:64). The mentioned factors have a significant impact on the adoption or non-adoption of mobile telecommunication services, which is another possible driver for technology and innovation adoption, addressing academic and social needs (Abatan & Maharaj, 2014:66). The telecommunications industry is extremely fast paced and has a continuous influx of new technological developments, change in processes and employees into the technology market, from universities and colleges. In today's global world, where processes are interconnected, organisations, particularly in the telecommunications industry, face increasing challenges. Innovation capacity, including user capabilities, the competitive landscape and speed to market, are all essential drivers of adoption (Hecklau *et al.*, 2016).

Customer segmentation and Big Data encourage technology customisation in order to address individual customer needs. However, consumer age and various other demographical information, also play an essential role in technology development decision-making (Diako, 2011). Diako (2011) has also indicated in his study that the relationship between age and technology adoption has been well researched. However, the propensity for senior citizens to adopt, i.e., digital banking services, is limited. Customers are also pretty empowered to select alternative options and better services through the internet and their use of social media. The slow uptake of new business and operational technologies, including systems, has threefold negative implications; (i) There are lost or missed business opportunities on the part of both the promoting company and the retail companies, where innovation is not being delivered with the requisite speed to market. (ii) Therefore, organisations see the reduced capability to timely recoup invested capital or break even on the part of the promoting company, due to slow technology adoption, and (iii) waste resulting from the use of inadequate and outdated business systems on the part of retail business. Further challenges are: new technology rollout and training delays due to capacity challenges, system integration problems, and user limitations. Any delays in training rollout or other capacity challenges, negatively affect operational and financial sustainability. Likewise, any integration or user problems affect improved efficiencies and have a negative bearing on customers. This research primarily seeks to investigate the limitations of the timely acceptance of new systems and technologies to expedite and smoothen the uptake of new business systems and applications in ways that benefit both the promoting company and the downstream mobile retail business. As a result, this research developed insights that: will speed up acceptance of new technologies, address the handicaps proactively; and allow the retail businesses to optimise the technological advances. Furthermore, it identified where opportunities are missed that is how to increase the return on invested capital; speed up break-even; and reduce waste, including operational and system improvements opportunities.

1.4 Rationale and Significance of The Study

Product development is an expensive process, and new products, systems and applications must find their place in the market and allow the company to recoup invested capital and make a profit in the shortest possible time. Companies must also predict product specifications and sales volumes for specific client categories. Significant failure rates develop, due to a lack of clarity in comprehending the customers' expectations (Ogawa & Piller, 2006). What further exacerbates this is the product life cycles that have become shorter as new products and services and better ways of doing business are continuously improving. Therefore, the use of technology has increased efficiencies and has improved profitability. A workplace example is the introduction of biometric systems in hotels that promise reduced costs and fraud, and increase transactional

processing and convenience, including security. However, the success of these systems was subject to the adoption of technology by employees and the organisation's responsibility to understand why individuals accept or reject technology innovation — using TAM as a proven model to understand human attitudes and behaviour towards technology acceptance (Ko & Yu, 2015).

They were making it imperative to fully appreciate the factors inimical to the speedy and timely acceptance of new business operating systems and processes, intending to benefit from new technologies for a distinct competitive advantage. Early adopters will also play an essential role in future technology development, adding value to emerging technologies and helping organisations gain customer feedback on innovation. Furthermore, this would shape future product and service development, placing both the organisation and early innovation adopters as pioneers and trendsetters for growth (Weitzel, 2019). Further spin-offs include improved customer service through reduced response service times, increasing convenience using Omni channels and segmented propositions, offering real-time solutions. Therefore, this research builds into the body of knowledge, marketing, addressing the resistance factors unique to Vodacom mobile stores in the North West Province, and contributes to uncovering existing theories, evaluating alternative theories, and identifying the discipline, paradigms, and generating further analogies, models, and frameworks (Hassan *et al.*, 2019).

1.5 Research Objectives

The central objective of the study was to investigate the factors affecting the timely acceptance of new business operating systems and applications in the mobile industry and to come up with ways to reduce resistance and to expedite the acceptance rate by:

1. Investigating the factors that influence the acceptance of new business operating systems and applications in the mobile retail industry,
2. Determining how the deployment and acceptance of new technologies can be expedited in the mobile retail industry, and
3. Making recommendations on the above findings, focussing on outlining these findings, assessing previous reports, following constraints and drawing parallels between interventions.

1.6 Research Questions

Innovation is always attempting to determine if technology would adapt to and meet the target audience's demands, taking into account variables that enable people to accept and use new

technologies (Diako, 2011:16). Therefore, this research broadly addressed the questions below, using TAM to explain user adoption of technological advances.

1. What factors enhance and influence the acceptance of new technologies in mobile retail stores in the North West?
4. How can the timely introduction of new business applications and systems be leveraged in mobile retail stores in North West?
5. How can the recommendations be applied to Vodacom's mobile retail stores in the North West Province?

1.7 Research Paradigm

This study adopted an interpretivism research paradigm, underpinning that people are creative and deliberate in their actions while actively constructing their social world; therefore people express their own thoughts, words and actions. It is further acknowledging that people's reality is complex and multi-layered, allowing for different interpretations through various interactions. The theory came after the research; thus, it was based on the facts collected throughout the research process. As a result, data were gathered and analysed in a grounded theory-like manner (Kivunja & Kuyini, 2017).

While this research attempted to solve an issue at work, where people have gathered work experience over a period of time, the interpretivism paradigm has emphasised that knowledge should be established on the experience of those who work inside the organisation. In the context of the population's social reality, this acknowledges that it is impossible to remove people from their social setting as their interpretation is linked to sense-making (Bhattacharjee, 2010). Interpretivism asks if the organisation exists outside the conceptions of its social players (Bryman *et al.*, 2018:20).

It is seeking a solution to the problem that is not constrained by ontological or epistemological viewpoints. This paradigm guides the qualitative approach to capitalise on the strength of a naturalist research methodology — balancing axiology, using participants' subjective meaning as they have experienced the phenomenon (Pizarro, 2014).

1.8 The Research Method

This study adopted the qualitative research methodology, using the grounded theory inductively by systematically analysing the data (Bryman *et al.* 2018:41; McCombes, 2021). This methodology was considered effective and efficient in meeting the objectives of the research

(Creswell, 1998). This study further comprised a non-probability sample size determined by the saturation point drawn from the employees of mobile retail shops. The interviews consisted of (thirteen) 13 standard interview questions. This provided an effective way to collect quality information used to obtain more profound insight into participants' feelings, perceptions, and ideas on accepting new business systems and has generated rich and detailed information as participants spoke their minds (Patton, 1990).

1.9 Research Design

The grounded theory approach was utilised in the study to create detailed explanations of complicated actions, processes, and transitions. This study used a systematic and simultaneous approach to data gathering and analysis (Mauldin, 2020), and followed a cross-sectional design, taking a qualitative research approach, using standard interviews and data without manipulation to compare different populations (Institute for work and health, 2015).

1.10 Research Process

Unstructured interviews were used to obtain data for the study. Data were analyzed by first identifying themes and then summarizing what the researchers have discovered during the interviews before putting the information into statistical methods.

1.10.1 Population

The study investigated a population of sales service consultants in mobile retail stores in the North West Province. The population refer to Vodacom South Africa's North West County, consumer sales and distribution, as the primary entity of analyses (Trochim, 2020). The target group comprised a diverse demographic, representative of the South African landscape, combining participants from deep rural areas to more developed areas. These employees included store managers, administrative staff, sales consultants, and technical (repair) staff, from different franchised and national chain stores, with varying employment timeframes, but no less than six months.

Therefore, the study investigated the factors affecting the adoption of new technologies in mobile retail stores in the North West Province, considering technology acceptance, perceived usefulness, and social influence, for technology adoption. Clearly defined units help with comparisons of relative precision and variations in error to make units meaningful (Glen, 2018). The unit of analysis is situated geographically in the Vodacom retail outlets in the North West Province. Therefore, the unit of analysis is not in the public domain but a specific organization and further demarcated to a specific business unit or functional role. The study focused on

Vodacom mobile store retail sales and service consultants, including store managers and owners. Depending on the store size, most store owners, store managers, and sales service consultants daily perform the same functions using the same technology systems, processes, and tools. However, the role would allow for small variations; for example, only managers will have access to specific reports and would be able to order stock daily.

1.10.2 Sample Technique and Size

This study followed non-probability sampling, using convenience sampling as a subset and focusing on the population and the sample studied. Non-probability sampling is concerned with conveying the external value of issues. In non-probability random sampling, the sample series and controls are usually stricter to size estimate techniques; non-probability sampling has a large sample size that is set by the aim of a given good component (Etikan & Bala. 2017).

The study utilised a non-probability sample size, determined by the saturation point, drawn from the employees of Vodacom retail shops, where the study consisted of standard interview questions.

1.10.3 Data Collection Instruments

The researcher requested and scheduled time with participants by setting up a pre-interview meeting with store managers and business owners. Thereafter the researcher conducted interviews using an interview guide. During the interviews standard questions were used to obtain high-quality data, while interviews allowed participants to express their thoughts, feelings and opinions in an interactive process that yielded valuable information.

1.10.4 Data Collection Field Work

After receiving approval from the organisation, fieldwork had begun as follows;

- Two weeks before the event, the researcher negotiated access with Gate Keepers (owners of mobile retail shops).
- With a copy of the authorization letter, the study targeted employees, store managers, and shop owners as an agent to describe the objective of the interviews, clarify any confusion, and answer any concerns.
- Participants have been informed that participation was optional once the researcher and shop managers have agreed, ensuring that no one was forced to participate.

- Participants were selected using a non-probability sampling approach that represents the total population and is based on availability, reaches, and accessibility.
- The sample was drawn from mobile retail outlets from the North West Province, based on the researcher's subjective judgment and theoretical and practical knowledge (Leard-Dissertation, 2012).
- Participants were notified of the data gathering method and how and where data are kept, data storage ethics, and data retrieval protocols.

The procedure was as follows:

- To assess trustworthiness, reliability, conformability, transferability, and authenticity, pre-testing (pilot) of interview questions was done.
- A qualitative interview was conducted face to face whenever feasible and at the convenience of the participants, following COVID-19 regulatory standards, to allow the researcher to explain concerns, investigate, and follow up on fresh leads.

As a safeguard against data loss, data were recorded with participants' agreement and taken during interviews (in the field).

Table 1-1: Interview process flow

1. Semi-structured telephone purpose discussion	2. Semi-structured interview	Video
		Telephone / Teams / Zoom
		Face-to-Face

1.10.5 Data Analysis

Content analysis techniques were used to analyze qualitative data, and research data would be distilled into particular codes and organized into specific themes. The information was analyzed using qualitative data analysis software (ATLAS.ti9), and the results displayed as graphs and tables. Following an inductive method, the detected themes were categorized based on similarity under the following themes: subjects, patterns, repetition, and concepts (Caulfield, 2019).

1.11 Demarcation of The Study

The researcher currently is a manager at Vodacom South Africa, servicing retail stores in the North West Province. This role gives the researcher access to data and information to conduct the study. Geographically, this research is delimited to North West Province and specifically to Vodacom's mobile retail stores only. The use of a qualitative research method limited the extent of scientific rigour. However, it was generating data that have been indicative of the factors that delay or progress the acceptability of new technologies.

Furthermore, non-probability sampling does not rely on randomisation, implying that the researcher may be prejudiced and unable to use all components of the population to be evenly represented in the sample (Singh, 2018). The study highlights the socio-cultural values in the adoption process of new technologies in the North West Province. Finally, the geographic selection of the unit of analysis was limited to Vodacom's mobile retail stores in the North West Province, which makes it difficult to generalise these findings (Faqih & Jaradat, 2015).

1.12 Ethical Considerations

Throughout the study project, axiology was taken into account, looking at the philosophical method to create value judgments by defining, assessing, and comprehending moral and erroneous conduct concerning the research. This study adhered to the highest possible level of ethical integrity throughout data collection, and processing, to data presentation. The primary objective was to ensure the protection of dignity, the rights and general welfare of participants as detailed below:

- Participation was based on voluntary participation and informed consent.
- Participants have been provided with appropriate information on the research purpose and intended use of the research, avoiding creating a sense of expectation which would have biased responses.
- The participant's right to refuse to participate in the process was reiterated, including the right to pull out even when the interviews have begun, without the need to give reasons.
- A brief explanation was given of how long their data were stored and how these would be used (Venkatesh & Bala, 2008).

They were allowed to go through the covering informed consent form, ensuring that they signed the form in acknowledgement.

1.13 Company Overview

The company in research, Vodacom South Africa, is a leading African communications and financial services company, servicing part of one hundred-and-twenty-three comma seven (123.7) million customers across the African continent, which offers a wide range of products and services. Vodacom's core value creation to the organisational investors, shareholders and other invested stakeholders is to connect (using technology), for a better future, where the organisation is transforming from a traditional telecommunication company (telco) to a digital technology company (techco). Underpinned are employee ideas, skills, experience and productivity by engaging in various ways; including internal communications, engagement applications, bi-annual surveys, and training development (Vodacom Group Limited, 2021:1-33).


Vodacom's future success in creating shareholder value should focus on human resource development by professionally educating and developing teams and individuals, by building specific competencies and by identifying defined actions in advance, a competency-based model should be used (Hecklau *et al.*, 2016). Technological advances, and the overall technology transformation, are essential to human beings' welfare by facilitating industrial transformation, increasing knowledge, and promoting modernisation (Fuzhan, 2019), meaning that, corporate leaders have two options; (i) they have to either figure out how these technologies would transform their businesses, and (ii) leverage on them or face disruption by other competing businesses who would figure it out first. Therefore, the need is to capitalise on the inevitable technological changes for a competitive edge or risk, operating in the marketplace from a position of technological weakness.

Failure to adopt new technologies at the right time, for whatever reasons, presents short to long-term consequences for the business. The benefits of accepting new technology include, but is not limited to, improved operational efficiencies and effectiveness in the business processes, expanding the scope of human activity through variety. In addition, technology further improves people's capabilities to do things faster through better control, coordination and collaboration (Coover & Thompson, 2014:351-352). There is, for example, a low usage rate of technology (services) from senior citizens in the banking industry, which require banks to fully understand the technological readiness of that particular segment, and the behaviours unfavourable to the adoption, in order to change these behaviours to a more favourable position (Diako, 2011).

1.14 Operational Overview

With its operations in all provinces across South African, Vodacom South Africa has divided its operations into three focus areas.

Table 1-2: Vodacom Operations

	Vodacom South Africa		
	1. Commercial	2. Enterprise	3. Technology
	4. Financial Services		

The business is divided into franchised retail, national chains, call centres and online stores, including wholesalers and other distribution partners (Linford, 2018).

This study focused on the franchised retail store staff and the readiness for adoption; their behaviours primarily based on technology and the introduction of various technologies into their work environment. This included looking at operational, strategic drivers, mainly digital services, the introduction of different projects, and human resources development to create shareholder value.

Technology is an integral part of improving efficiencies and ensuring effective operations, particularly at the store level. Business leaders in Vodacom have an opportunity to ensure a competitive advantage through which business sustainability can be guaranteed. Fred Davis has introduced the Technology Acceptance Model (TAM) in 1989 to clarify how individuals accept and utilise technology. He has built the model around perceived usefulness, perceived ease of use as significant drivers around user attitudes and behaviour around technology acceptance (Davis, 1989). The TAM model is widely used and is a valuable tool to study the core drivers of perceived usefulness and ease of use. TAM 3 was specifically developed for computer technology and innovation, with its comprehensive dimensions (Diako, 2011). Therefore, the Technology Acceptance Model, with specific reference to TAM 3, is the most suitable model for this study.

1.15 Layout and Plan of The Study

The study has been broken down into five (5) chapters:

Chapter 1: Introduction

This chapter provides an overview of the impact of innovation and how technology has changed the way organisations operate. Introducing technology adoption, in comparison to non-adoption and resistance to change, further clarifies the study's background and rationale, the problem statement, the research objectives, paradigm, methodology, design, scope, limitations of the study, and ethical considerations.

Chapter 1 further gives an overview of the organisation under investigation used for the data collection. This provides a framework around the theory and develops discussions introducing the literature on technology adoption. The subsets consider an introduction to the organisation, an overview of its operations, the impact of technology on companies and individuals, the benefits and consequences of early versus late adoption, and the Technology Acceptance Model (TAM).

Chapter 2: Literature Review

This chapter reviews the influence of technology models, e-business and its advantages to organisations. It also discusses technology change, the process for change management and how these changes influence consumer expectations. Furthermore, it discusses the theoretical and conceptual framework in light of the Technology Acceptance Models (TAM), the key determinants, challenges in technology uptake, and the impact of the different factors, like perceived usefulness and ease of use.

Chapter 3: Research Methodology

This chapter focuses on the applied research methodology, starting with an introduction, the demographics, exposure to different innovations, measuring acceptance, and innovation readiness. This chapter further explains the data collection through interview questions, conducted either face-to-face or via electronic medium, the limitations of the study, and ends with a conclusion.

Chapter 4: Data Evaluation and Analysis

This chapter introduces an overview of the data collected and how these have been coded and analysed. The chapter further refers to TAM and how these instruments have contributed to the analysis. Finally, the analysis further goes into the findings, considering perceived usefulness, perceived ease of use, the theories of change, and various adoption stages.

Chapter 5: Summary, Recommendations and Conclusion

This chapter includes an introduction, a research overview, detailed findings, and suggestions.

1.16 Conclusion

Product development is an expensive process, and new products, systems, and applications must find their place in the market and allow the company to recoup invested capital and profit in the shortest possible time. Given these product life cycles, this approach has become limited as new products and services and better ways of doing business improved, thus making it imperative to

fully appreciate the factors inimical to the speedy and timely acceptance of new business operating systems and processes. Therefore, this research clarified the characteristics that encouraged the adoption of new technologies; identified the attributes that supported customers and employees in using new technologies; and overcame adoption hesitation. Furthermore, the study opened windows that understood resistance to adopting new technologies and identified opportunities for building bridges, to overcome adoption inertia while classifying key barriers (Heinze, 2016:4), and to get a distinct and competitive edge by utilising innovative technology. This research therefore has built into the body of knowledge, decision science for information technology, and addressed the resistance factors unique to South Africa.

This chapter also provided a synopsis of the mini-dissertation and contextualised the theoretical framework of the study. Further to this, the chapter explained how the study contributes to the barriers that discouraged technology adoption and identified opportunities to overcome adoption hesitation. This was followed by an overview of the organisation, which created a framework around the theory and discussed the adoption impact, benefits and consequences. This section further provided a summation of contemporary literature on the adoption of new technologies. Attention was focused on the resistance and factors that affect the timely adoption of new technologies. A theoretical framework that informed this research was briefly addressed.

The next chapter (Chapter 2) discusses the literature on the Technology Acceptance Models (TAM) and assessing customers' technology readiness, including the impact of innovation on employee adoption or non-adoption of technology.

CHAPTER 2: LITERATURE REVIEW

2.1 Overview and Introduction

The Technology Acceptance Model (TAM) is regarded as the most important and widely used framework for characterising a person's acceptance and use of technology. TAM is based on the Theory of Reasoned Action by Ajzen and Fishbein (1980), and this theory was initially presented by Davis (Davis, 1986). He believes that an individual's adoption of data systems is controlled by two key factors: 1. perceived usefulness and 2. perceived ease of use. TAM was derived from integrating three specific disciplines: Management Information Systems (MIS) attitude research; MIS laboratory research; and Human-computer Interaction (HCI). Understanding that organisations want to improve performance, but that performance is gravely impacted by the fact that humans decide to use or not to use the technology is imperative (Davis, 1987).

The two critical components of TAM, perceived usefulness and ease of use, are critical determinants for technology acceptance. The theory of reasoned action (TRA) proposed by Ajzen and Fishbein (1980) provides a framework for understanding how these social norms of compliance, conformity, and identification may affect behaviour. They have dubbed these social effects "subjective norms" and demonstrated how these, together with personally held views, could be utilised to predict conduct. Subjective norms are defined as "felt external influences to use or not (to) use a technology." The subjective norm of individuals is the obligation they feel from others in the setting to utilise the system. Subjective norm denotes whether others influence consumers in technology usage and adoption (Shen *et al.*, 2006). Electronic commerce (EC) has grown in popularity in emerging economies, where the internet penetration rate has risen dramatically. This rise is affected by the many stages of technological advancement as it progressed over time (Amin & Hussin, 2014). Furthermore, technology adoption has been opposed in many forms throughout history, with strong opposition constituting the biggest threat to innovation acceptance (Park & Koh, 2016).

2.2 E-commerce

Telecommunication companies continuously improve their business offerings through innovation and new technology, allowing businesses and consumers to transact electronically. This improvement encourages e-business as part of a larger economic environment that includes communications technology and telecommunication networks and is responsible for significant organisational developments. Furthermore, e-business offers various advantages, for example, individuals and organisations may engage, communicate, cooperate, and acquire information on a worldwide platform at the tap of a button (Borges *et al.*, 2009). However, many organisations

fail because they jump onto the online platform without considering crucial elements for their long-term operational and tactical success. These organisations are introducing new apparatus, systems, and processes without incorporating the required due diligence or competence exploitation. Competence exploitation is when a firm combines human capital, external data, and internal procedures to create a unique capacity that is difficult to replicate and this provides a competitive advantage in the market (Borges *et al.*, 2009).

With much research done over the years, information technology has significantly impacted innovation and worldwide communication. However, a lot needs to be learned about how the use of technology as value creation may help global micro-enterprises and scale service businesses to gain a competitive advantage. Companies increasingly see digital media as a critical and strategic tool for connecting with customers as well as with external stakeholders. The attempts to use internet channels as proven methods for addressing and consolidating marketing possibilities are being prioritised. The desire for stakeholders to better grasp the function and effect of knowledge management, is driving the search for such understanding. Considering how effective tools like Information Technology (IT), Customer Relationship Management (CRM), Enterprise Resource Planning (ERP), and Human Capital Management (HCM) are improving efficiencies when used in synchronous (Kwarteng *et al.*, 2021).

2.3 Technological Change

Generally, technological changes refer to a range of innovations touching upon organisational processes, systems and products and how an organisation interacts with its customers (Faqih & Jaradat, 2015:37-39). A review of current literature points to five technologies shaping businesses: mobile computing, big data, machine learning, sensors, intelligent manufacturing, robotics, drones, and clean-energy technologies (Cascio & Montealegre, 2016:350).

Therefore, it is pertinent for businesses to keep abreast with these technologies to capitalise on the opportunities while minimising the attendant costs that these technological advances also present. Another dimension driving technology change is convergence through its scope, products, functions, and regulatory framework. These rapid changes create customer and user expectations and influence their adoption, rejection, and or postponement of new technologies. Resistance to technology adoption can be classified under three types (i) inertia – people maintaining existing products, systems or services, (ii) active resistance – people taking a negative approach to innovation and (iii) robust and active resistance – people blaming innovation and is negative around technology adoption (Park & Koh, 2016:143).

2.3.1 Change Management

Cummings and Worley (2015) have proposed a paradigm for effective change management that included five action steps: 1) inspiring change, 2) establishing a vision, 3) gaining political support, 4) transition management, and 5) maintaining momentum. The first action phase, inspiring change, entails preparing changed recipients and assisting them in overcoming resistance to change. On the other hand, Change Management (CM) is concerned with assisting businesses in implementing new organisational structures, technology, or work practices. Therefore, the ideals and practices of CM are very pragmatic to improve the effectiveness and efficiency of change processes (Cummings & Cummings, 2014).

People's perceptions of risk drive the decision to accept or reject innovation, and the more the sensation of risk that a technological innovation would bring, the greater the users' hesitation to accept the new technology. As a result, consumers are more inclined to tolerate risk depending on their sense of the technology's worth (Jeffrey, 2015). Individuals with a solid dispositional aversion to change tend to want to keep their user experience as it is. Modifying the status quo is associated with uncertainty and ambiguity since it is unknown if such a change would provide similarly satisfactory rewards. As a result, there is a positive link between an individual's proclivity to defend the status quo and his / her unfavourable cognitive response to, as well as risk assessments of innovations. (Röth & Spieth, 2019).

2.4 Theoretical and Conceptual Framework

2.4.1 Technology Acceptance Models

Technology Acceptance Models (TAM) have focused on three areas, (i) the psychometric aspects, (ii) the relative importance of TAM, and (iii) additional constructs of determinants. Compatibility, application self-efficacy, subjective norm, and technological complexity influence two belief variables – perceived usefulness and perceived ease of use – which influence behavioural intention in the effective deployment of new technology (Jeffrey, 2015). Relative importance focuses on perceived usefulness (the platform's ability to improve work effectiveness) and perceived ease of use (the level of simplicity with which the system can be used) (Venkatesh & Bala, 2008:274). Secondly, technology acceptance depends greatly on functionality and ease or difficulty with which a task can be performed (Davis, 1989). According to Orlikowski (2009) thirdly, there is a dynamic interaction between people, organisations and furthermore, technology affects the individual, the team and organisational performance (Cascio & Montealegre, 2016:365).

Many theories have been posited to help explain and simplify the factors that account for the adoption of technologies. This research, however, will draw insights from the Technology Acceptance Model (TAM) (Davis *et al.*, 1989). It is a popular model which essentially explains how users come to accept and use new technology. In light of its simplicity and ability to bring a variety of factors that affect the adoption of new technology, this model has been selected. Venkatesh and Bala (2008) have upgraded the Technology Acceptance Model from version two to version three, concentrating on increasing the number of factors that influence an innovation that has perceived usefulness and ease of use, resulting in a positive behavioural intention towards user behaviour. Theories of change are also referred to in the TAM, particularly the force field analysis. Furthermore, the relative importance of technology acceptance further dichotomizes individual preferences, system characteristics, social influence, and the overall conditions facilitating the adoption process (Venkatesh and Bala, 2008).

2.4.2 Perceived Usefulness

The degree to which people feel that using a specific system would improve their job performance, is referred to as perceived usefulness. When users believe a system is beneficial, they will utilise it more than those who do not believe it is functional. As a result, a user's "subjective probability that utilising a specific technology will improve his or her work performance" is defined as perceived usefulness (IM *et al.*, 2011). Subjective norm, image, job relevance, output quality, and result demonstrability are factors that impact perceived usefulness (Jeffrey, 2015). Effectively, this could mean improved productivity and increased efficiencies, resulting in early innovation adoption and return on invested capital.

2.4.3 Perceived Ease of Use

The degree to which a person feels that utilising a specific system will involve effort on their behalf is perceived ease of use. This is a critical factor in both the user's and the consumer's retention of usage (Diako, 2011). Anchor variables such as computer self-efficacy, perceptions of external control, computer anxiety, and computer playfulness, as well as adjustment variables (Perceived Enjoyment and Objective Usability), all have impacts on this component (Jeffrey, 2015).

2.4.4 Technology Acceptance Conceptual Framework

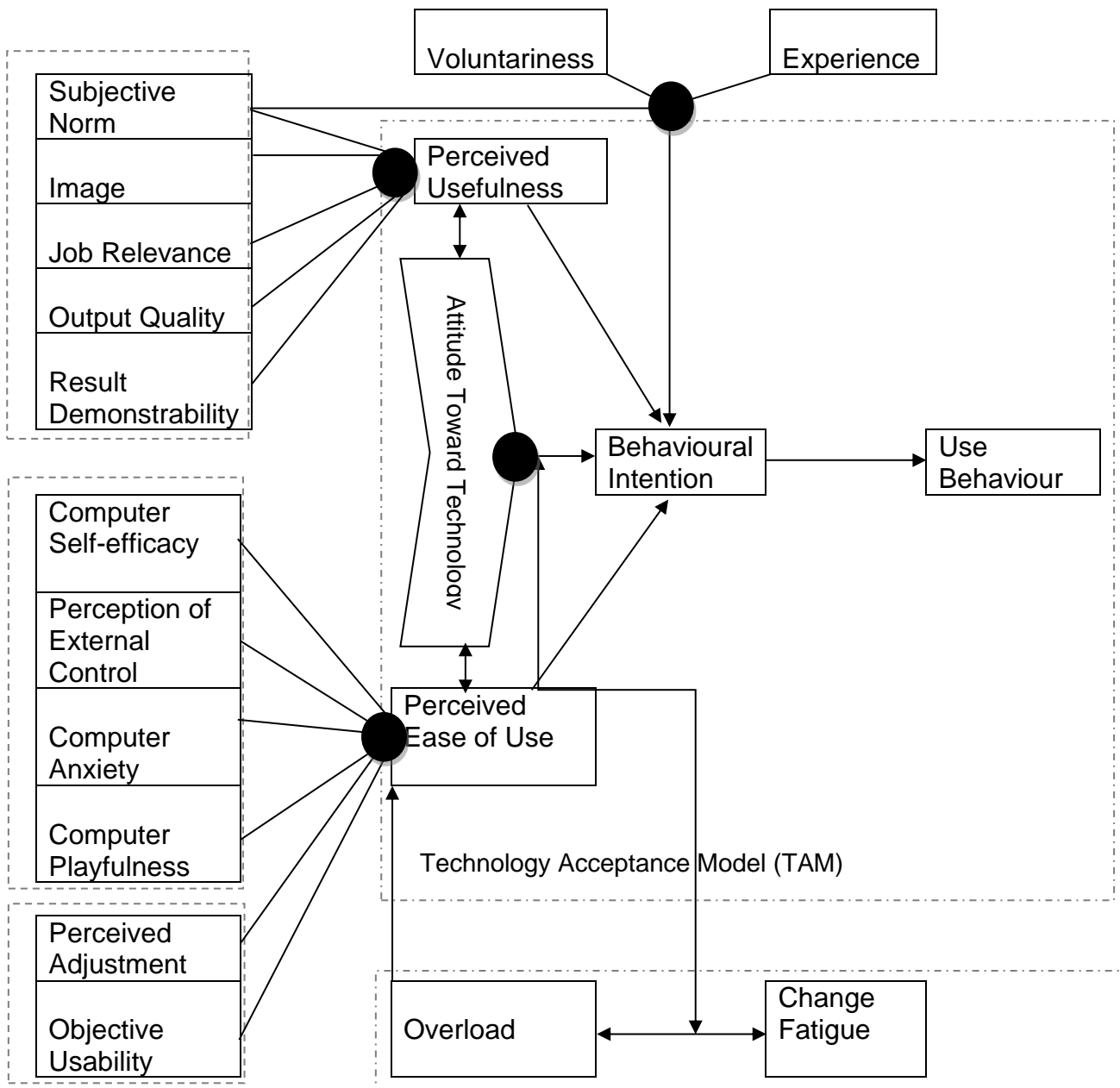


Figure 2-1: Technology Acceptance Model Conceptual Framework

(Venkatesh & Bala, 2008).

According to Jeffrey (2015) subjective norm is directly and positively linked with image, while perceived usefulness is simultaneously directly and positively linked with subjective norm, image, job relevance, output quality, and outcome demonstrability. Computer self-efficacy, perception of external control, computer playfulness, perceived enjoyment, and objective usability is directly and positively associated with perceived ease of use. Computer anxiety is also linked to ease of

use directly and positively, and vice versa. Thus, perceived usefulness and perceived ease of use are linked directly and positively. Furthermore, the effect of the subjective norm's perceived usefulness is modulated by experience. Subjective norm, perceived ease of use, and perceived usefulness are directly and positively connected to behavioural intention. Subjective norm effect on behavioural intention is regulated by experience and voluntariness. Overload and change fatigue are directly and adversely connected, and the technological adoption paradigm does not account for this. Finally, user behaviour is linked to behavioural intention directly and positively (Venkatesh & Bala, 2008).

2.5 Technology Acceptance and Key Determinants

Four concerns have been distilled from the common factors influencing the adoption of new technologies:

- Usability: checking if the technology is standard and easy to use
- Efficiency: the time it takes to complete a task
- Effectiveness: viewing the error rate
- User satisfaction (Bias *et al.*, 2014).

Self-efficacy and or collective-efficacy create a benefit dimension that extends to which the new technology can help build a competitive edge and achieve the desired results driven by interdependence (Bandura, 2000).

Technology Acceptance Models (TAM) further proposes that perceived usefulness and ease of use play a key role in clarifying user intentions to adopt new information system technologies (Hazen *et al.*, 2015:3). Understanding the interplay of these factors and how they determine the uptake of new technology is critical in understanding how new technologies will fare in the market and in coming up with measures to speed up the adoption of new technology. Perceived usefulness and ease of use are affected by cultural factors and vary based on the different adoption stages. Wu and Lu (2013) further suggest that the role of function, ease, or difficulty of technology use is unclear and requires further research.

2.6 Technological Uptake: Challenges and Limitations

Technological advances present both opportunities and challenges, albeit surmountable. One of the challenges faced in the adoption of new technology is the need for computer skills. It has been observed that the practical usage of software and other technologies require high levels of human

capital skills. In comparison, some systems and applications may require easy and repetitive tasks; some have multiple levels of computer literacy. However, it is always beneficial to invest in skills-building, which leads to employability and provide opportunities for both employer and employee to excel (Kamaruzaman *et al.*, 2019:55-57).

Developed markets are responsible for training and upskilling emerging economies to enhance infrastructure development through technological advancements, thus driving up the world economy (Fuzhan, 2019). Some scholars have highlighted the necessity of fundamental preconditions that should be met, including but not limited to: educating the workforce; foster inclusive adoption; and provision of underlying infrastructure and issues of cybersecurity. Furthermore, it is pertinent to ensure that recipients of new technologies are ready for its adoption and making sure that prerequisites are in place, as the imposition of new technology without a fair assessment of feasibility issues might result in implementation challenges which may sap the necessary initial enthusiasm with the technology and may lead to its shelving.

By and large, businesses must adopt new technologies, including in the retail mobile industry — the adoption of new technology results in increased efficiencies in business processes that create a distinct competitive edge. However, notwithstanding its considerable benefits, the introduction of new technologies is often met with severe resistance that slows or completely forestalls its uptake. Therefore, researching into the factors inimical to the adoption of technology is critical.

2.6.1 Resistance to Change

A growing body of literature has pointed to resistance to change as the primary reason for the failure of IT projects (Röth & Spieth, 2019:90). It has been suggested that while some technology seems to present better ways of doing business, other technologies arguably can be used to enable or oppress people at work (Coovert & Thompson 2014). To this extent, therefore, such technologies are likely to meet considerable resistance in their adoption. When new technologies threaten employees' financial security and identity, departments or functional areas, innovation may be resisted (Oswald & Kleinemeier, 2017:278).

It is necessary to regard workers not as passive recipients but as active and rational players with the potential to derail or wholly forestall adoption. Trusting the technology, its intended use, functionality, and ease of use is also an essential factor in adopting new technologies. A solid organisational culture on technological change, its impact, and the willingness to adopt, can drive a positive adoption rate for new and emerging technologies.

2.6.2 The Force Field Analysis

Determining and assessing the variables or forces that drive and oppose change is known as force field analysis. Force field analysis is a technique for managing organisational change that identifies the key factors that drive the need for change and those obstructing or preventing it from happening. Various factors affect change, which could be a driving force or pressure that impacts the change. For example, identified restraining factors in organisations like Vodacom, include a lack of the requisite skills, employee resistance, outdated equipment, bad attitudes and or organisational culture or long-standing traditions.

The force field analysis can be conducted systematically by identifying the problem, defining an outcome, talking to the driving forces and restraining forces and developing and executing an action plan (Keenan, 2020). Finally, having a discussion with other stakeholders on the collective forces for adoption can encourage adoption. While minimising the forces against adoption is typically the best method, in some instances the overriding factors against adoption may be so vital that adoption is not possible (Youssef & Mostafa, 2019).

2.6.3 Innovation Adoption in Education

One of the key contributors to technology readiness and innovation adoption in the South African context is education and infrastructure exposure, which apply to different schooling communities. South Africa's education identifies with extreme system failures and infrastructure limitations that affect the right to a decent education. In addition, legacy issues disallow schools to be adequately resourced and subsequently determine the exposure learners will have, such as science laboratories and or technology innovation equipment (Mohamed, 2020).

Students can benefit from using information technology systems (ITSs) via electronic devices to complete learning activities. It can change the way students learn new things by allowing them to acquire the complex domain of knowledge required to build higher-order critical thinking abilities and cope with various situations in real-world situations. Early adoption of innovation in schools may aid students in higher education institutions to learn more effectively and to complete assignments more quickly. This behaviour is expected to flow over into the workplace, perhaps improving the likelihood of early technology adoption (Wang & Lin, 2021). Schools use various names to describe digital learning systems / tools, including e-learning, remote learning, m-learning, virtual classroom, virtual learning environment, and web-based learning (Panigrahi *et al.*, 2018). These resources contribute to learner behaviour toward technology adoption, perceived ease of use, and perceived usefulness in the longer run. For students, engineers must handle problems related to all types of unique learning demands, such as the design of user-

friendly interfaces and the sequencing of learning activities. Furthermore, design challenges for diverse platforms such as the iPhone Operating System (iOS) and the Android Mobile Operating System must consider user restrictions (Wang & Lin, 2021).

2.7 Technology Acceptance in Retail

Vodacom's mobile retail stores use a franchise module and constitute small and medium enterprises, as these stores range from one store per owner up to forty-five stores per owner. In addition, some franchisees have a local or one regional footprint, while others have a national or multi-provincial footprint. In Vodacom's mobile retail stores, the ability to give information, to enable two-way communication with customers, to gather market research data, to advertise goods and services, and assist online buying of goods, is quickly recognised by shops, resulting in vibrant and versatile new retail channels (Amin & Hussin, 2014).

The organisation recognises the competitive advantage of innovativeness and therefore is one of the leading techco's in business. However, at the same time, the staff members that the different franchisees employ have to pace themselves with the speed at which the mother company introduces new technology. Other challenges on the one hand, are that the organisation that has to introduce new technology, new systems and processes and must stay relevant in an ever-changing environment. However, on the other hand is the staff member that needs to ensure that they stay relevant by adopting and using the different innovations introduced from time to time.

Staff members who decide to adopt, are affected by various factors, like the lack of infrastructure, electronic facilities, education, financial resources and awareness thereof. Not all of them adopt a technology immediately, and innovation adoption is affected by different personality traits. With the introduction of every new technology, the aim is to ensure that all staff members become adopters and drive increased efficiencies.

2.7.1 Stages of Technology Adoption

Innovators, early adopters, early majority, late majority, and laggards are all stages of adoption that people and technology companies go through. Individuals with greater risk tolerance are willing to try new things, and are outstanding change agents and are regarded as innovators. Their character qualities include exuberance for new technologies, willingness to take innovative risks, and a lack of fear of the unknown; instead, they focus on the new technology's advantages (Mirthinti, 2020).

To support their judgment, early adopters create technological trends based on previous accessible facts about specific inventions and these support their judgement. Subsequently they

are willing to try out new developments if the technology does not harm their image. They are patient with technology problem patches (fixes), if they are overall convinced that their image will benefit when / if the technology works.

The early majority is preoccupied with innovation testing and proof of performance and responds to the demonstration of technology efficacy. These user choices are based on logic, practicality, and data. To secure early majority buy-in, the organisation must promote digital adoption success stories to encourage adoption (Mirthinti, 2020).

The late majority is compelled to embrace statistics, and they want confirmation that the innovation is practical. Furthermore, these users are risk-averse and have limited tolerance towards innovation failures; they do not follow trends and are careful and rational in their decisions. They want much proof that the technology functions well, and they want to know how technological advances would affect their jobs.

Laggards are excited about the idea of seeing what the new technology can do and how its capabilities may help them to be happier at work. However, if the new technology does not serve the stated goal or make their lives simpler, they will quickly decline or reject it. They demand tangible advantages, better working conditions based on innovation, and oppose change with scepticism and dread (Mirthinti, 2020).

2.7.2 Technology Adoption Life Cycle

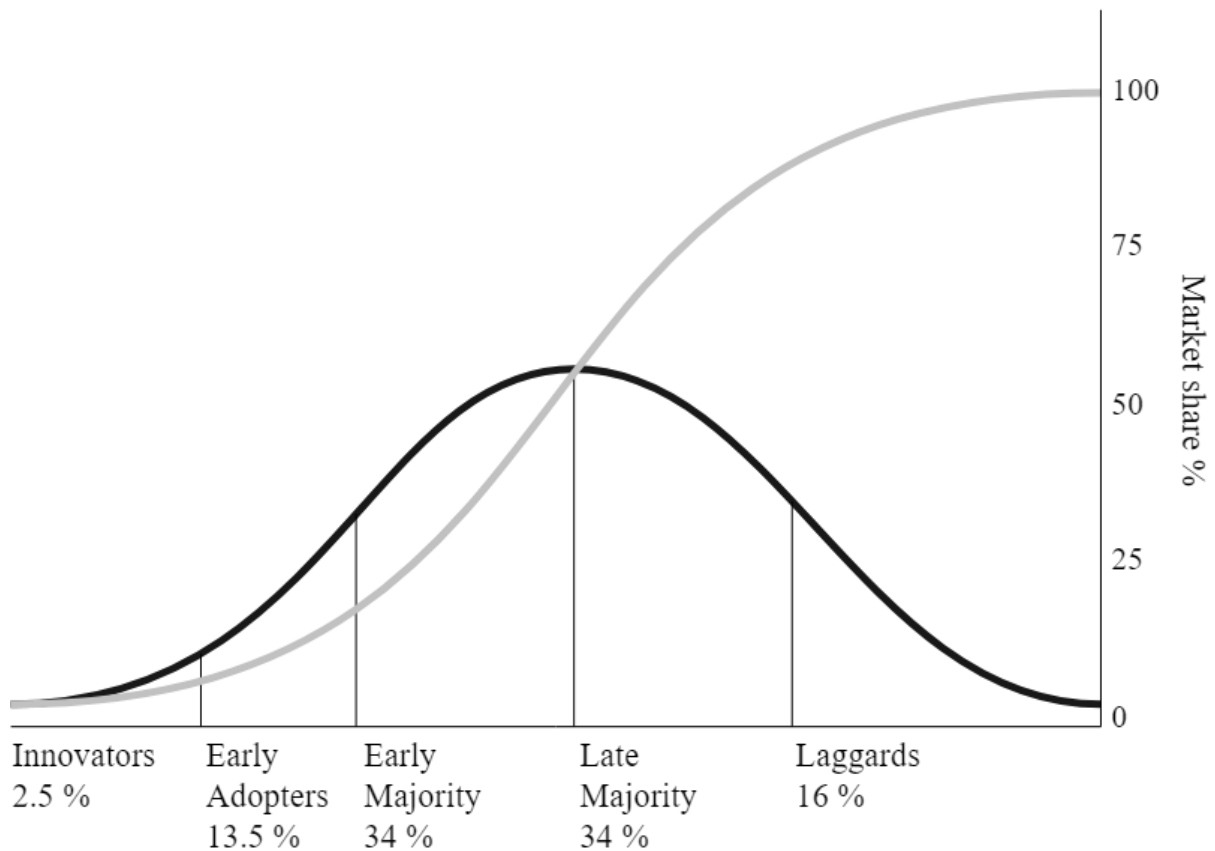


Figure 2-2: Technology Adoption Market Share Curve

(Lumen, 2020).

2.7.3 The Theory of Reasoned Action

The Theory of Reasoned Action (TRA) explains a person's behaviour by looking at their purpose, a linear relationship between their attitude toward doing, their behaviour and their subjective norm about their behaviour (Shimp & Kavas, 1984). People evaluate the consequences of their actions before engaging in a specific activity, according to the TRA. The TRA is a framework for studying attitudes toward behaviour. This asserts that a person's desire to do, or not execute a behaviour, determines that behaviour. Behaviour purpose is a subjective norm and a subject of attitude toward behaviour (Vallerand *et al.*, 1992). According to the TRA, whatever drives and impacts behaviour - for instance, higher levels of intention lead to involvement. Intentions determine action, which is determined by one's attitude toward the activity and the subjective norm around it. The subjective norm is an individual component in the theory that expresses the perceived

impact of the social environment, referring to the social pressure placed on the individual to do (or not to perform) the action (Shen *et al.*, 2006).

Subjective standards imposed by superiors, such as employers or parents, have been found to affect a person's decision to enrol in an online course. The study conducted by Shen (Shen *et al.*, 2006) indicates that students' motivation, course engagement, learning accomplishment, and attitudes about adopting online learning systems, were all impacted by the instructor's presence and social interactions with the students. According to some academics, peers play a significant role in determining technology adoption and usage behaviour for online courses. The TRA considers a person's behaviour, attitude toward the behaviour, subjective norm, perceived behavioural control, and behavioural intention, as well as the person's views about the consequences of their acts, since these prominent beliefs are thought to influence attitude toward the behaviour (Diako, 2011).

2.7.4 The Theory of Planned Behaviour

The theory of planned behaviour is among the most broadly applied and widely utilised theories of human behaviour (TPB). The TPB establishes a theoretical framework for assessing potential behavioural variables, which may be utilised to develop targeted therapies. According to the Theory of Planned Behaviour (TPB), intentions are the primary drivers of conduct, and social norms significantly impact moral norms and people's perceived behavioural control (Rush, 2014). Thus, three interconnected factors, comprising attitude toward the activity, subjective norm, and perceived behavioural control, contribute to creating a behavioural intention, which can predict conduct when combined with perceived behavioural control (Seyal & Rahman. 2017).

2.8 Relative Importance of Technology Acceptance

Historically, the literature on information technology for development has evaluated technological interventions from an economic perspective, calculating improvements in revenue or other economic benefits. However, several studies have shown that technology users only receive a modest monetary gain, implying the relevance of other factors, for example, non-monetary factors in information technology adoption. In addition, non-monetary rewards, such as procedural fairness and uncertainty reduction, may be more significant than positive monetary rewards (Alam & Wagner, 2016).

2.8.1 Social Influence in Technology Adoption

The shift in an individual's ideas, feelings, attitudes, or actions that result from encounters with several other persons or groups regarded as similar, desirable, or expert, is known as a social

influence (Graf-Vlachy *et al.*, 2018). Social impact has been integrated as “interpersonal considerations” of technology adoption and usage in information systems (IS) research, acknowledging that such decisions are frequently made cohesively, or with a goal of how they fit in with, or effect other individuals or group requirements. Thus, identifying what impacts people's decisions to embrace and utilise information and communication technologies (ICTs) is becoming increasingly crucial as ICTs penetrate many parts of our lives. Furthermore, while there is a scholarly understanding that social influence plays a significant role in technology adoption, contradictory empirical pieces of evidence call into doubt the construct's evidential support and reliability (Graf-Vlachy *et al.*, 2018).

2.8.2 Information System Characteristics

The features that characterise practical Information Technology Systems are both information quality and system quality (BIS). System quality (for example: relevance, correctness, conciseness, completeness, ‘understandability’, currency, and timeliness) is critical in achieving desired BIS outcomes. Information provided by an IS can be used for more than simply decision-making. Information received from an IS can help enhance existing processes and increase efficiency in heavily process-oriented businesses. The business has to consider the impact of these characteristics on user decision-making and build process improvement capabilities into the BIS (Onyango, 2019). Similarly, systems perceived as faulty, not improved and challenging to use, will encourage resistance, thus increasing non-adoption.

2.8.3 Organisational Culture on Technology Change

Vodacom adopts and adapts at a rapid and agile speed in response to market demands. Technology and innovation drive the firm; therefore, it has made the strategic shift from a typical telecom company (Telco) to a Financial and Technology organisation (Fin-Tech or Techco). The company aims to digitalise the organisation, while ensuring that the appropriate skills and cultures are in place, for example, through the simplification of current internal processes and the empowerment of individuals through more collaborative structures; Investing in the skills and people, required a digital future by developing, attracting, and keeping them, creating a Vodacom "digital DNA" through fostering a culture of innovation, inclusivity, and participation (VODACOMGROUPLIMITED, 2017). The company also has different initiatives to drive up digitisation through people development. Information technology, cross-collaboration, agile sprints to accept technology change, and recruiting and upskilling employees inside the organisation; are all part of the innovative culture.

2.8.4 Limitations of Key Determinants

However, a close analysis of the underlying model exposes a flaw inherited from TAM. While TAM has been proven highly successful in forecasting prospective user acceptance, it is not particularly helpful in designing and implementing high-acceptance systems. The gap between what users want and what technology offers, is described as perceived service quality. High perceived service quality has traditionally been linked to higher user happiness, retention, and usage (Chen & Tan, 2004).

Usability refers to three factors that are frequently used to assess the success of product offerings: product selection breadth; pricing strategies; and product retail channel fit. Thus, a mixture of these three elements shapes a user or consumer's product perception, which is thought to affect perceived usefulness.

Concerning efficiency, the longer it takes to adopt an innovation that could improve efficiencies and task completion, the longer it will take to monetise the technology and secure an investment return (Chen & Tan, 2004).

Even though TAM beats the previously produced Theories of Reasoned Action and Theory of Planned Behaviour, researchers have overlooked some of the flaws within its simplicity. To begin with, Bagozzi considered the relationship between intention and action to be an unproven assumption in social scientific research. Thus, the emphasis on the influence of intention on behaviour misses the gap between use and goal achievement. As a result, consumers are more likely to employ innovations to attain a particular objective. Secondly, there frequently is a lag from intention and conduct, with various intervening variables influencing ultimate adoption behaviours. Finally, how decision-makers act, is influenced by their attitude towards attempting to embrace technology. Their dedication to the decision inspires them to take action in favour of their decision. As a result, Bagozzi (2007) emphasises goal-setting rather than behaviour modification as the desired outcome of innovation. Furthermore, technological adoption must consider group, cultural, and social elements of decision-making and usage, as technological decisions are rarely made in isolation (Jeffrey, 2015).

2.9 Technology Readiness

Technology-based innovations are used to decrease costs, to boost customer happiness and demand, to enhance service efficiency, and to create new delivery channels for existing or new client groups. As a result of both suppliers' and organisational buyers' increased interest in adopting new technologies, a substantial and expanding corpus of research on e-readiness in the business to business (B2B) market has emerged. On the other hand, technological advances

provide significant benefits to customers, such as improved convenience, flexibility, and autonomy (Rojas-Méndez *et al.*, 2017).

The Technology Readiness Index model (TRI) was created to assess people's willingness to embrace and utilise new technology in their personal and professional lives (Parasuraman, 2016). The TRI model assesses a person's preparedness to utilise technology based on four personality characteristics: optimism, inventiveness, discomfort, and anxiety. According to the study, these four aspects reflect a person's general willingness to embrace and use technology. Optimism and innovativeness are associated with suitable sentiments and drive technology readiness, whereas discomfort and insecurity limit technology readiness (Diako, 2011).

These are the four different dimensions of technology readiness:

1. Optimism: a favourable perspective of technology and the idea that it gives individuals more authority, freedom, and productivity in their lives;
2. Innovativeness: a proclivity to be a technology pioneer and thought leader;
3. Discomfort: a perceived inadequate control over technology and a sense of being inundated by it; and feelings of inadequacy;
4. Suspicion of technology and scepticism about its ability to work effectively.

These four aspects of technology readiness are distinct from one another, and each one assesses an individual's proclivity to accept and then use innovation (Parasuraman, 2016). According to studies, one approach to fully understand what drives user and customer decisions to utilise technology, is to study underlying consumer sentiments (Rojas-Méndez *et al.*, 2017). According to Davis (1989) attitude precedes plans to embrace computer technology.

The Technology Readiness Index (TRI) was created as a scaled evaluation of people's adoption of new technologies and their overall opinions about them (Parasuraman & Colby, 2003). The TRI has been used in several research studies to assess people's readiness to engage with technology. These results have proven the TRI to be an excellent tool for measuring people's readiness to interact with technology. However, the literature also points out that the TRI neither recommends nor explains how to improve technology utilisation nor explains user behaviour. Nevertheless, the TRI has effectively measured people's acceptance and views regarding technology in various situations. The TRI has also been effectively utilised to explain variables influencing technology acceptability in the education sector, although some studies claim that technology access is strongly reliant on one's capacity to use it (Diako, 2011).

There was also evidence of growing customer dissatisfaction with technology-based solutions (Parasuraman, 2016). This evidence implies that client adoption of technology will vary depending on personal attributes. Different psychological reactions will arise when customers interact with technology, depending on the individual's sentiments regarding the technology-based system. Individuals can be arranged along a hypothesised technological views continuum, with strongly positive beliefs, and extremely negative opinions towards the other.

Companies that wish to accelerate digital adoption must pay attention to and grasp the Pyramid Model's customer-technology and employee-technology linkages. People with a high TR are more likely than others to adopt cutting-edge technology and to make greater use thereof when it becomes available. Companies that take the risk of introducing innovations can engage directly with their consumers by employing an interactive platform and virtual agents tied to individual innovators or early adopters to drive digitalisation. Employees trained to assist customers can use internal technological services, strengthening the organisation's connection to customers.

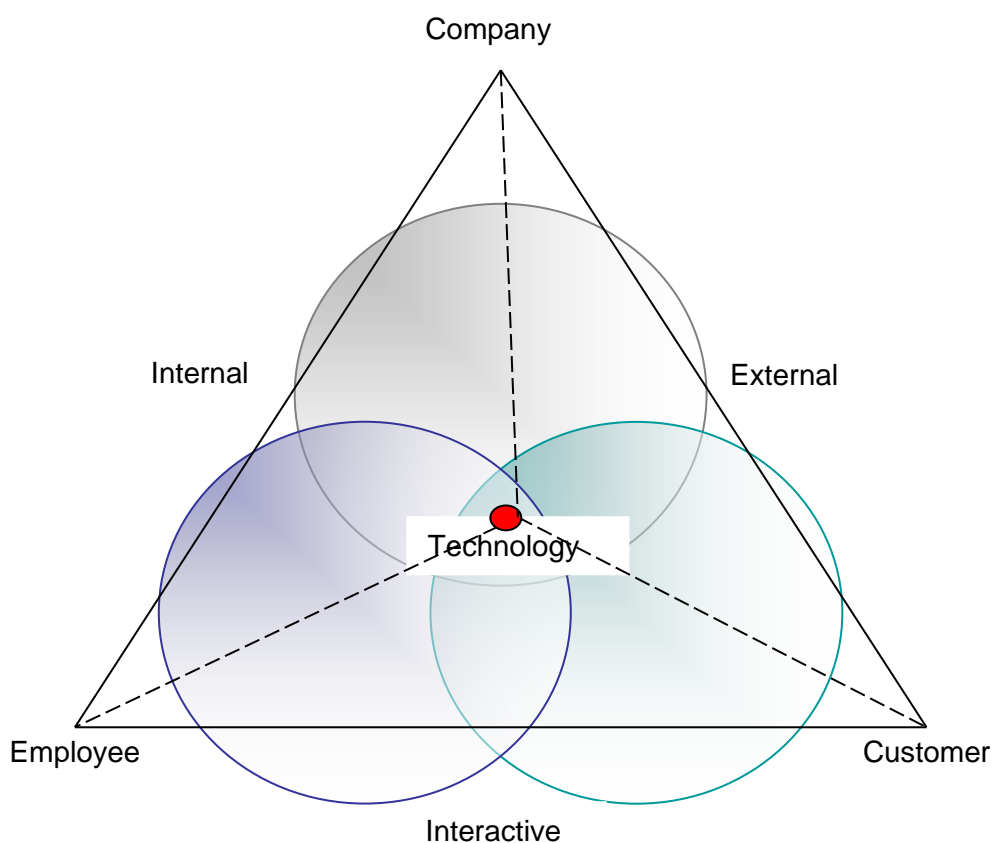


Figure 2-3: The Pyramid Model for Technology Ready Marketing

As a result, the ultimate goal of innovation is to connect the consumer to the organisation. Adopters of new technology can employ collaborative interactions to improve customer service and boost efficiency. As a result, technology has fundamentally and profoundly altered the company - employee relationship (Diako, 2011).

2.10 Customer Relations and Application of Services

Mobile phones and different mobile services are always on hand and may be used for many purposes, rendering the cellular business one of the world's top commercial industries. When a client loses his / her phone or fails to turn it off for longer than 24 hours, it is clear that cell phones are becoming increasingly vital in his / her life. The Independent Communications Authority of South Africa (ICASA) believes that promoting competition among cellular providers will benefit the South African economy. ICASA is therefore promoting healthy competition between role players in the industry to try and level the playing fields. However, the available market for cellular and mobile service providers is declining, and the necessity of customer retention must therefore be emphasised (Kruger, 2014). As a result, mobile providers like Vodacom are looking at other avenues that could be revenue generative.

Kumar and Xie (2012) posit that people are always seeking more significant degrees of satisfaction in their day-to-day interactions and changes associated with mobility have become an essential element of human life. Thus, service customisation, which directs users' interactions with the technology environment, is critical for any innovative environment or technological innovation. As a result, the primary need is that cellular agents dynamically identify, connect, and perform services concurrently and strategically in multiple operating systems. Therefore, there has been much interest in integrating an agent with specialised service in recent years. According to this definition, an agent is a person who does work on behalf of another person. As a result, an agent is a person or thing that represents and has the ability or authority to act on behalf of individuals, groups, institutions, groupings of institutions, or even a country (Kumar & Xie, 2012).

These cellular agents are at the forefront of technology innovation, even though they find themselves at different places within the adoption stage-bell curve. This is a result of various technical and other aspects of technology integration. One of the critical supporting functions is when peers within the same team or more experienced co-workers are eager to help with complicated inventions, to use informal training methods, and to employ different degrees of expertise, becoming adoption agents, or promoting change (Jeffrey, 2015). Furthermore, Daiko (2011) suggests that the additional factors influencing adoption is the quality of the product being used, as this increases perceived value, which subsequently impacts adoption and the intention to adopt. Further suggesting that user awareness of technology and its advantages is in its

perceived quality. Subsequently, people's confidence in their ability to utilise technology influences their adoption, use, and judgments of the quality of technology-based services (Diako, 2011).

2.11 The Question Pertinent to This Study

According to the literature examined in this study, Vodacom constantly integrates technology to enhance internal processes, to gain market share, and to improve customer experience via its service offerings. The literature has also revealed a dearth of studies on adopting new technologies, particularly in mobile shops. With the continual introduction of new technologies at Vodacom's mobile retail outlets across the North West Province, this study aims to explore the variables detrimental to the acceptance of new technologies. This study also aims to identify the sources of resistance, to eliminate these sources, and to increase the acceptance rate, by:

1. Investigating the factors that limit the acceptance of new business operating systems and applications in the mobile retail industry,
2. Determining how the deployment and acceptance of new technologies can be expedited in the mobile retail industry, and
3. Making recommendations on the above findings, focusing on outlining these findings, assessing previous reports, following constraints and drawing parallels between interventions.

The research challenge is addressed in the following ways in the literature: Park and Koh (2016) proposed that fast technological change creates adoption rejection and/or delay by identifying variables that restrict and hinder the acceptance of new technologies in mobile retail outlets. Furthermore, reviewing the deployment and looking for ways to speed up acceptance, Hazen et al., (2015) suggest that understanding adoption speed is dependent on the process of perceived usefulness and ease of use.

2.12 Conclusion

TAM and its importance for the components that drive innovation adoption was discussed in this chapter, centred on the literature review. Furthermore, the evidence presented in this chapter has shown that adoption of new technology is more likely when a person is optimistic and inventive, while simultaneously feeling minimal discomfort or uncertainty about it. As a result, such a person would demonstrate a high level of technological preparedness. This chapter explored the obstacles and limitations that have an impact upon technology adoption, such as computer skills. Organisational effectiveness and efficiency may be enhanced through workforce education, infrastructure development, and improved education. This chapter also examined adoption

readiness from the standpoint of South African school leavers, emphasising the advantages of early innovation.

This chapter provided a quick overview of resistance issues and the extent to which certain technologies are likely to encounter resistance. It has said that applying the force field analysis may help an organisation manage opposition to organisational change. Vodacom's mobile retail outlets have been briefly mentioned, as well as the company's ability to innovate. To keep ahead of the curve, the company continuously adopts new technologies and procedures — recognising the many technology phases and where people may discover these in the technology adoption stages.

The Theory of Reasoned Action, The Theory of Planned Behaviours, and Technology Readiness have all been discussed in this chapter. Before engaging in a specific technology, reasoned action addresses the linear link between user attitude and subjective norm and how individuals evaluate the impact. In addition, this chapter examined the many behavioural factors, primary motivations, and societal norms. Finally, it closed by emphasising the impact of technology adoption and organisational culture on technological transformation and people's willingness to embrace and use new technologies.

The following chapter (Chapter 3) discusses the data collection instruments and methodology used in the study. It starts with an introduction, followed by the different innovations and measuring acceptance through a battery of interview questionnaires.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Chapter three describes the applied research methodology, detailing how the target population and their exposure to different innovations can indicate their propensity for technology acceptance. Furthermore, this chapter elaborates on the instruments developed for the data collection of the study, the data collection process, and the study limitations.

3.2 Research Design and Methodology

The methodology applied is a broad research approach that specifies how research should be conducted. It consists of beliefs and philosophical assumptions that influence the research issues and guide the selection of research methodologies. A dissertation or thesis study design is an essential component that helps to guarantee consistency across the instruments, methodologies, and theoretical underpinnings (Melnikovas & Žemaitis, 2018). This chapter describes the research design, the research method employed, and the techniques and instruments used in this study to identify the factors inimical to the limitation of innovation adoption in Vodacom's mobile retail stores in the North West Province.

Recapping, the research questions have been aimed to establish:

1. What factors enhance and influence the acceptance of new technologies in mobile retail stores in the North West?
2. How can the timely introduction of new business applications and systems be leveraged in mobile retail stores in North West?
3. How can the recommendations be applied to mobile retail stores in the North West Province?

The theoretical framework utilised alludes to the TAM, commonly used to define a person's acceptance of innovation. This idea is backed by Ajzen and Fishbein's (1980) and Davis's (1986) Theory of Reasoned Action, including perceptions, usefulness and ease of use. The qualitative research method used is concerned with what, why and how things happen. It wants to ascertain what people think, the nature of their interactions, using language and artefacts. Through this method, the researcher collects data through interviews in the field, using standard interview questions as a guide (Albertyn, 2021). Using a standard interview questionnaire allows consistency and structure, and serves as a guide to conduct the interviews. Data collection for the study includes the sales staff from Vodacom's mobile retail stores, conducting in-depth

interviews by asking pre-interview questions telephonically, discussing the purpose and process with store managers and store staff.

3.2.1 The Research Process Onion

One approach to developing research methodology is based on the theoretical idea of the "research onion."

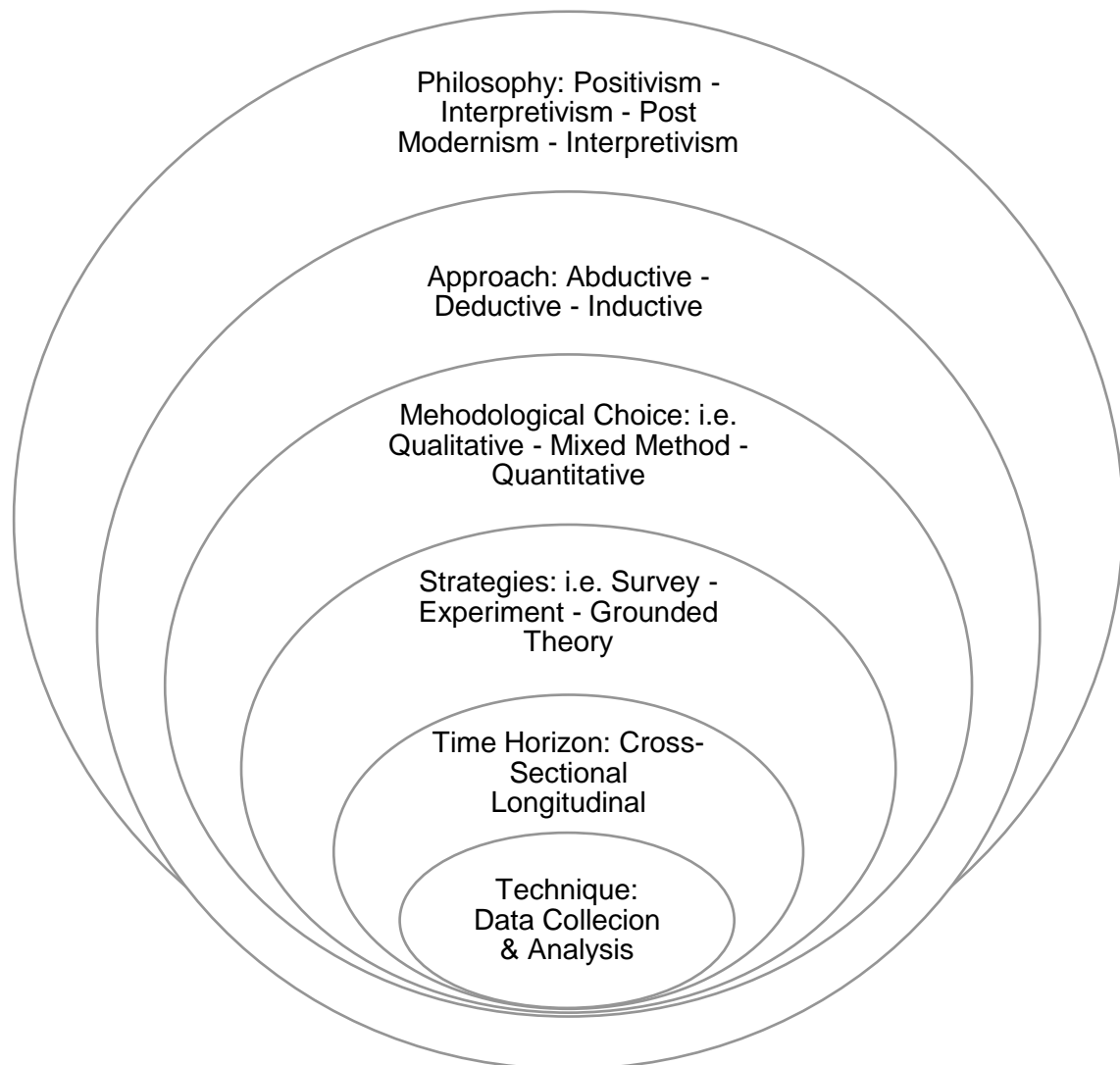


Figure 3-1: The Research Onion

(Saunders *et al.*, 2019).

The term "research onion" refers to the several considerations that must be made when creating a research technique. Working from the outside of the onion inwards, one will be confronted with various options that span from high-level and philosophical to tactical and practical. At the same time, it also helps to comprehend what judgments developers need to make in terms of study design. The onion is stacked as follows: (1) Research philosophy; (2) Research approach; (3) Research strategy; (4) Choices; (5) Time horizon; and (6) Techniques and procedures (Saunders *et al.*, 2019:33-34).

3.2.2 Research Design

A research design is a study plan that is used as a guideline in gathering and evaluating data. It serves as a framework for the whole research process and is essential for any research endeavour. The fundamental goal of research design is to help the researcher find solutions to the topic under investigation. They are considering what ideas should be researched, how they should be measured, and the strategy that should be adopted. The data obtained will be analysed based on the factors, and the results will be presented methodically, based on the problem being researched (Ongori, 2014).

3.2.3 The Research Philosophy

Research philosophy impacts the quality and value of research findings by providing a view of reality. Positivism, Interpretivism, and Realism are the three primary philosophical schools. The qualitative research philosophy is interpretive, humanistic, and naturalistic, with a strong emphasis on subjectivity. The ontological premise is that there is not one reality but that each phenomenon contains numerous realities. Furthermore, because everyone has a varied perspective of reality, each individual perceives, interprets, and experiences a situation or phenomenon of interest from his / her point of view (Ongori, 2014). According to Creswell (1998), qualitative researchers think that "reality is both complicated and dynamic, and can only be discovered by observing people as they interact with and within their socio-historical contexts."

As a result, phenomena are best understood and sorted by immersing the researcher in the context of qualitative research. Furthermore, this study was typically conducted in a natural setting, with the researcher interacting with participants to probe perceptions, feelings, thoughts, beliefs, expectations, and behaviour in order to gain knowledge about the phenomenon of interest, with the result that the researcher takes an active role in the study (NursingAnswers.net, 2020).

3.2.4 Research Approach

There are two research approaches: deductive and inductive; the deductive technique necessitates thorough testing and is prevalent in the natural sciences. This study employed an inductive method, with the phenomena entailing data collection, data analysis, and a review of current literature on the issue under investigation (Saunders *et al.*, 2019). The inductive research technique has aided the researcher in moving from detailed information in the interviews to a more significant generalisation, as seen in the figure below.

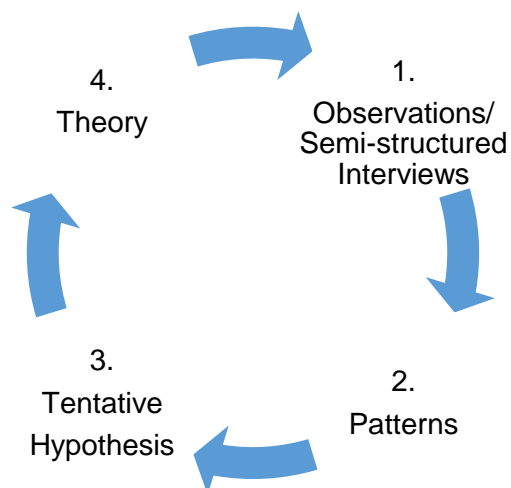


Figure 3-2: Inductive Research Approach

(Ongori, 2014; Saunders *et al.*, 2019).

3.2.5 Research Strategy

Experiments, surveys, case studies, action research, grounded theories, archival research, and ethnography are examples of research techniques; nevertheless, researchers contend that no single strategy is intrinsically superior (Saunders *et al.*, 2019). As a result, the strategic decision is influenced by the assistance offered to the researcher in answering the research question and fulfilling the research objectives. Furthermore, the research objectives for this study used a cross-sectional research approach, which had aided in improving knowledge based on the study and data analysis (Ongori, 2014).

3.2.6 Research Method

To ensure high-quality research and to answer the research topic, the researcher must gather primary and secondary data using the right approach. The qualitative research technique is

concerned with what, why, and how things happen, gaining knowledge of people's motives and behaviours, proving to be useful in the study exploration phases (Ongori, 2014). It wishes to learn what people think and find out the nature of their relationships via language and artefacts. The researcher uses this approach to acquire data by conducting interviews with conventional semi-structured interview questions as a guide (Albertyn, 2021). A standard semi-structured interview questionnaire provides for uniformity, structure, and direction in conducting these interviews. The study's data collecting methods included interviewing sales personnel from mobile retail locations, conducting in-depth interviews by asking pre-interview questions over the phone, and explaining the objective and procedure to store managers and staff.

The formal interviews followed a conversational style to view patterns and associated attributes to address the research question. Using complicated acts, processes, and the grounded theory create progressions, relevant and detailed interpretations. The study further used a continuous comparison method, in which already obtained data were evaluated as current data are being collected. This method has enabled the researcher to identify when fresh information can no longer be gained from data gathering — when data saturation has been achieved — and when the data-gathering phase should be completed (Mauldin, 2020). The research has not been altered but was making further contributions to the field of study and body of knowledge, assessing the outcomes and prevalence of the adoption of new technologies (Fidler & Wilcox, 2018).

3.2.7 Secondary Data Collection

Data are the quantitative or qualitative properties of a phenomenon. Data may be defined as facts presented in a measurable language. Data must be translated into meaningful information once it had been acquired in order for it to be comprehended and conveyed. The process of collecting and analysing information that will assist in answering the research question is referred to as data collection (Thamane, 2018). Secondary data refers to a literature review, where information has already been acquired, and documented analyses serve as the foundation for primary data gathering and inspection. In order to help the researcher, a broad literature study on the research topic was done in chapter two (Ongori, 2014), researching the variables influencing the adoption of new technologies in mobile retail outlets in the North West Province. This technique has aided the researcher in seeing and analysing the research problem, answering the research question, and achieving the study objectives through diagnostics.

3.2.8 Primary Data Collection Method

Semi-structured interviews were used to obtain primary data for this study, allowing for a dialogue between the researcher and the participant. This technique was effective in gathering genuine, trustworthy data relevant to the study topic and aim. Furthermore, the semi-structured interviews allowed the researcher to delve deeper and elicit significant insights by bringing to light concealed detail in one-on-one interviews (Saunders *et al.*, 2019).

3.2.9 Interview Guide as An Instrument

The semi-structured interview guide is adaptable and versatile, and it may be used for both individual and group interviews. One of the primary benefits is that the semi-structured interview approach has been proven to facilitate congruence between the researcher and the participant, allowing the investigator to improvise follow-up questions based on the participant's replies (DuPlooy-Cilliers *et al.*, 2017). Furthermore, because the interview questions have been selected before the interview and have been created using the interview guide covering the key themes of the study, semi-structured interviews necessitated prior study, in the research issue area, hence providing a robust structure for the debate during the interviews which should not be rigidly adhered to (Kallio *et al.*, 2016).

The semi-structured interview guide was developed and implemented in five stages: (1) defining the preconditions for using semi-structured interviews; (2) extracting and applying prior knowledge; (3) establishing the provisional semi-structured interview roadmap; (4) trailing the guide; and (5) presenting the comprehensive semi-structured interview guide. As a result, the thorough creation of a qualitative semi-structured interview guide adds impartiality and trustworthiness to the research and makes the results more credible (Kallio *et al.*, 2016).

3.2.10 Target Population

The population refers to a group of people, things, or instances that share characteristics. In the context of this study, it refers to people who work at Vodacom's mobile retail outlets in the North West Province. Depending on the size and location of the business, these stores employ three to twenty-three individuals. Furthermore, sampling is necessary to fulfil the study aims owed to limitations (Ongori, 2014).

3.2.11 Sampling

The sample is produced as a subset of a larger population using probability and non-probability sampling techniques (Saunders *et al.*, 2019). The sample size was determined by the study's aim, the risk of a bad sample, and the population size, which allowed the researcher to collect data

from a portion of the population (Ongori, 2014). While it is impossible to collect information from every member in a group, sampling – collecting data from a subset of the population – is the most common way of gathering information about a community. To ensure that the sample represents the population and avoid sampling bias, the researcher used a simple random sample. The researcher can assess the interview guide through testing, which is essential for removing complex and probing questions, restructuring questions, and making it more pragmatic (Kallio *et al.*, 2016).

The researcher sent an electronic letter to all stores in the North West, which explained the research project to the owners and managers. In addition, the researcher followed up with a phone call to each store to discuss the goal and ethics of the research. Store managers were asked to discuss the initiative in the weekly team meetings and to share specifics with anybody who was interested. Participants could express their interest by notifying the owner / manager, and a convenient time and method was established. The researchers employed this opportunity to provide more clarity and to answer any issues or queries and set a future date for interviews. Subsequently a subgroup of the population was selected at random, and each member of the population had an equal opportunity of being chosen in this sampling process.

3.2.12 Reliability, Trustworthiness and Conformity

The research began with a pre-test and pilot of the data collection instruments with a random sample. This method has assisted in the elimination of unnecessary questions and enhanced the validity of the results. Modifications have been implemented based on the input received, and reliability and validity were assessed (De-Villiers, 2016). Face validity is used to assess the study's plausibility. Before discussing the final version, the researcher had to get experts' opinions on the phenomena under investigation and had to perform a pilot interview to test the instruments, with the objective to correct and delete extraneous questions (Ongori, 2014).

3.2.13 Data Analysis

In light of the Technology Acceptance Model, a comprehensive assessment of current literature on technology adoption across industries, including banking and hospitality, was undertaken. This study has used factor analysis to identify internal and external determinants of innovation uptake. Furthermore, the researcher was investigating the critical elements influencing technology adoption; hurdles such as reluctance to change and change fatigue (Fuzhan, 2019). The factor analysis provided a summary of the data, indicating additional variables for further data study (Ongori, 2014). This analysis proved to be a reliable method for the data analysis and has been utilised by several others.

3.2.14 Ethical Considerations

The appropriateness of research behaviour regarding the rights, values and beliefs of people who become the subject of the study or are impacted by the study is referred to as research ethics (Saunders *et al.*, 2019; Melnikovas & Žemaitis, 2018). The researcher ensured that the participants' rights were respected and they have not been forced into participating in the research. Participants were asked to engage freely; they were given the option to withdraw at any juncture, without consequence, as well as the chance to clarify things and resolve any issues.

The researcher obtained consent from the Franchisor, the Franchisee, the shop managers, and the participants, as well as any other gatekeepers. Access was provided by a letter of recommendation acquired from the Regional Managing Executive (Regional ME), who has the necessary authority. As a result of reliability and validity, data interpretation has offered an accurate analysis of the data and prevented data manipulation. Furthermore, personal prejudice was avoided by carefully selecting wording based on gender, sexual orientation, age, race, or handicap (Saunders *et al.*, 2019).

3.2.15 Conclusion

This chapter examined the technique utilised to carry out the research study, emphasising a qualitative research approach. Non-probability sampling aided in the selection of participants, whereas semi-structured interviews aided in data collection. The next chapter discusses the data presentation and study findings.

CHAPTER 4: DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter discusses the empirical findings of the data gathered during the research process. The interpretation of data assisted in the examination of material gathered and the provision of solutions to research questions via a presentation. The data presentation is based on information gathered from ten (10) interviews with Vodacom shop employees in the North West Province as part of the study process (Creswell, 2013).

4.2 Analysis of the Data and Data Presentation

As a discussion starter, a high-level description of the research, ethical informed consent form, and interview questionnaire guideline were presented to store managers and franchisees. Following that, a research briefing was held to address any concerns, questions, or ambiguities about the study. Consent and authorization were sought from shop managers and franchisees, and an appointment booking procedure was then initiated. This was also an opportunity to give more explanations. Pre-testing of the instruments and interview were conducted with a random sample, to test interview timeline and reliability of the questions. Modifications were done to the questionnaire after the pilot interview, and gaps identified during the pre-test, was that the interview did not thoroughly evaluate participant emotions toward technology developments in mobile retail stores. Another key shortcoming, was that questions were complex and the interviewer had to simplify questions, during discussions, through probing and clarification.

Following this, interviews were held, data were analysed, and feedback findings were provided. Subsequently, participants have expressed a strong interest in the study, and the researcher performed interviews until saturation was reached. The data were analysed using ATLAS.ti9, and the researcher employed a qualitative technique as the primary building block for the study, as well as an interpretivism paradigm. Some participants were concerned that the researcher was part of Vodacom management and that participation in the study would possibly have a negative impact on their stores and employment. Stores, employees, and owners that were concerned about any bias were voluntarily removed from the research to guarantee that all ethical standards were followed.

4.2.1 Demographic Information:

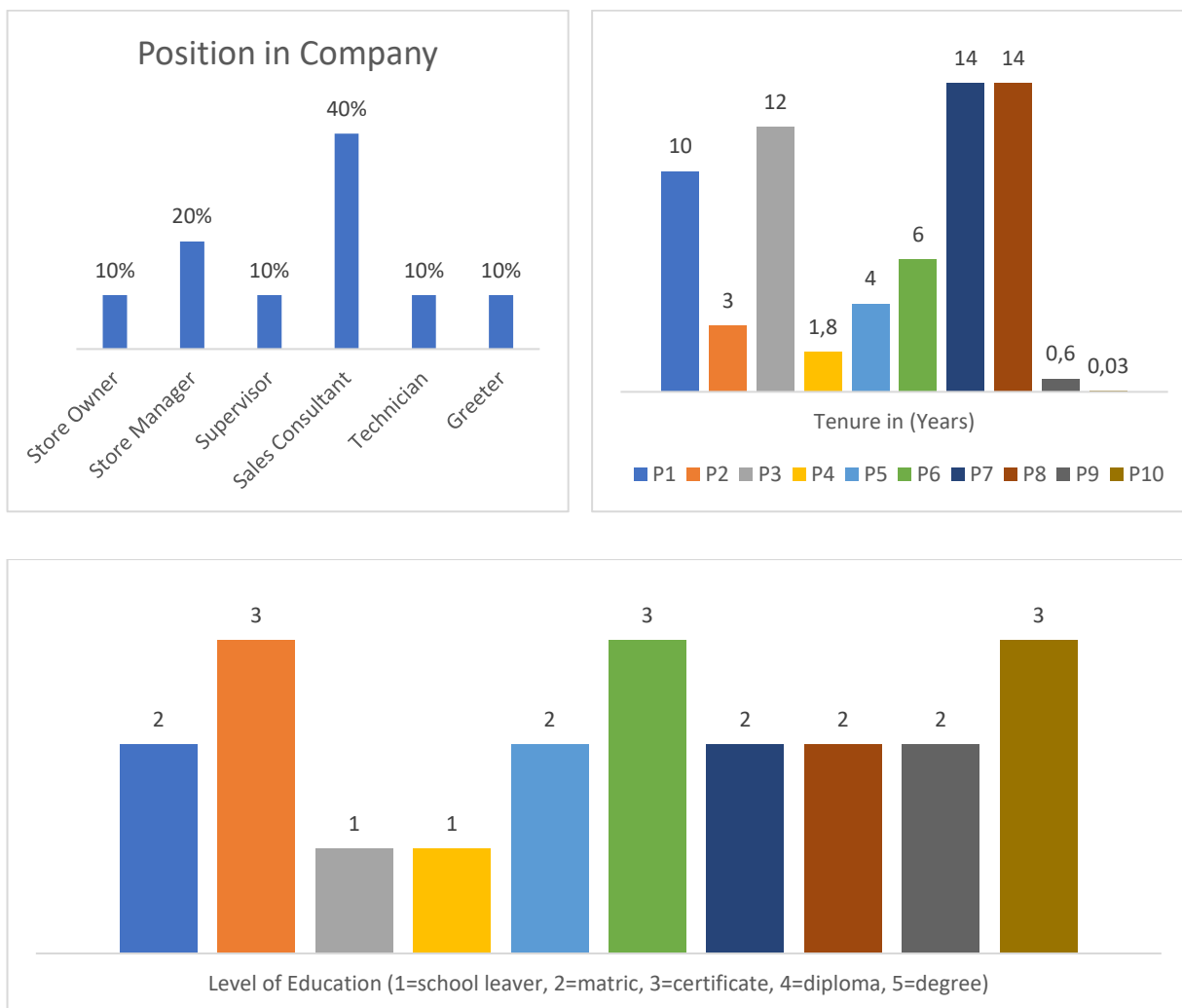


Figure 4-1: Demographic Profile of Target Audience

Ten respondents were interviewed, with the majority of them being sales consultants because of to their work schedules and accessibility. Twenty percent of those interviewed were store managers, ten percent were business owners, and the remaining twenty percent were supervisors and greeters. This provided the researcher with a decent mix of the sample population, and participants were scattered over the North West Province to guarantee that the target group was represented. To guarantee reliability and validity, a portion of the data was allocated to participant demographics and organisational factors. The participants had a six-and-a-half-year average tenure, with the greatest duration documented for two people being fourteen years and the least time being three weeks. This contrast allowed the researcher to compare participant emotion toward technology to persons who had recently finished a two-week training cycle, and those who had completed their training years earlier and had been utilising the systems, equipment, and

other tools for some time. The degree of education of participants was assessed, as well as whether they had undergone mandatory Vodacom on-board training, in order to gauge their comprehension of technology and solve use constraints. According to the data, fifty percent of the participants had completed grade twelve and the remaining thirty percent had received a certificate after completing grade twelve.

4.3 Sentiment on Key Technology Measures (Perceived Ease of Use / Usefulness, Feelings, Technology Clarification and Target):

	1: M.Hartzen... 18	2: M.Hartzen... 18	3: M.Hartzen... 18	4: M.Hartzen... 18	5: M.Hartzen... 18	6: M.Hartzen... 18	7: M.Hartzen... 18	8: M.Hartzen... 18	9: M.Hartzen... 18	10: M.Hartze... 18	Totals
Feelings a... 50	254	157	324	178	199	124	109	122	276	234	1977
Perceived... 30	141	150	292	100	215	169	163	120	151	53	1554
Perceived... 40	278	203	527	154	347	196	173	98	152	80	2208
Target Aud... 30	37	25	38	41	33	33	28	28	42	32	337
Technolog... 30	145	124	190	66	128	89	177	125	87	73	1204
Totals	855	659	1371	539	922	611	650	493	708	472	7280

Figure 4-2: Technology Sentiment

Participants showed a strong sense of positivity toward perceived usefulness for the technology developed by Vodacom for the mobile retail stores. Furthermore, there was a strong sense of feeling in favour of adopting the new technology being launched. Perceived ease of use, scored the lowest between participant emotions toward technology being used in stores and the usefulness of these technologies.

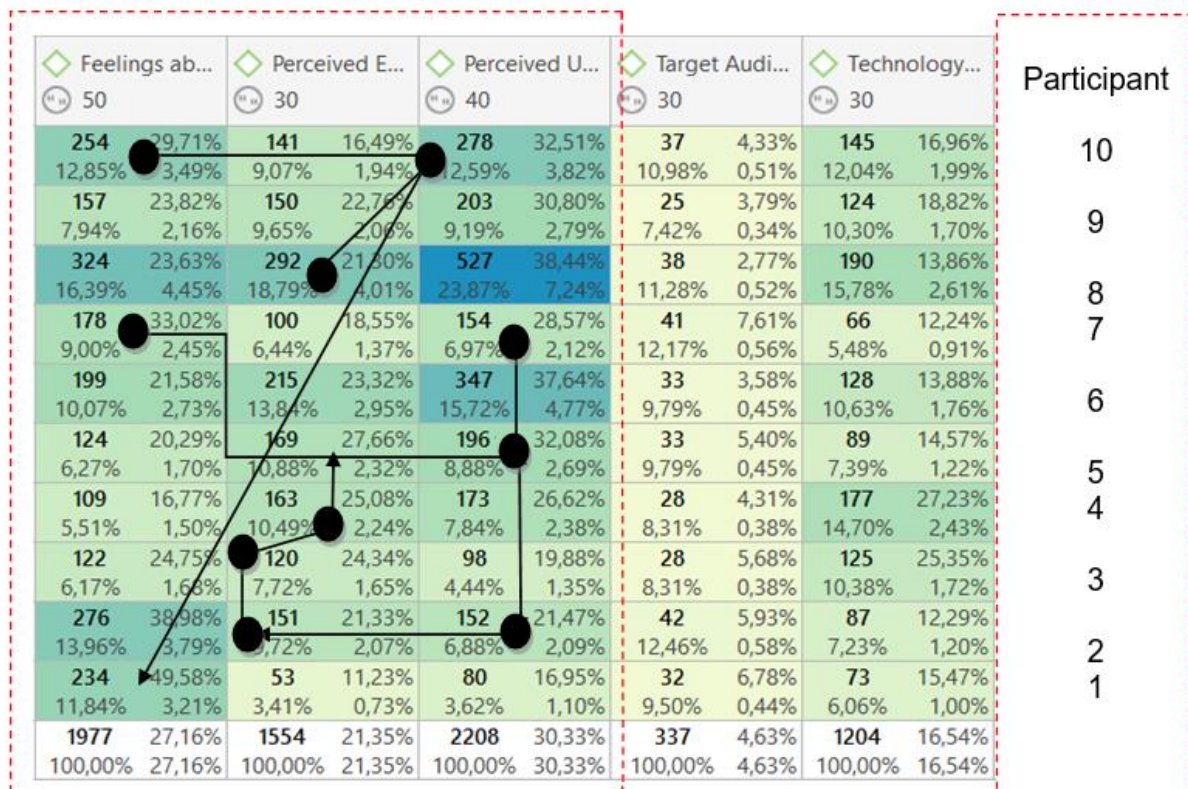


Figure 4-3: Technology Acceptance Correlation Index

There is a strong correlation between feelings about the technology being used and perceived usefulness. Perceived Ease of Use is a cause of Perceived Usefulness and a property of a positive attitude (feeling) toward technology adoption. Participant one and participant ten, showed a strong propensity toward Ease of Use and a positive attitude to new innovations. Participant four showed the least excitement about the new technology based on emotions, but a stronger sense of Usefulness and Ease of Use, in comparison to participant three. Participant one does not perceive the technology available as easy to use, nor very useful to perform their daily duties, but scored very high with the feeling toward the technology being made available.

4.4 Findings From Interviews

Findings from interviews conducted with ten participants across the North West Province in mobile retail stores, using the thematic approach.

4.4.1 Technology Clarification and Technology Interpretation Questions:

Question: Can you give me your personal definition of technology and what you understand it to be?

A common theme that came through was that technology was making life easier and simplified, ensuring that the human race was moving forward. This meant for the participants, that one could manage his or her life electronically; P1, P3, P4, P6 and P7 have indicated that technology allows one to do many things and it improves lives.

A strong secondary theme that came through in the definition was the fact that technology involves mobile phones as P1, P2, P3, P5, P6, P9 and P10 have indicated, while at the same token, participants mentioned computers, laptops and networks. Most of the participants could link technology with some type of electronic equipment, whether it was a computer, a mobile phone, or the operating system utilised to operate the programme. Therefore, their description of what technology entails, was satisfactory: P1 - *“new ways of working”*; P3 - *“make life easier”*; P4 - *“allow(s) you to do everything”*.

The literature indicates that technology is an enabler and play a pivotal role in driving organisational capabilities and ensuring that people can communicate globally and conduct business (Obiso *et al.*, 2019). This in line with the participant list, technology enablers would include, but is not limited to Mobile, cloud computing, data analytics, big data, machine-to-machine communication, robotics, e-commerce, m-commerce, and customer self-service are all examples of emerging technologies (Almada-Lobo, 2015). This indicated that there is a general understanding of what technology is and how it is linked to specific technology hardware and software.

Question: How will you explain your knowledge and use / capabilities for using technology?

The participants unanimously said that they do not struggle with using the existing technology and the majority have indicated that they had a good knowledge of the systems. Participants indicated a strong sense of capability to use the technology that Vodacom is making available to service customers daily. Only P2 and P4 have indicated that they have a distinct knowledge of all the systems that they utilise daily in the store. P2 has indicated that he has a ninety percent (90%) competence to utilise the systems that Vodacom give, while P4 indicated that *“Service Base, M2 and C3D are very easy”*.

The interviewer observed that the participants were very modest in evaluating their capabilities of usage of technology. Furthermore, the researcher assessed this topic based on the specific

systems that participants are using within their scope of work. This enabled fairness, particularly considering the amount of time participants were employed by the company. There were a few remarks around certain challenges for example P1 has suggested that new technology should be tested, before it is rolled out. P2 has indicated that some applications like C3D should be simplified and P6 indicated that the constant development and introduction of new technologies is rather painful and that the franchisor at times lack support. P1, P2 and P3 had an average of nine and a half years working experience on Vodacom's technology systems amongst them, which was an interesting take on the challenge mentioned. However, there was a general willingness amongst participants to adapt, which did not specifically agree with Barley (2015) who suggested that the timely acceptance of technology enhances operational efficiencies and improves customer service. The lack of support referred to by P6 refers to delays in training rollout and various capacity challenges like user integration and inadequate and outdated business systems.

Question: Tell me about the technology systems you use at work and how fast can you master them?

Participants were indicating that C3D was a bit more challenging in comparison to M2. P1 and P3 described C3D as more advanced and intricate respectively. Participants felt that, with a bit of practise, one could manoeuvre and navigate the system, but that it would take years of practise to master fully. P2 was the only anomaly from the participants using C3D, which indicated that they all struggled with M2, more than C3D: *"M2 was a struggle and a bit difficult, but C3D was very easy"*.

P5 suggested that no knowledge of the technologies could be gained through training and P3 purported that specific scenarios would confront you with system capabilities that are not being used daily. Furthermore, P8 also indicted that *"with C3D, you have to click on this thing, to get to another thing"*, and that there are a lot of links. The general consensus was that M2, VPP, Q-Nomy and other more basic systems were learnt relatively fast, while at the same time the technology that had multiple layers and more complex dashboards, took longer to master. None of the participants have indicated an unwillingness to learn how to use these systems, but a challenge which was identified, was that C3D took longer to master. At the same token, the research question seeks to create insights that will: accelerate the adoption of new technologies; resolve hindrances in a proactive manner; and empower retail enterprises to take advantage of technology advancements. Fuzhan (2019) indicates that resistance to change is natural and that it limits the uptake, which in turn has a negative effect on efficiencies and profitability. No deliberate stalling of the new technology uptake could be identified through this question; however, participants did allude to the fact that complex dashboards were more difficult to master and that this could have an adverse effect on technology engagement (Laing, 2017).

4.4.2 List of Questions Assessing (Perceived Ease of Use)

Question: Would you say there was a time when you struggled with any of the technology systems, processes, equipment and why?

Out of all the participants, sixty percent have suggested that they struggled with C3D, due to various reasons. P1 has struggled to adapt, while P7 has indicated that the attitude toward the program was negative, further to that the franchisor instituted a negative incentive to drive up usage, which further exacerbated the delay in adoption of the system. The majority of participants have indicated that although C3D was difficult to utilise, utilising the system for a while helped navigation on the dashboard and improved utilisation. P1 has indicated that *“the system looked very busy”* while P2 has expressed frustration at the errors found on C3D and that this encouraged a bad feeling, especially when facing a customer.

P5 has demonstrated a strong sense of frustration with the lack of training and support received, when explaining that there are challenges with the rollout of new systems and trying to understand this, while fixing the problems and not knowing whom to call. Furthermore, logging into the system *“fifty times”* (as the participant put it), before being able to complete a transaction while facing a customer, are the things that are frustrating and out of his / her control. There was a common narrative on the lack of support and training, when facing customers and experiencing system challenges. P9 has also indicated that even though training is provided, a lack of Over the Shoulder (OTS) training contributed to struggling. The researcher also observed here that not all knowledge was available on a knowledge repository and that certain skills lay with the individual and when they lack the will to train, or leave before training new employees, it creates a challenge for the new members.

Question: How satisfied are you with the equipment and systems you use daily? Does it make your job easier? Please elaborate.

Nine out of the ten participants have indicated that they are satisfied with the technology Vodacom introduces. While eight out of the total number of participants interviewed, have indicated that the technology being used, makes life easier for all stakeholders. P4 has suggested that they were mostly satisfied with the technology used, but that the business could bring simpler systems like M2 dealer. P5 said, *“I am not happy all and I’m even prepared to give my name, we are supposed to be representative of technology, ... the equipment we use is way outdated”*.

Participants were extremely solution driven, even though they have expressed themselves thoroughly. P1 was concerned with the location of the store and the time of month that they would experience network problems, which could have an impact on the performance of the systems

they use daily. At the same token P3 proposed more technical training for senior store staff in order to be able to self-manage the more basic troubleshooting. System simplification was suggested by P4, P6 and P7. Davis (1989) suggested that ease of use was a significant driver around attitude and technology acceptance behaviours. Through his research called TAM, he had integrated attitude research in Management Information Systems (MIS); MIS laboratory research; and Human-Computer Interaction research (HCI). Understanding that organisations seek to increase performance, but that performance is heavily influenced by humans' decisions to utilise or not to use technology (Davis, 1987). Perceived ease of use describes the level of simplicity with which the system can be used and eighty percent of the participants have suggested that the technology was fairly easy to use (Venkatesh & Bala, 2008).

Question: Do you think using the equipment and systems for a more extended period helped you to perform your job and functions better? How / why?

Eighty percent of participants have indicated that using technology for extended periods improves work output, as participants become used to the user interface. P3 and P5 have indicated that everyday usage becomes muscle memory and users do not have to think about using the system. P7 said that *“the system minimises paperwork”*, but learning is dependent on the individual.

P9 has also indicated that peer assistance plays an important role in understanding the technology. P8 has suggested that COVID-19 fast-tracked data and technology usage. The overall sentiment was that technology is better understood and utilised over longer periods of time. Between technology development and innovation rollout, one has to appreciate that a great amount of time has already lapsed and the timely acceptance of new technology can expedite the return on investment. Increased customer satisfaction through shorter reaction times, greater convenience through multiple channels and segmented offerings, and real-time solutions are among the other benefits (Hassan *et al.*, 2019).

4.4.3 List of Questions Assessing (Perceived Usefulness and Subjective Norm)

Question: In your opinion, why is it taking longer at times to have the equipment, tools and software utilised optimally in stores?

A lack of training was for fifty percent of participants the main reason indicated for delays in technology optimisation. Further to this, P5 and P6 added peer learning and IT support to fast-track technology optimisation. P1, P2 and P10 suggested that people's backgrounds played an important part in the time it took to learn a new technology. P1 wrote, *“people don't understand things in the same way”*. P2 said, *“people are not the same, and does not understand the same”*.

While interviewing participant 1, the researcher was requested to scope the technology and this indicated that the technology conversation could be limited to M2 and C3D only, but for the purpose of validity, the interview guideline was followed and questions were asked to ensure all participants discuss technology from their own point of view. One participant has indicated that the trainer plays an important part in the speed of technology acceptance, while P3 said that the user's level of education, the jargon and language barriers are typical delays on technology adoption. Lack of communication and system errors were some of the factors mentioned that delay technology adoption. The primary theme is aligned to Jeffrey (2015) who found that when colleagues on the same team, or more experienced co-workers, are keen to assist with complex ideas, utilising informal teaching techniques, can employ different degrees of competence, to become adoption agents, or to promote change, is a crucial supporting function. It further indicates that training delays and training capacity challenges negatively affect financial sustainability of new technologies. The Vodacom Group Limited (2021) integrated report has indicated that the organisational strategy is underpinned by effective communication, participation apps, bi-annual questionnaires, and training development, which all are examples of opportunities to involve employees' understandings, talents, experience, and productivity. User backgrounds and subjective norms also seem to play a big part in speed of adoption as users suggested that personal preference plays an important part.

Question: What is your view about the retail application tablet, self-help kiosks and online customer service points in-store and how does your team view these tools?

Some technology is good to utilise for example the Retail Application Tablet. P1, P2, P4, P5, P6, P9 and P10 all agree that they view technology as a brilliant tool that makes life easier. Most participants have also indicated that self-help services are problematic, particularly affording the customer the option to use an online self-help portal. P2 has suggested that "*online upgrades are a nightmare*", P4 has said that the online facility does not always offer what was promised.

As participant 2 was discussing the question, the researcher could sense the frustration with online services and other business units. P2 has indicated, in contrast to the seven other participants, that the Retail Application Tablet was a challenge, it could not meet the required turnaround time (TAT), it also had continuous problems with hardware as well as software. Participants were happy with other technology, like the self-help kiosk found in certain stores within a shopping mall; the queueing system that direct customer traffic; and other OMNI-Channels. P8 has suggested that self-help services are good for the customer, but not necessarily for the business, as it directs customers away from the stores. His overall sentiment was that technology improves efficiencies in store and reduces customer waiting times. Patton (1990) suggested that a qualitative study allows the researcher to gain insights into participants' feelings,

perceptions and ideation on accepting new technologies, as they speak their minds. The researcher could sense the emotion from participants, when discussing specific technologies, like the online option for customers and the software challenges experienced instore, while using some of the technology, that should simplify operations. Also, in line with Jeffrey (2015), who states that people's perceptions of risks in using new technology have been observed with the strong hesitance to accept customer online portals. Whether this was as a result of the loss in sales and the creation of additional work due to inquiries that are being directed to the stores was not certain, although P2 felt that online would refer customers to the stores for support. P5 has also suggested that ninety percent of the time, the online inquiries result in cancellations when the customer comes to the store for support. This phenomenon is directly correlated with perceived ease of use, as the perception of online challenges create anxiety, which negatively affect perceived enjoyment (Jeffrey, 2015). Due to the emotion displayed when participants have discussed online self-help services, the effect of subjective norm perceived usefulness is modulated through user experience.

Question: Do these systems make collaboration easier with other departments, and how can it be improved, if at all?

The general consensus is that technology improves collaboration between teams, departments and business units. P1, P4 and P7 made specific references to the Trade Partner Support Desk (TPSD) and the ease of working and collaboration. Customer Three D (C3D) came across as a system that does not enhance collaboration. P3, P6 and P7 have indicated that C3D and specifically SIM SWOPS and acquisitions were difficult and that support took too long. P3 said that *"stores and support should have the same service requests (SR), but would not see the same information"*. P4 indicated that the insurance division should allow stores self-service, as this leads to logging multiple service requests.

The overall sentiment was that collaboration was enhanced through the use of technology and - adoption. P2 and P3 have suggested that the process was too slow and could be streamlined. Participants also highlighted the limitations of technology due to errors, multiple systems, departments and accesses. P8, P9 and P10 have indicated that the systems which were talking to each other, were seamless and enabled faster information-sharing between departments. The researcher observed that these sentiments were shared by participants that utilised a limited number of systems, in comparison to the majority of the participants. Participants were not rejecting the technology used for collaboration, but were fairly concerned due to its short comings. Coovert and Thompson (2014) also suggested that technology enhances coordination and collaboration and that a favourable perception could improve the usage rate. Vodacom Group Limited (2017) have indicated that it focuses on cross-collaboration, agile work groups, and skills

development, to foster a culture of innovation, but would need to focus on sentiments from P2 and P3, that the process is taking too long, even though they were only representative of twenty percent of the sample population. Sharing the overall sentiment that collaboration is effective, Diako (2011) has indicated that technology had fundamentally and profoundly altered relationships.

Question: Kindly share any additional valuable information or details about questions I did not ask?

Most participants were rather satisfied with the interview at this stage and have not volunteered any additional information, when afforded the opportunity. It should also be noted, that this was approximately twenty-five minutes into the interview and the researcher had to ensure that participants remained focused and iterated that the interview was almost drawing to a close. P1 has indicated that the youth was a driver for technology and that a lack of supply for this segment affects adoption uptake. Furthermore, P10 has indicated that not all people have a technology background and that they are struggling to adapt to new technology. Even though individuals might not have a technology background, any form of resistance affect the relationship between innovation and operational effectiveness through perceived risk. Thorough onboarding processes will have to be considered to ensure the right skill and fit, when placing these. This background and adaptation limitation creates fear of technology and could be classified as: active resistance – those who have a negative approach to innovation; inertia – people who retain existing goods, systems, or services; robust and active resistance – people who blame innovation and are negative about technology adoption (Park & Koh, 2016).

4.4.4 List of Questions Assessing (Participant Feelings about Technology)

Question: How to you feel about the new technology Vodacom develops (optimistic, pessimistic, etc.) – Please explain?

P4, P6, P8, P9 and P10 were very optimistic around the new technology that Vodacom develops and uses within stores. Some participants were concerned about the amount of information being made available and the time limitations to the launch thereof. P1 has suggested that the lack of knowledge and available information creates confusion. P9, *“I’m quite impressed with the way Vodacom develops new systems, for example Skyline will manage orders, show part availability for repairs and allow repair stores to do a forecasting”*. P1 said, *“I’m a bit sceptical, wondering if I’m going to struggle”*.

There has been a general perception that there was not enough time between launching the new technology and using the technology. Furthermore, training is now being offered online and only covers the surface of what it needs to optimise the technology. Apart from this, there is an

information overload, which contributes to the limited functionality usage. Fifty percent of participants were extremely happy with the technology and innovative ways of doing business, but have also indicated that continuous development creates hesitancy on technology routes. The overall participant sentiment has indicated that they were happy with the technology and felt good towards it. Two participants drew contrasts between the good and the bad they have experienced with technology and have not demonstrated signs of optimism nor pessimism. P1 and P7 were pessimistic, due to innovation volumes within the mobile retail environment and the lack of support mentioned by the support teams. The technology readiness index (TRI) assesses willingness to adopt new technologies and view the preparedness of participants to utilise a technology based on optimism, innovation discomfort and anxiety (Parasuraman, 2016). Participants have not demonstrated an outright assistance to technology usage, but suggested that training and support be streamlined; they also proposed time considerations between technology launches.

Question: Would you say you have any suspicions about the technology, how it is affecting / can affect your job and job security? Please explain.

P2 said that they have no suspicion about technology, while P3 views technology in a positive light. P5 said that *“technology can give you a promotion”*, and P6 discussed the reduction in manual labour, due to innovation. Participant 1 had very strong suspicions about technology and was concerned that people might not be needed in future, due to self-help options. This posed an eminent threat to job security and P7 shared this sentiment, suggesting that petrol stations and delivery options could be automated and this could lead to job losses. P4 suggested that technology is a good thing, but would affect people’s jobs and that cyber security is becoming a constant risk. *“There is possibility in the future that technology can replace humans, through AI functions, but not immediately”*, said P10.

Technology is described by most participants as a good thing and also described in a good light. P9 suggested that even though technology simplifies work life, there were certain things that only human beings could do, and was not concerned with job security. P6 also suggested that technology might not be an immediate threat to the mobile industry, but that there were industries that were negatively affected by technology takeover. The underlying sentiment (Rojas-Méndez *et al.*, 2017) was that the majority of participants were not particularly suspicious toward technology and innovation. Participants also showed an above average inclination to accept and use technology as part of the technology readiness demonstration (Parasuraman, 2016). Consideration has to be given to the perceived risk that could affect resistance to change when new technology is being introduced (Röth & Spieth, 2019). Jeffrey (2015) also suggested that people’s perception of risk would drive their decision to accept or reject innovation and the more the consciousness of risk, the greater the hesitation to use a technology.

Question: Would you say Vodacom is getting you ready enough for new technology launches, please explain your answer?

There was a strong sentiment that Vodacom is getting store staff ready enough for technology usage, considering that P1, P2, P4, P6, P7, P9 and P10 shared this view. Training came through as a strong detractor to technology readiness and P3, P4 and P5 suggested this in their discussion. To confirm this, P1 said, *“Vodacom get(s) people ready enough, but everything comes at the same time”* while P8 said, *“You are never really ready, there are so many things, can you really be ready”*.

P6 and P10 in contrast to P3, P4 and P5 suggested that Vodacom provided adequate training for product, system, and technology launches. Some participants have drawn a direct negative correlation between technology readiness and the lack of training, usage, and practise. This is in line with Diako (2011) findings that a low usage rate of technology in the banking industry resulted in behaviour unfavourable to technology adoption. Mohamed (2020) supported this notion that a key contributor to technology readiness and adoption is education, as the lack thereof identifies with extreme failures.

Question(s): Could you list a few things that would help you accept new technology? / Could you also list a few things that would stall / hinder that acceptance?

Table 4-1: Technology Accelerators Versus Technology Detractors (Table 3)

Technology Accelerators:	Technology Detractors:
Training simplification and more detailed training, granting participants the opportunity to do things practically; this including having access to original equipment manufacturers (OEM) devices to demonstrate to customers how the different technologies work. Furthermore, having a simplified system, where everything is available on one system,	<p>The amount of technology being launched and introduced within mobile retail stores. Limited time spent in training and the fact that not all data are available on the training repository.</p> <p>P3 indicated that technology intimidates due to a lack of knowledge and that the lack of information is a huge detractor. System updates, or the lack thereof, are also viewed as a detractor (P9), while a lack of leadership on innovation at store level, is also impacting user adoption.</p>
Participants have also indicated detractors as things that are outside of their scope of control, like network downtime and load shedding, which negatively and adversely impact technology	

usage and adoption. Data security and organisational integrity were also considerations for P10 and this fact came up twice in the interview with this participant. Fuzhan (2019) suggested that detractors hinder technology adoption and work against the uptake of new technologies, limiting the adaptive capabilities. The request by technology users in mobile retail stores to see training improvements, is directly correlating to the Abatan and Maharaj (2014) assertion that adoption increases quality and provides superior customer service.

4.5 Conclusion:

Interviews were used to collect primary data, which were coded using a mix of data analysis, utilising a similarity index and Atlas.ti9. The researcher was able to gain a better understanding of the topic by using secondary data from the literature. The results of the interviews were presented using a theme approach, and these revealed that participants at mobile retail outlets in the North West Province were generally eager to interact with new and current technologies. There was also agreement that technology enhances people's lives and business' efficiency. Lack of knowledge, training, and the number of new technologies released, were all noted as negatives, especially given the little time allotted to use and optimise these. The findings, conclusions, and suggestions are summarised in the next chapter.

CHAPTER 5: SUMMATION OF FINDINGS, CONCLUDING REMARKS AND RECOMMENDATIONS

5.1 Introduction

Chapter four included scientific data on the study's conclusions, based on information received from 10 participants over three weeks. Finally, the findings are discussed in Chapter five and closing observations and recommendations based on the research. In addition, they are integrating these findings and conclusions to the study topic and literature on the adoption of new technologies in Vodacom mobile store outlets across the North West Province.

This research also aimed to discover causes of resistance, eradicate them, and boost acceptance through:

1. Investigating the reasons that restrict the adoption of new strategic software applications in the mobile retail sector,
2. Determining how the deployment and acceptance of new technologies may be accelerated in the mobile retail industry, and
3. Making suggestions based on the above results, emphasising describing these findings, analysing prior reports, following limits, and drawing similarities across interventions.

Chapter four used graphs, tables, and general discussions to present the outcomes of the interviews while also citing a high-level summary of the literature.

5.2 Summary of The Findings

Based on the findings presented in Chapter one, this part addresses the nature and scope of the investigation and how the study's objective was accomplished.

5.2.1 Technology Definition and Clarification

The study's current objective was to define technology and make sure that everyone in the sample group understood what it meant in the context of the investigation. Although most of the participants gravitated toward the technology they use daily, the researcher did not solely confine their interpretation to the mobile sector. The clarification of the definitions as confirmed by Almada-Lobo (2015) who indicated that technology includes Mobile Phones, Cloud Computing, Data Analytics, Big Data, Machine Learning or Artificial Intelligence, Robotics, E & M-Commerce and consumer Self-help Services. Furthermore Barley (2015) suggested that technology include

applications and systems designed to improve operational efficiencies. Technology also allows the organisation to improve their capabilities and ensure global communication, interaction and business transactions (Obiso *et al.*, 2019). All ten interview participants supported this finding, and no one seemed to misunderstand what technology was during the discussion. Apart from the hardware and software mentioned, eight participants suggested that technology enables life to be more accessible, simpler, and more comfortable.

Bresnahan (2010) posits that technology has transformed the way organisations does business and empowers both the consumer and organisation alike. Further to this Abatan and Maharaj (2014) also suggests that technology and innovation adoption addresses academic and social needs, while Diako (2011) indicated that technology is essential in decision making, thus further supporting the notion that technology is an enabler, simplifying things.

5.2.2 Technology Usage Capabilities and User Skill

The next objective was to determine the level of skill required to utilise these technologies and if participants demonstrated any gaps that could lead to technology failure or user frustration.

The interviews suggested that most participants had a good grip on the daily technology to perform their duties. Participants were reluctant to credit their abilities to excellence but instead explained it as above average. Two participants suggested that they were highly competent to use all available systems in-store. The researcher prompted participants to list some of the technology they utilise to ensure data reliability. One participant, in particular, suggested that technology be tested before rollout and that fewer complex applications be introduced. Kamaruzaman *et al.* (2019) suggests that technology utilisation requires computer skills and that software optimisation requires a high level of human capital. A lack of skills is an adverse driver for technology adoption and should be managed systematically (Keenan, 2020). Vodacom's strategy is to transition from a telco to a techco and digitise the organisation while using the appropriate skills and simplifying its processes through innovation. The mentioned limitations to technology capability optimisation were complex systems and a lack of support by participants 1 and 6, respectively.

Furthermore, the lack of training impacts user integration negatively, which directly impacts innovation adoption, albeit voluntary or circumstantial. Participant nine demonstrated characteristics of early adopters through an exuberance for new technologies, a high-risk tolerance for innovations and focussed on the advantage's technology bring to their skill set. Participant one was concerned with the time required for testing, while participant 6 emphasised the technology challenges as a hindrance for optimisation; this is in line with Mirthinti (2020) early

majority finding, preoccupied with testing and technology proof of performance. Furthermore, the researcher could see where participants were sitting on the technology adoption life cycle (Lumen, 2020).

Even though the overall sentiment was positive regarding technology usage, there was a reluctance to utilise due to system problems and complexities. Furthermore, there was consensus that technology performance failures impact overall skills output.

5.2.3 Speed of Mastering Technology System Utilisation

This objective was to determine the time it took participants to learn a new system and identify some of the reasons for any delays in innovation optimisation.

Findings suggested that some innovation systems were more accessible to navigate than others. For example, seven participants suggested that Vodacom's customer 3-D system was very complex and challenging to learn. One participant suggested that they are still learning the system because it had multiple layers and options on the dashboard and that some functionality was hidden behind other navigation buttons.

Onyango (2019), indicated that information systems are characterised by relevance, correctness, conciseness, completeness, understandability, currency and timelines, which is critical to achieving the required outcomes. He further states that technology perceived as faulty, not improved, and challenging to use, encourages non-adoption and resistance. Although C3D has been explained as highly complex and takes much longer to navigate, participants suggested it has a high perceived service quality linked to higher user happiness, retention, and usage (Chen & Tan, 2004).

The fact that some of the functionality is hidden suggests that the system cannot be fully optimised and could result in customer frustration and take longer to monetise and secure the return on the innovation investment (Chen & Tan, 2004). Furthermore, Bagozzi (2007) considered that the relationship between intention and action was an unproven assumption in social science research, and those technology usage decisions are influenced by their attitude to embrace technology. He indicated that dedication inspires favourable action and that goal setting should focus instead of behaviour modification. In line with Jeffrey (2015) adoption and optimisation should consider group, organisational culture and social elements affecting the perception, specifically around C3D and ease of navigating.

The interviews further indicated that all other systems were relatively easy to navigate, less complex, learned faster, and monetised sooner. The participants did not display an unwillingness

to learn the systems and technology, and participant three indicated that some functionality would only be discovered when faced with a specific scenario.

5.2.4 Perceived Ease of Use

This section aimed to determine how easy it is to use the technology introduced by Vodacom and the degree of difficulty between innovations used daily.

This factor focuses on technology complexity, directly correlated with perceived usefulness, ease of use, and influence behavioural intention (Jeffrey, 2015). Perceived ease of use is described as the level of simplicity with which a system can be used (Venkatesh & Bala, 2008). Furthermore, Davis (1989) suggests that technology acceptance greatly depends on innovation functionality and the ease or difficulty of performing a task. The degree to which a person feels using a specific system will involve effort is critical in technology usage intention (Diako, 2011). Six participants indicated that they had a greater degree of difficulty with one of the systems, namely Customer 3-D, due to issues like the system's layout; C3D is more complex than other systems utilised in store the multiple layers of navigation through its dashboard. However, participants indicated that using the system for a prolonged period improved ease of use. During those difficult times of navigating that, a lack of competence exploitation delays the competitive advantage in market share (Borges *et al.*, 2009). The research aligned with the findings of Wu and Lu (2013) that the role and function of technology use is unclear and require further study as the interviews indicated that C3D was complex but not impossible to manage, regardless of tenure experience or exposure.

The interview identified the frustration experienced with new systems and the lack of training support provided. This is in line with the Theories of Change that suggests technology acceptance further splits individual preferences, system characteristics, social influence, and the overall conditions facilitating the adoption process (Davis *et al.*, 1989). The perceived ease of use is directly correlated with computer self-efficacy, the participant's perception of external control, and objective usability, which promotes behavioural intention and, ultimately, user behaviour. Furthermore, perceived ease of use affects the users' attitude toward the technology. The multiplicity of C3D could create the perception of overload and or change fatigue and could stall adoption (Venkatesh & Bala, 2008). Participants three and five identified with a strong sense of non-voluntariness, but the organisation incentivised (albeit positively or negatively) to drive adoption behaviours.

5.2.5 Technology Satisfaction

The next objective determined how satisfied participants were with Vodacom's technology available for daily usage and if this made their work easier.

Ninety percent of participants suggested that they were happy with the technology available in stores and could perform almost all functions. However, references were made to instances where challenges had to be escalated, and participants felt that they should be further empowered to solve fundamental troubleshooting problems. Furthermore, participant four proposed simpler technology, referring to Morpheus (M2) as an example of a simpler technology introduced before C3D, further elaborating the point of Mirthinti (2020) regarding Laggards in the Technology Adoption Life Cycle. The interviews further suggested that technology makes life simpler, allowing users more time to conduct other business.

5.2.6 Time Impact on Usage

This objective aimed at understanding how long it took participants to master daily technology and any best practices that enhance technology adoption.

Retail misses the benefits of timely deploying and monetising technology, systems and applications, and this slow adoption of technology could result in loss of customers and ultimate loss of revenue. Barley (2015) suggests that the timely acceptance and deployment of innovation enhance effectiveness and efficiencies and drive customer retention. Half of the interviews indicated that a lack of training was the main reason for delayed adoption and indicated that the company needs to consider diversity and people's backgrounds in technology adoption. User education, language and other barriers were other strong sentiments that came across during the interview. Furthermore, a lack of communication and the fact that a lot of time laps during the technology deployment and implementation stage that affect speed of usage and adoption.

Fuzhan (2019) posits that training and skills development drives up the economy, which would mean revenue growth for Vodacom. When peers or more experienced co-workers are willing to assist with complex ideas, utilise informal teaching techniques, and employ varying degrees of competence, becoming adoption agents or pushing change, this is one of the most critical supporting tasks (Jeffrey, 2015). The interview with participant nine suggested that peer learning was an essential contributor to technology adoption, which aligned with Fuhzan's view on the benefits of peer learning.

5.2.7 Perceived Usefulness and Subjective Norms

The following objective aimed at ascertaining how useful the technology was for the store's day-to-day operations and if it empowered participants to service customers.

Venkatesh and Bala (2008) describes perceived usefulness as a platform's ability to improve work effectiveness. Furthermore, user behaviour is affected by perceived usefulness, considering interface complexities and diverse platforms (Wang & Lin, 2021). Figure 7 demonstrated that participants showed a strong positive relation between Vodacom's technology and user-perceived usefulness. Considering the framework of Fishbein and Ajzen (1980) comprehending how social norms influence compliance, conformity, and identity, the interviews suggested individuality and that people do not view and understand technology the same, based on views from participants one, two and ten. Simultaneously, the interviews emphasised that some people might understand one technology, while another person something else, and that cross-pollination could be helpful in light of usefulness.

5.2.8 Users Own View on Technology Deployed in Stores

The following objective encouraged participants to reflect on the range of technology deployed to stores and their views. Findings highlighted commonalities and a generally positive sense of the technology being used.

The interviews indicated a high acceptance of the deployed comprehensive technology and described it as brilliant, valuable and good to great. This supported Liao *et al.* (2015) that the appropriate behaviour during and after a technology launch by sponsors may encourage or discourage technology uptake. Furthermore, based on Kleijnen *et al.* (2009) the high level of acceptance overcome two barriers, psychological needs, mainly tradition and perceived image. Based on the hypothesised technological view continuum, where 1=strong negative belief or 10=strong positive belief, interviews demonstrated a strong positive belief toward the technology being deployed in Vodacom's mobile retail stores.

5.2.9 The Influence of Technology on Inter Departmental Collaboration

The following objective focused on the impact of technology usage on inter-departmental collaboration. The findings indicated that technology improves collaboration between teams and business units. However, three participants also sensed that one specific user interface does not enhance collaboration. Furthermore, responses indicated that a lack of transparency on the user interface between front line staff and support staff delayed service request resolution time.

Coovert and Thompson (2014) indicated that technology usage expands the scope of human activity and improves human capability and collaboration, supported by the interview responses. This further supports Vodacom's digital strategy to empower individuals through collaborative structures by investing in skills and people to drive a digital future (VODACOMGROUPLIMITED, 2017).

5.2.10 User Emotions Toward Technology Used in Retail Stores

This objective focussed on users' feelings about new technology Vodacom develops and whether it created emotions of optimism or pessimism. Findings indicated that five participants were highly optimistic about the new technology developed and deployed. One participant was mainly concerned with the rate at which new technology was deployed and suggested it raised emotions of scepticism and questions around ease of use. However, the overall sentiment was that there was not ample time between technology launch and training to ensure user confidence with the innovation.

Due to the robust nature of the techco industry, change fatigue could creep in, and it is imperative for the business to address the feeling of dread, despair and scepticism (Ace & Parker, 2010). There was a high propensity toward positive emotions in accepting new technologies, although two interviews indicated negativity toward the number of innovations being launched. Graf-Vlachy *et al.* (2018) cautions that change due to similar groups is impacted by social influence. Although only twenty percent of participants demonstrated emotions of outright pessimism, interpersonal considerations for technology adoption should be further investigated. The feelings of pessimism support one of the dimensions of technology readiness referred to as discomfort, perceived as inadequate control over technology and a sense of being inundated by it; and feelings of inadequacy (Parasuraman, 2016).

5.2.11 Suspicions About the Technology Used in the Mobile Retail Stores

The following objective was to ascertain any suspicions around technologies being used and introduced within the mobile retail environment. The findings indicate that most participants had no suspicions about the technology being used in the retail stores, although technology disadvantages were highlighted by participants seven and ten.

The overall sentiment was that technology enhances life and operations and that although it had its limitations, it could not threaten job security. However, one interview indicated strong general suspicions about technology and that self-help kiosk in the retail environment could render people jobless. This supports Parasuraman (2016) view that technology suspicion promotes scepticism and the users' tendency to adopt technology adversely. Furthermore, Park and Koh (2016)

indicate that suspicion could lead to technology fear and spill over to active resistance, where people can blame innovation and become pessimistic about technology adoption.

5.2.12 User Technology Readiness

The following objective focussed on assessing if Vodacom was getting users ready enough for new technology launches. The findings suggested that Vodacom is getting store staff ready enough for new technology and technology usage.

This aligned with the technology readiness index (TRI) that assess user's willingness to embrace and adopt innovation (Parasuraman, 2016). Diako (2011) elaborates on this point and suggests that optimism and inventiveness are related to positive emotions and increase technological readiness, but discomfort and insecurity hinder it. The findings also indicate that the lack of training support was a strong detractor for technology readiness. Therefore, the 4IR encourages skills development and investors in people to drive learning new competencies (Kamaruzaman *et al.*, 2019).

5.3 Conclusion

The study discusses solutions that might help with a technological push and expedited decision making in retail businesses. It admits that change is generally expected but that resistance to change is also expected, influenced by a few elements such as staff adoption decisions, social norms, perceived usefulness, and ease of use. New technological innovations boost production and efficiency across all markets. Furthermore, the fourth industrial revolution (4IR) promoted technological investment through education and expanded competencies.

According to the initial analyses, the conclusions of the literature are consistent with empirical findings. According to the research and actual evidence, adopting new technology provides several advantages. Vodacom will gain a competitive edge due to higher efficiency, revenue, delighted customers, and enhanced customer retention. Furthermore, accepting new technology has a range of benefits, including enhanced operations and corporate processes, broadening the area of human activity via diversity, and enhancing people's skills to accomplish things quicker. It also gives greater control, coordination, and cooperation.

Investigating the factors affecting the adoption of new technologies in mobile retail stores in the North West Province, paid careful attention to the technology acceptance model Davis (1989), with a specific focus on; perceived ease of use and usefulness. Furthermore, factors of change management Cummings and Worley (2015), the technology acceptance framework Venkatesh and Bala (2008), technology in retail, considering the stages of adoption Mirthinti (2020) and

theory of reasoned action Vallerand *et al.* (1992), and planned behaviour (Seyal & Rahman, 2017).

While contextualising technology and innovativeness, participants showed comprehension for technology clarification, which confirmed the mobile retail industry's right fit and correct skill. This aligns with Vodacom's strategy (Vodacom Group Limited, 2021) to build competencies through defined actions in advance, considering employee ideas, skills and experience. Vodacom's mobile retail staff also demonstrated a firm handle on utilising the technology to perform their daily duties. However, capability limitations were linked in the findings to interface complexities and a lack of support by the teams performing a supporting function. Apart from the two mentioned limitations, a lack of training, the time limit of training and the new training medium, was also cited as negatively integrating users and affecting their skills.

The complexity of specific technology systems and the fact that there are different layers of information on the user portal, directly and negatively impact technology optimisation, monetisation and user satisfaction. Some of the interviews identified high frustration levels as sixty percent of participants indicated a high degree of difficulty with one particular technology. Furthermore, this adversely impacts ease of use and usefulness. Twenty percent of participants showed a strong sense of compulsion through organisational incentives to adopt technologies. Vodacom's technology and innovativeness created a positive vibe, and store staff indicated positive emotions with their technology. The findings did not indicate a deliberate stalling or delay in adoption due to highly technical requirements; however, the lack of proper training surfaced again, including language and cultural differences. Peer learning was recommended as an alternative training vehicle in the wake of capacity challenges. Individual differences were highlighted as a strong consideration for technology development, while group considerations were for group and peer learning. Furthermore, technology acceptance, teamwork, and user emotions achieved a very positive metric during the analysis, while most participants had no suspicions about the technology.

5.4 Recommendations

The following suggestions are based on the findings of the research.

5.4.1 Simplified Technology User Interface

Technology complexities are one of the most challenging factors to circumvent, and participants asked for radical simplification, where all systems are in one place, yet at the same time, requesting almost a single-layered dashboard. A simplified user interface would represent a

deliberately visual interface. If there are layers, due to the number of options available (in keeping everything in one place), the click of a button should not fundamentally change the graphics.

5.4.2 Lack of Support

The store staff was interviewed to represent the frontline in Vodacom's mobile retail stores. They require a versatile support structure that includes interpersonal, organisational, and professional assistance. The company must take into account the structural, systemic, and human impediments to obtaining assistance. More collaboration is required, including system alignment, engagement, and co-production of support services and their monitoring, while ensuring coherence and consistency.

5.4.3 Lack of Training and Training Time Constraints

Training remains a core factor in driving overall technology adoption in mobile retail stores and introducing a variation of training delivery tools and methods, including modular training to manage time constraints and make learning fun and flexible. Drive continuous improvement to manage quality and address learning gaps while getting managers involved as sponsors. Consider learning preferences and be accommodative, furthermore making training available given the language and diversity challenges.

5.4.4 Voluntariness in Comparison to Compulsion

It is of utmost importance that the potential adopters believe their decision to adopt is voluntary, being cognisant that forced learning harm the genuine interest in the technology or innovation. Instead, it focuses on scenario learning to drive decision making and problem-solving and to motivate learning.

5.4.5 Digital Over the Shoulder (OTS) Regional Champions

Peer learning continuously came up as a recommendation from participants, focusing on empowering store managers and or supervisors to do primary troubleshooting and more advanced access to technology navigation. In addition, simplify the knowledge repository and learning management systems and leverage discussion forums and learning collaboration chats, debates, and teamwork.

5.5 Areas for Further Research

This study focused on investigating the factors affecting the adoption of new technologies in mobile retail stores in the North West Province. This study succeeded to highlight technology

accelerators and detractors to Vodacom's mobile retail staff. Furthermore, it highlighted the factors inimical to the delay of innovation adoption and recommended future actions. Future research could focus on investigating factors that encourage early technology adoption as an adoption driver.

5.6 Limitations

The study had the following limitations;

1. The research was confined to the North West Province and, more specifically, Vodacom's mobile retail stores; as a result, the scope and results cannot be applied to other mobile retail stores.
2. Furthermore, a larger sample spanning all of the country's regions is required to confirm the results further. The study further had a time and budget constraint. Some of the interviews were conducted face-to-face where possible while observing all COVID-19 protocols and making telephone conversations. During the interviews, there was also fatigue as approximately twenty-five minutes into the interview. Some participants got distracted, while others started giving shorter answers and had to be prompted for elaborative feedback.

The researcher was limited in the findings in the following way;

1. The study only focussed on Vodacom's mobile retail stores in the North West province.
2. Furthermore, the focus was on technology adoption as a driver for operational efficiency, effectiveness and technology optimisation.
3. The researcher further only used the interview to measure opportunities and challenges for technology adoption.

However, regardless of the limitations, the findings from the study offer valuable insights into the adoption behaviours in Vodacom's mobile retail stores in the North West province.

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LIST OF ANNEXURES

Annexure 1: Pre-testing Interview Guideline

Annexure 2: Final Interview Guideline

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Annexure 5: Turn it In Report

Pre-testing Guideline for Semi-Structured / Standard Interview Questionnaires

Dear Sir Madam

Good day; I am Moses Hartzenberg and am a student at North West University studying towards an MBA. As part of my studies, I am conducting research (Investigating the factors affecting adoption of new technologies in mobile phone retail stores in the North West Province).

I want to ask for your assistance to complete my research project by accepting an interview that will take approximately 30 minutes. Doing the interview will not have any cost, disadvantage or penalty on you, and there will be no direct risk or benefit in participation or withdrawal from the interview. The interview can be face-to-face, telephonic or via a zoom meeting, observing all COVID-19 protocols.

You may skip any question that you do not feel comfortable answering, and you may also stop at any time or request to resume at a convenient time. The interview will be anonymous and confidential, and you do not have to indicate your name or identification details. The information will be kept secure and will not be disclosed to any third party. A pseudonym will be allocated to each participant to protect their privacy in the research findings and report.

If you have any questions or concerns during or after the interview, kindly contact me on 0829974779 or e-mail me at Moses.Hartzenberg@gmail.com

The research report will be available on the North West Universities library site, and all data collected will be kept on a password-protected computer. Other researchers, with your consent, may use data collected, and any ethical concerns may be directed to the Universities ethics committee.

Purpose of the interview:

Investigating the factors affecting adoption of new technologies in mobile retail phone stores in the North West Province

Duration of the interview:

A 30-minute interview discusses 13 questions on your work, your role and the technology equipment you use. (N.B.: Demographic information for analysis purposes only).

The procedure of the interview:

Research briefing	Consent & Permissions	Appointment booking	Further clarifications	Interview Conducted	Results & feedback
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Interview Questionnaire Guideline

NB: Questions only serve as a guideline for the interview.

Target Audience

1. Good day. Could you state **your name, your position and the company** that you work for?
2. **How long** have you been **working** in this organisation, and how long in your current **role or position**?
3. What is your **highest level of education**?

Technology Clarification

4. Can you give me your personal definition of technology and what you understand it to be?
5. How will you explain your knowledge and use / capabilities for using technology?
6. Tell me about the technology systems you use at work and how fast can you master them?

Perceived Ease of Use

7. Would you say there was a time when you struggled with any of the technology systems, processes, equipment and why?
8. How satisfied are you with the equipment and systems you use daily? Does it make your job easier? Please elaborate.
9. Do you think using the equipment and systems for a more extended period helped you to perform your job and functions better? How / why?

Perceived Usefulness and subjective norm

10. In your opinion, why it is taking longer at times to have the equipment, tools and software utilised optimally at the store level?
11. What is your view about the retail application tablet, self-help kiosks and online customer service points in-store and how does your team view these tools?
12. Do these systems make collaboration easier with other departments, and how can it be improved, if at all?

Conclusion

13. Kindly share any additional valuable information or details about questions I did not ask?

Thank you for your time; the next steps are to review the data and compile a report.

Final Guideline for Semi-Structured / Standard Interview Questionnaires

Dear Sir Madam

Good day; I am Moses Hartzenberg and am a student at North West University studying towards an MBA. As part of my studies, I am conducting research (Investigating the factors affecting adoption of new technologies in mobile phone retail stores in the North West Province).

I want to ask for your assistance to complete my research project by accepting an interview that will take approximately 30 minutes. Doing the interview will not have any cost, disadvantage or penalty on you, and there will be no direct risk or benefit in participation or withdrawal from the interview. The interview can be face-to-face, telephonic or via a zoom meeting, observing all COVID-19 protocols.

You may skip any question that you do not feel comfortable answering, and you may also stop at any time or request to resume at a convenient time. The interview will be anonymous and confidential, and you do not have to indicate your name or identification details. The information will be kept secure and will not be disclosed to any third party. A pseudonym will be allocated to each participant to protect their privacy in the research findings and report.

If you have any questions or concerns during or after the interview, kindly contact me on 0829974779 or e-mail me at Moses.Hartzenberg@gmail.com

The research report will be available on the North West Universities library site, and all data collected will be kept on a password-protected computer. Other researchers, with your consent, may use data collected, and any ethical concerns may be directed to the Universities ethics committee.

Purpose of the interview:

Investigating the factors affecting adoption of new technologies in mobile phone retail stores in the North West Province.

Duration of the interview:

A 30-minute interview discusses 13 questions on your work, your role and the technology equipment you use. (N.B.: Demographic information for analysis purposes only).

The procedure of the interview:

Research briefing	Consent & Permissions	Appointment booking	Further clarifications	Interview Conducted	Results & feedback
-------------------	-----------------------	---------------------	------------------------	---------------------	--------------------

Interview Questionnaire Guideline

NB: Questions only serve as a guideline for the interview.

Target Audience

1. Good day, could you state **your name, your position and the company** that you work for?
2. **How long** have you been **working** in this organisation, and how long in your current **role or position**?
3. What is your **highest level of education**?

Technology Clarification

4. Can you give me your personal definition of technology and what you understand it to be?
5. How will you explain your knowledge and use / capabilities for using technology?
6. Tell me about the technology systems you use at work and how fast can you master them?

Perceived Ease of Use

7. Would you say there was a time when you struggled with any of the technology systems, processes, equipment and why?
8. How satisfied are you with the equipment and systems you use daily? Does it make your job easier? Please elaborate.
9. Do you think using the equipment and systems for a more extended period helped you to perform your job and functions better? How / why?

Perceived Usefulness and subjective norm

10. In your opinion, why it is taking longer at times to have the equipment, tools and software utilised optimally in stores?
11. What is your view about the retail application tablet, self-help kiosks and online customer service points in-store and how does your team view these tools?
12. Do these systems make collaboration easier with other departments, and how can it be improved, if at all?

Conclusion

13. Kindly share any additional valuable information or details about questions I did not ask?

Additional Questions: Based on time availability – willingness and total group Participation.

- a. How do you feel about the new technology Vodacom develops (optimistic, pessimistic, etc.) – Please explain?
- b. Would you say you have any suspicions about the technology, how it is affecting / can affect your job and job security? Please explain.
- c. Would you say Vodacom is getting you ready enough for new technology launches, please explain your answer?
- d. Could you list a few things that would help you accept new technology?
- e. Could you also list a few things that would stall / hinder that acceptance?

Thank you for your time; the next steps are to review the data and compile a report.

ETHICS INFORMED CONSENT

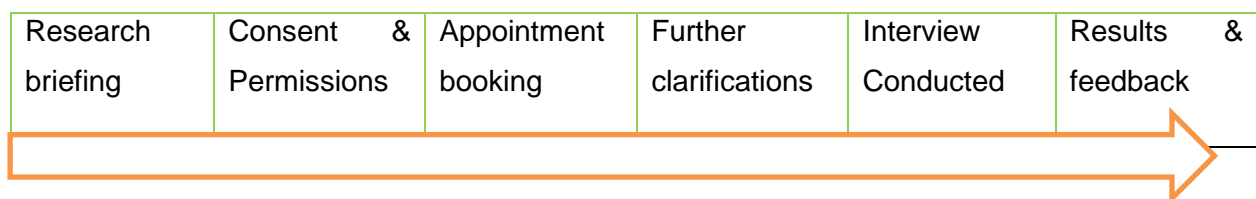
Dear Participant

This **Informed Consent form** confirms an approved research project at the North West University on the following research topic; “Investigating the factors affecting adoption of new technologies in mobile phone retail stores in the North West Province”.

The study aims to investigate factors that affect technology adoption and how the introduction, use, and support of new technologies affect your work.

Duration: A 30-minute interview discussing 13 questions on your work, your role and the technology equipment you use.

Procedure: Qualitative research design, which involves an interview and the proposed process – flow is illustrated below:



Confidentiality is guaranteed, as the interview will be anonymous, and you do not have to indicate your name or any identification details.

Demographic information will be used for analysis purposes only; doing the interview will not have any cost, disadvantage, or penalty on you, and there will be no direct risk or benefit in participation or withdrawal from the interview.

You may skip any question that you do not feel comfortable answering, and you may also stop at any time or request to resume at a convenient time; this interview is entirely voluntary.

Data gathered will be kept secure and will not be disclosed to any third party. Furthermore, a pseudonym will be allocated to each participant to protect their privacy in the research findings and report.

If you have any questions or concerns during or after the interview, kindly contact me on 0829974779 or e-mail me at Moses.Hartzenberg@gmail.com

The research report will be available on the North West Universities library site, and all data collected will be kept on a password-protected computer. Other researchers, with your consent,

may use data collected, and any ethical concerns may be directed to the Universities ethics committee.

Please indicate your consent

After reading the above information, I give my consent that my data may be used as stated above.	YES	NO
As a result of this consent, my demographic data may be used to develop a profile for technology adoption in Vodacom stores.	YES	NO

_____	<u>dd / mm / yyyy</u>	_____
Name of participant	Date	Signature

_____	<u>dd / mm / yyyy</u>	_____
Name of person		
taking consent	Date	Signature

Sincerely

Moses Hartzenberg

0829974779

(Moses.Hartzenberg@gmail.com)

Thank you for your time

Language Editing Certificate



Thunyelwa Godongwana
Professional Translation & Editing Services
54 Mokolo Street
Penina Park
Polokwane
c/o Department of Language and Social Sciences Education
University of Limpopo
Email: thunyelwa.g@gmail.com;
thunyelwa.godongwana@ul.ac.za
Cell: 0740622194

08 Dec. 21

To Whom It May Concern

This is to confirm that I have done language editing on the required sections of the following mini dissertation:

Title:

Investigating the factors affecting adoption of new technologies in mobile phone retail stores in the North West province

Author:

Moses Hartzenberg (North West University, Student no: 11340894)

Do not hesitate to contact me if the need arises.

Many thanks and regards,

Dr. T. Godongwana (PR: 8764434)

Member: English Academy of Southern Africa (Council member, 2016-)
Research Fellow: School of Languages and Communication Studies, University of Limpopo (2018-)

Turn it In Report

11340894:M.Hartzenberg_(11340894)_MBAC_873_Mini_Diss...

ORIGINALITY REPORT

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