



**THE INFLUENCE OF INFORMATION TECHNOLOGY INNOVATIONS ON THE  
PERFORMANCE OF ORGANISATIONS: A CASE STUDY OF SELECTED SMES  
IN THE WESTERN CAPE**

**A Research Report presented to the**

**Faculty of Business and Management Sciences**

**at the Cape Peninsula University of Technology**

**In partial fulfilment of the requirement for the  
MASTERS DEGREE IN BUSINESS AND INFORMATION ADMINISTRATION**

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## DECLARATION

I, Kingsley Ogwu, hereby declare that this research report is my own work, except to the extent indicated in the text and reference. It is being submitted in partial fulfilment for the degree of Master of Business and Information Administration at the Cape Peninsula University of Technology. It has not been submitted before for any degree or examination in any other University.

K.Ogwu

2022-03-15

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Signed

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Date:

## LANGUAGE PRACTITIONAL CERTIFICATE

MELODY KOZAH PROOFREADING SERVICES

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24 September 2021

Dear Sir/Madam

This confirms that I have proofread and edited the research study titled, “*The Influence of Information Technology Innovations on the Performance of Organisations: A Case Study of Selected SMEs in the Western Cape*”. I have advised the candidate to make some changes before final submission.

Thank you.

Yours faithfully



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- The SME managers and employees who availed themselves for this study
- My friend Mr. Kenneth Egwabor for his moral support.

I would also like to thank my family for their undivided support, attention, and encouragement.

## **DEDICATION**

I would like to dedicate this thesis to my adorable wife and best friend Mrs R.M Selepe-Ogwu for standing by me through thick and thin.

## **ABSTRACT**

Diverse attempts have been made to ascertain the benefits of adopting digital technologies for Small to Medium Sized Enterprises (SMEs). Despite the significant role of SMEs in the economy of a country, most SMEs are lagging behind in digital transition due to high costs of information technology (IT) acquisition, frequent modification of IT tools by service providers, and lack of necessary digital skills amongst employees, etc. Previous research conducted on the influence of IT has not offered a clearer insight in respect of organisational performance.

This study gauges the relationship between the adoption of IT innovation by SMEs and influence on organisational performance. It explores different models and theoretical perspectives such as Technology Acceptance Model, Diffusion of Innovation Theory and Theory of Dynamic Capabilities, amongst others. The study used qualitative and quantitative research methods with multiple case study design to attain the study's objectives and aim.

Several studies have highlighted the significance of IT for SMEs in general without precision to some industries. This study was carried out at 12 selected SMEs, in 12 industries in the Western Cape province of South Africa. Convenience sampling was used to select the SMEs while purposive sampling was used to select the 47 participants that were interviewed. The data collected was transcribed, coded by adopting open coding, analysed and interpreted utilising content analysis to give transparency to the findings.

The findings indicated that SMEs depend on some IT innovations to manage and market their services. IT innovations are tools for competitive advantage by helping SMEs to configure better products and services for their customers. IT innovation when adopted and used enhances efficient communication and speed delivery at the workplace.

Therefore, the researcher is convinced that there is a positive correlation between IT innovations and organisational performance. As a result, it is recommended that SMEs visualise and prioritise IT innovative tools for enhancing their business operations. Modern IT skills and training for SME employees cannot be undermined in today's digital economy.

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## LIST OF ACRONYMS

<b>SME</b>	<b>Small to Medium Enterprise</b>
<b>SMEs</b>	<b>Small to Medium Enterprises</b>
<b>SEDA</b>	<b>Small Enterprise Development Agency</b>
<b>TAM</b>	<b>Technology Acceptance Model</b>
<b>TPB</b>	<b>Theory of Planned Behaviour</b>
<b>TRA</b>	<b>Theory of Reasoned Action</b>
<b>DIT</b>	<b>Diffusion of Innovations Theory</b>
<b>DCs</b>	<b>Dynamic Capabilities</b>
<b>RBV</b>	<b>Resource-Based View</b>
<b>RBT</b>	<b>Resource-Based Theory</b>
<b>OECD</b>	<b>Organisation for European Cooperation and Development</b>
<b>UK</b>	<b>United Kingdom</b>
<b>US</b>	<b>United States</b>
<b>CRM</b>	<b>Customer Relationship Management</b>
<b>HRM</b>	<b>Human Resource Management</b>
<b>EU</b>	<b>European Union</b>
<b>IT</b>	<b>Information Technology</b>
<b>ICTs</b>	<b>Information Communication Technologies</b>
<b>SEO</b>	<b>Search Engine Optimisation</b>
<b>E-MAIL</b>	<b>Electronic Mail</b>
<b>ERP</b>	<b>Enterprise Resource Planning</b>
<b>CEO</b>	<b>Chief Executive Officer</b>
<b>ITs</b>	<b>Information Technologies</b>
<b>ROI</b>	<b>Return-On-Investment</b>
<b>GPS</b>	<b>Global positioning System</b>
<b>VOIP</b>	<b>Voice Over Internet Protocol</b>

## **CHAPTER 1 – BACKGROUND**

### **1.1 INTRODUCTION**

The layout of this chapter constitutes: Section 1.2 presents the thesis statement. The background to the study is discussed in section 1.3. The problem statement is debated in section 1.4. In section 1.5 the aim of the study is shown while research objectives are stated in section 1.6 and the research questions in section 1.7. The significance of the study is presented in section 1.8 followed by definition of key terms in section 1.9. The research methodology is discussed in section 1.10 while the limitations of the research are discussed in section 1.11. Outline of the dissertation is described in section 1.12 as the chapter is concluded with a summary in section 1.13.



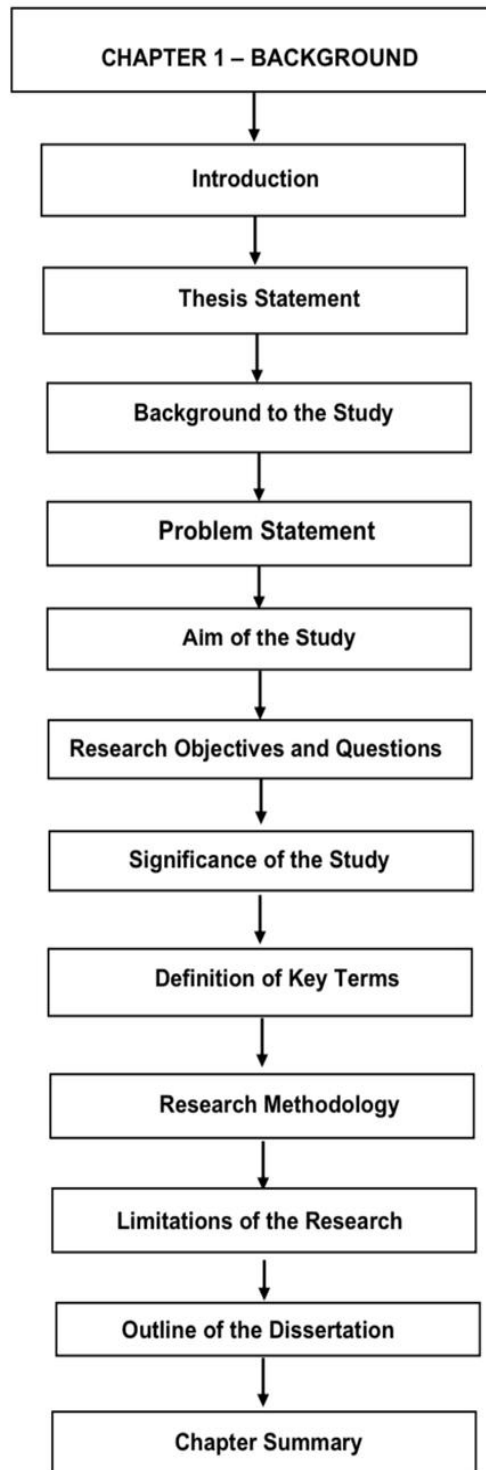


Figure 1.1: Graphical representation of Chapter One  
(Source: Researcher's own compilation)

## **1.2 THESIS STATEMENT**

The researcher derived motivation to carry out this study from the following: Intellectual acquisition; technological advancements; personal development; problem solving, and to explore the influence of Information Technology (IT) innovations on performance in South African Small and Medium Enterprises (SMEs). The motivation was also due to the positive contribution that such a study will make within this sector of the economy. This study was carried out in the following sectors: manufacturing; health and fitness; financial services provider; hospitality; audio-visual communication; business consultancy services; retail services; automotive sales; agriculture; education; auto-technical services; and pharmaceutical services. The reason for the aforementioned industries is due to the key role they play in any economy, and the positive effect that IT can have on them. The next section outlines the background to the study.

## **1.3 BACKGROUND TO THE STUDY**

The world is currently in the Fourth Industrial Revolution (4IR) as data processing and storage dimensions are increasing tremendously, while people are gaining more insight when compared to previous industrial revolutions which signifies a good prospect for human development as the efficacy of new technologies like 3-D printing, artificial intelligence, energy storage, the Internet of Things, and quantum computing evolve (World Economic Forum, 2016). Despite the fact that digital technologies are beneficial, there are risks associated with usage. The future of countries, business organisations, including SMEs and individuals will rely on the adoption of digital technologies (World Economic Forum, 2016). It is widely recognised that SMEs are crucial to the development of a country and economic stability. SMEs in New Zealand for example are defined as an organisation with 0-49 employees, made up more than 99% of all businesses in 2018 and accounted for about 60% of employment (OECD, 2020). In the United States of America more than half of all the employment in 2001 came from firms that had fewer than 500 employees (Baldwin, et al., 2001). In the UK in 2000, SMEs employed 67% of the workforce (Eurostat, 2018). SMEs generate revenue for many countries and contribute a lot to gross domestic product (GDP), entrepreneurship, and new business ideas (Eurostat, 2018). In 2008 for most EU member states, SMEs made up over 99% of enterprises, 67% of jobs and 59% of GDP.

In both developed and developing countries, SMEs are perceived to be the main contributor to economic growth by promoting partnership and private sector development (Apulu, et al., 2011). SMEs are key for the advancement and transformation of economies because they create employment (Apulu et al., 2011; Mutula & Brakel, 2006) and help transform commercial activities which significantly contributes to balance of payments (World Economic Forum 2016; Apulu et al., 2011; Ongori, 2009). Given the importance of SMEs to national economies, it is important that SMEs survive even in turbulent environments and in the face of competition. One strategy that helps SMEs gain a competitive advantage is the adoption and use of information technologies which are said to be revolutionising the way companies do business, especially with the advent of the Internet and web-based services.

In this global economy, IT has made it possible for SMEs to compete profitably in larger and more dynamic markets (Osorio-Gallego, et al., 2016). The overall capacity of firms to innovate has increased, but there seems to be stagnation in the rate of ICT adoption and usage around the world suggesting that many firms are not diving into it with pace (World Economic Forum, 2016). According to Okundaye et al., (2019) SMEs in developing countries are not taking full advantage of the influence of Information and Communications Technology (ICT). The same sentiments were echoed by the OECD (2018) who stated that some SMEs are behind innovatively, compared to large enterprises even though some have a better productive capacity than some large corporations. It is important that support is given to SMEs to encourage them to adopt and use digital technologies. The next section will discuss the statement of the problem investigated.

#### **1.4 PROBLEM STATEMENT**

The growth and contribution of SMEs to the national economy cannot be taken lightly, it is a pointer to generating employment and revenue (Kansakar, et al., 2019). Many businesses all over the world now depend on some IT innovations to manage and market their services. The influence of IT on organisational performance has drawn the attention of managers, policymakers, and researchers (Melville, et al., 2004). In spite of the success of investment in IT, which is not dithered, managers are only concerned with measuring its payoff (Mazidi, et al., 2014). The researchers in the 1980s and 1990s who investigated the influence of IT on organisational performance

obtained contradictory results giving rise to the IT productivity paradox (Brynjolfsson, 1993). Recent researchers have embraced a broader analysis of how IT influences organisational performance (Mazidi, et al., 2014).

Several studies have highlighted the importance of IT for SMEs in general (Agboh, 2015; Modimogale, 2008; Mutula & Brakel, 2006) without being specific to some industries like telecommunications, manufacturing, health, and hospitality (Samkange & Crouch, 2008) including the business environment. OECD (2017) notes that the adoption and use of information technologies offers new opportunities for SMEs to participate in the global economy, but SMEs are lagging behind in the digital transition. Although the number of SMEs adopting IT innovations is increasing, the rate of adoption or investment with regard to IT innovation differs between industries and between individual organisations. A review of literature shows that although extensive work was done on the influence of IT on performance globally; most of these studies were done a few years back and looked at basic IT in different contexts to the South African contexts. Given that IT applications are evolving on a daily basis, it is important to look beyond communication when analysing the influence of IT innovations on SMEs performance. It is also important to look at several measures of performance to come up with an informed conclusion on the real influence of IT innovations on SMEs.

This study will utilise the four perspectives of the Balanced Score Card to have a holistic approach to performance measurement in relation to SMEs use of modern IT innovations. It will look at 12 SMEs in the following sectors: manufacturing; health and fitness; financial services provider; hospitality; audio-visual communication; business consultancy services; retail services; automotive sales; agriculture; education; auto-technical services; and pharmaceutical services to obtain strong empirical evidence to establish the level of awareness of IT innovations available for use by SMEs in the Western Cape province in South Africa because of their contributions to alleviating poverty, meaningful contribution to the South African tax base, and job creation. It will analyse the extent of use of IT innovations and the effects of the adoption and use of these innovations on their performance. The aim of the study will be discussed in the next section.

## **1.5 AIM OF THE STUDY**

The main aim of this study was to find the relationship between the adoption of IT innovations by SMEs in the Western Cape Province in South Africa and organisational performance. Below are the research objectives.

### **1.6 RESEARCH OBJECTIVES**

The study is based on the following objectives:

1. To investigate SME employees' level of awareness of IT innovations.
2. To establish the extent of use of IT innovations by SMEs.
3. To assess the current factors influencing the use of IT innovations by SMEs.
4. To evaluate the effect of the use of IT innovations on organisational performance.
5. To draw insights to increasing the adoption of IT innovations by SMEs.

The next section presents the research questions for the study.

### **1.7 RESEARCH QUESTIONS**

1. What are SME employees' level of awareness of useful IT innovations?
2. What is the extent of use of IT by SMEs?
3. What factors are currently influencing the use of IT innovations by SMEs?
4. What is the effect of the use of IT innovations on organisational performance?
5. What insights can be drawn to increase the adoption of IT innovations by SMEs?

The next section outlines the significance of the study.

### **1.8 SIGNIFICANCE OF THE STUDY**

This study is of both theoretical and practical significance. Theoretically, it is expected to add to the body of knowledge the evidence-based relationship between IT innovations and the performance of small to medium sized enterprises in a competitive environment. Practically, it sought to: shed light on the extent of use of IT innovations by the organisations under study; the challenges they are facing in the adoption of IT innovations; the influence of IT innovations on performance for those organisations using them; and possible strategies to enhance the adoption and use of IT innovations.

The study suggests strategies that can be adopted by policy makers and stakeholders to enhance the adoption and use of IT by SMEs thereby improving their performance. The study raises awareness of the benefits derived from the adoption of IT and brings to light the challenges that may be faced in the adoption of the said technologies, increasing the rate of diffusion of IT by SMEs. The study will benefit other researchers as it will lay a foundation in the South African context on how IT influences organisational performance. The researcher expects to benefit from the knowledge acquired during the review of literature and seminars and develop a firm foundation of research methods useful for further studies. The next section is definition of key terms.

### **1.9 DEFINITION OF KEY TERMS**

**Information Technology:** A technological concept that uses computers to gather, process, store, protect and transfer information (Rendulic, 2011 ). The four main components of IT are database and network management, business software development, information security, and computer technical support (Network Depot, 2017). In this study, IT is referred to as the usage of computers connected to the internet to get information, store the information, and transmit the information.

**Innovation:** The process of translating an idea or invention into goods or services that creates value or for which customers will pay for (OECD, 2005). In this study, innovation is referred to as constant improvement on an already existing idea or generating a new idea which can be of utmost value to customers, employees, and SME owners.

**Performance:** A task or operation seen in terms of how successfully it is carried out to the extent to which an investment or an idea is profitable (Oxford English Dictionary, 2007). In this study, performance is referred to as the completion of an operation with the application of skills, knowledge, and abilities to yield maximum profit for the SME.

**Influence:** Having an effect (positive or negative) on something by measuring the usefulness and judging the significance of changes brought by those effects (Oxford English Dictionary, 2007). In this study, effect here is referred to as the outcome of application of IT on a given organisational task as it relates to the operations of the SME.

**SMEs:** Any enterprise in different sectors ranging from manufacturing to retail that has capital assets of less than R10 million and has less than 200 employees; annual turnover of not more than R46 million, and when the owners are directly involved or engaged in the management of such businesses (South African Government, 2004).

In the next section, research methodology will be discussed briefly.

## **1.10 METHODOLOGY**

The following sub-sections from 1.11.1 to 1.11.10 will be discussed under this section.

### **1.10.1 Choice and Rationale of Research Design**

According to Saunders et al., (2007, p 153) the research design is the process through which the research question is answered by the researcher, it constitutes time horizons, research choices and research strategies. According to McCombes (2021) research designs are plans that are developed to answer research questions elaborating how a study is to be conducted. Ponto (2015) says that the research design is a careful approach to understanding suitable data to be collected to answer a particular research question. From the above definitions the research design is a master plan for data collection and analysis to answer research questions. For this research, the research design used was a multiple case study of selected SMEs in the Western Cape. Therefore, the researcher used questionnaires for the collection of quantitative data and used interviews for the collection of qualitative data. The reason for the usage of interviews on qualitative data collection is because interviews can explore the views and experiences of individual participants. Hence, a mixed methods approach was used. Gliner & Morgan (2000, p 17) define a research paradigm as a philosophy that guides how a research is to be conducted. In this study the researcher proposes the pragmatism philosophy which combines methodologies used in both the positivist and interpretivist paradigms. According to Kaushik & Walsh (2019) pragmatism banks toward solving practical problems rather than on assumptions about the nature of knowledge. This study integrates both quantitative and qualitative giving rise to a mixed methods approach. Marie (2007) posited that quantitative and qualitative approaches differ in how they access knowledge to answer the research questions but complement each other. He went further to say that the two approaches provide a complete and balanced analysis of the research problem. From this

perspective, the researcher used interviews for the collection of qualitative data, thus offsetting the weaknesses of the other. The next section will present the study population.

### **1.10.2 Study Population**

Collis & Hussey (2014) say that a population is the complete group of members about whom a research intends to establish facts. In agreement, Fraenkel et al., (2015) opined that a population is the entire group of persons or set of objects the researcher is interested in gaining information and drawing conclusions about. For this study, the population comprised participating SME employees and their managers representing each SME in the following sectors: manufacturing; health and fitness; financial services provider; hospitality; audio-visual communication; business consultancy; retail services; automotive sales; agriculture; education; auto-technical services; and pharmaceutical services. Sampling procedure is the next section.

### **1.10.3 Sampling Procedure**

Sampling is the process of selecting a representative sub-set from a population for the purposes of data gathering or experimental purposes (Saunders, et al., 2012). Important factors to consider in sampling are sample size, representativeness, sample parameters, access to the sample and the sampling strategy to be used (Taherdoost, 2016). In most cases collecting data for the entire population would be expensive and time consuming (Field, et al., 2012). There are basically two categories of sampling namely probability and non-probability sampling. Non-probability sampling was adopted for this study. Convenience sampling was used to select participating SMEs whilst purposive sampling was used to select the managers. The next section will discuss convenience sampling as adopted for this study.

### **1.10.4 Convenience Sampling**

Convenience Sampling a non-probability sampling technique was used to select SMEs for the study. The role of the selected SMEs in a given sector was important in determining the influence of IT innovations for that particular industry. Saunders et al., (2003) opined that a subset of participants can be selected by the researcher due to time and cost constrictions. This method often assumes that the target population is



represented by the subset of population. Purposive sampling will be discussed in the next section as a non-probability sampling.

#### **1.10.5 Purposive Sampling**

Purposive sampling a non-probability sampling technique was used in selection of SME managers who participated in the study considering their in-depth knowledge of the organisations they lead. The facts they provided, their views and opinions were important in answering the research questions. This is in line with Saunders et al., (2012) advising that the researcher can apply non-probability sampling technique to permit the researcher to select particular elements or subjects for a study to make sure that the elements have certain characteristics pertinent to the study. The next section will discuss the sample size.

#### **1.10.6 Sample size**

This study was carried out in 12 SMEs (1 SME each) from different sectors such as manufacturing; health and fitness; financial services provider; hospitality; audio-visual communication; business consultancy; retail services; automotive sales; agriculture; education; auto-technical services; and pharmaceutical services. This is because it is very challenging to get a higher sample size from the SMEs that gave the researcher the consent. Data collection will be discussed in the next section.

#### **1.10.7 Data collection**

This study used questionnaires and interviews for data collection. The research instruments were constructed to have validity, reliability, and objectivity. The researcher used consistent and reliable validated instruments that permitted validation of conclusions about the influence of IT innovations on firm performance. In addition, a few statements for the instruments was extracted from the literature reviewed. Mellenbergh et al., (2011) says that a questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from research participants. In this study, a questionnaire with both closed and open-ended questions was used.

The researcher visited research participants at their offices and conducted interviews. The first section solicited demographic information and computer knowledge and skills

of the participants. The second section solicited for information on the extent of use of IT innovations by SMEs in the Western Cape. The third section solicited for information on the challenges faced by SMEs in adopting IT innovations. The fourth section collected information on the effect of IT innovations on organisational performance while the fifth section solicited for recommendations on improving the adoption and use of IT innovations by SMEs. The researcher asked questions and recorded responses in a notebook, probing further where necessary to clarify issues. The researcher also recorded all the interview proceedings using a smart phone with permission from the interviewees and committed to delete the recordings after transcribing the data. The next section will present the pilot study.

#### **1.10.8 Pilot Study**

This pilot study gave rise to sub-sections 1.11.8.1 to 1.11.8.2 which will be discussed. A pilot study was conducted in February 2020 through semi-structured interviews with IT managers, CEOs, and IT users of two conveniently selected SMEs which were not involved in the main study to avoid maturation effects.

##### **1.10.8.1 Objectives of the Pilot Study**

1. To have an initial perspective of the extent of adoption and use of IT innovations by SMEs in the Western Cape.
2. To identify which factors affecting the adoption of IT innovations mentioned in the literature review could be recognised in SMEs in the Western Cape.
3. To have an idea of the influence of IT innovations on SMEs performance from the respondents' perspective.
4. To develop and test the structure of the interview guide for the main study.
5. To strengthen the researcher's interviewing skills and techniques.
6. To gauge the time interviews were expected to take in the main study and to plan accordingly.

##### **1.10.8.2 Insights to the Pilot Study**

This section presents the summary of the findings of the pilot study, presented in detail in section 4.10. Each interview took between 30 and 45 minutes and all interviews were recorded using an electronic recording device. All interviews were conducted in a relaxed environment, and all interviewees expressed interest and were very cooperative, however the CEOs did not divulge the financial status of the SMEs. The pilot study helped the researcher gain some interviewing, recording and transcribing skills. The pilot study revealed that SMEs were at different stages of the adoption of IT innovations therefore the researcher probed deeper through interviews of a number of SMEs from different sectors in order to establish challenges being experienced by SMEs in the adoption of modern IT innovations, and to ascertain whether those SMEs that have adopted IT innovations were realising benefits. The pilot study also revealed that SMEs owner managers were elusive when it came to questions regarding the financial performance of the company and employee wellness, which required the researcher to be more tactful in the main interviews when asking sensitive questions. The next section is data coding and analysis.

#### **1.10.9 Data Coding and Analysis**

For the purpose of this study, mixed methods were used to analyse data. Quantitatively, questionnaire fixed responses were pre-coded prior to data collection which made it easy to enter the responses onto an SPSS template for analysis. Code 1 was assigned to the 1st option, code 2 to the 2nd option and so on. Frequency tables were generated using SPSS for interpretation to answer the research questions. Pie charts and bar graphs were drawn to give a visual picture of the frequency distributions. The chi-square test was not used to test if there is a relationship between IT innovations and SMEs profitability performance because there was no hypothesis formulated. Qualitatively, open-ended questions were analysed as the researcher engaged in sentence by sentence, reading, assigning key concepts numerical codes for grouping. Similar responses was assigned the same code. Ethical considerations will be discussed in the next section.

#### **1.10.10 Ethical Considerations**

Saunders et al., (2007) refers ethics to as the appropriateness of the researchers' behaviour in relation to the rights of those who become the subject of one's work or are affected by it. The researcher followed the University's ethical guidelines. He

sought permission to conduct the study from the university. He obtained a letter from the institution to seek permission to conduct the study at the SMEs. The researcher followed the steps below: Notice of the intention to conduct the research; seeking informed consent from participating SMEs and managers; respect for confidentiality and anonymity. No names of SMEs and individuals was written on questionnaires. Information obtained in the study has been used for academic purposes only and will not be given to third parties except with the permission of the participating SMEs. Finally, there was no physical or emotional harm to participants. The next section is research limitations.

### **1.11 Research Limitations**

The study targeted only a number of selected SMEs since the multiple case study strategy was adopted. The results obtained were made general to the whole population. This limitation is however mitigated by the fact that data was collected from different sectors making the sample representative of the population. Outline of the dissertation is presented in the next section.

### **1.12 Structure of the Dissertation**

The outline of the dissertation is as follows:

Chapter 1 gave an introduction of the research and the background to the study by stating the problem and explaining the various concept used in the research as well as giving details on the significance of the study.

In Chapter 2, models and theories are discussed as they provide a detailed underpinning theory in relation to the study.

Chapter 3 outlined the literature review showing a proper review of Information Technology and various literatures that supported the research work.

Chapter 4 discussed a detailed explanation of the methodology and design of the research, and the reasons for adopting a quantitative and qualitative research study.

Chapter 5 discussed the research results and findings which evaluated and interpreted data collection from the research.

Lastly, in chapter 6 the conclusions and recommendations based on the research were outlined.

References- showed the list of material consulted on the research and literature with their authors.

## APPENDICES

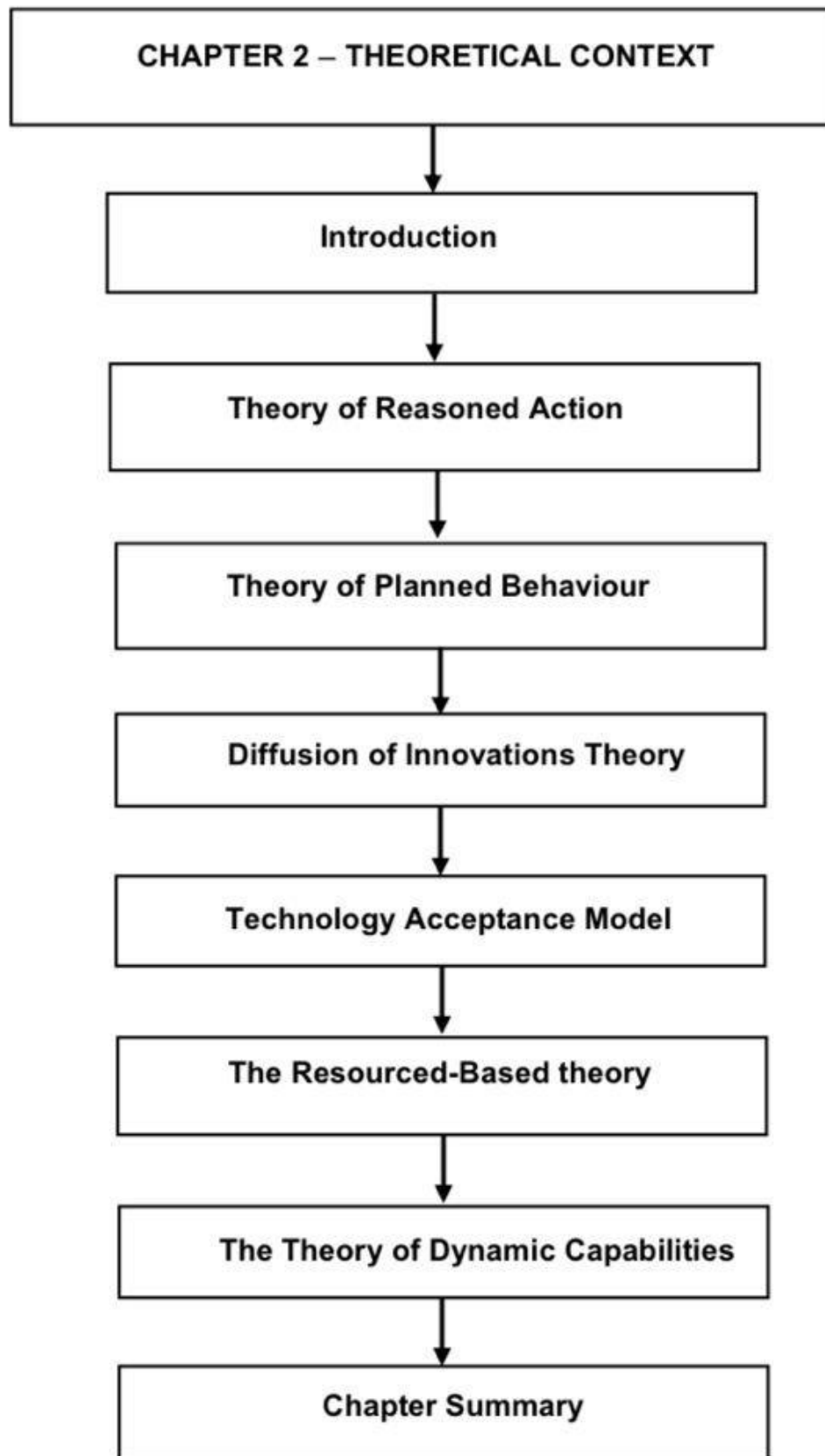
### **1.13 SUMMARY**

Chapter one outlined the thesis statement and background to the study. The main aim of the study and problem statement were discussed. The research objectives were outlined while presenting the overview of the pilot study conducted. This chapter also stated the limitations of the research, its significance and gave an outline of the dissertation. The next chapter explains the underpinning theories adopted for this study.

## **CHAPTER 2 – THEORETICAL CONTEXT**

### **2.1 INTRODUCTION**

It is essential to consider model and theories as they form the foundation of IT innovations adoption by SMEs before they can be utilised appropriately for the business. The Resource Based Theory (RBT), Theory of Dynamic Capabilities (DCs), Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB), Theory of Reasoned Action (TRA), and Diffusion of Innovation Theory (DIT) are described in the sections that follow in relation to the adoption of Information Technology innovations by SMEs. It should be noted that there are many more theories and models that could have been used. However, after a careful consideration of the various models and theories, the DIT; TAM; and the DCs were found appropriate for utilisation in this research. Below is a graphical presentation for this chapter, and the subsequent sections discussed various models and theories relating to IT innovations.

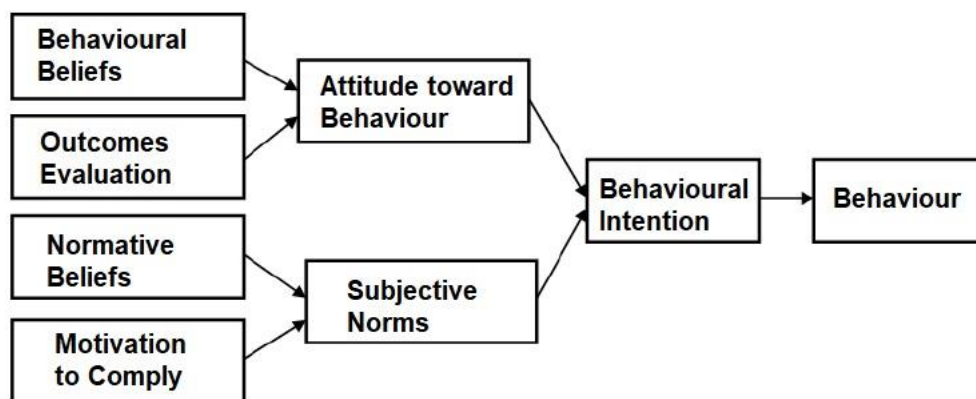


**Figure 2.1: Graphical representation of chapter two (Source: Researcher's own compilation)**

## 2.2 Theory of Reasoned Action

According to Davis (1989) an individual's intention to adopt a technology is influenced by personal interests and social interaction. The theory will not be used in this research, despite the fact that the adoption of IT innovation is influenced by the degree of usefulness and peer pressure from industry activities. The TAM which will be adopted will cover for the Theory of Reasoned Action. Influences range but are not limited to technological advancement and, support institutions, vendors of IT equipment and government policies and regulations guiding the use of information technologies. See figure below in 2.2.

Figure 2.2: Theory of Reasoned Action



Source: (Fishbein & Ajzen, 1975)

South African SMEs operate in an environment characterised by over regulation according to (Pyper, 2016). SMEs in South Africa are struggling when it comes to compliance with regulation on the use of IT resources (Cant & Wiid, 2013). The intention to adopt IT innovations by SMEs can be made easier if the government relaxes some of the regulations regarding IT usage. The next section discusses the Theory of Planned Behaviour which is an extension of the Theory of Reasoned Action.

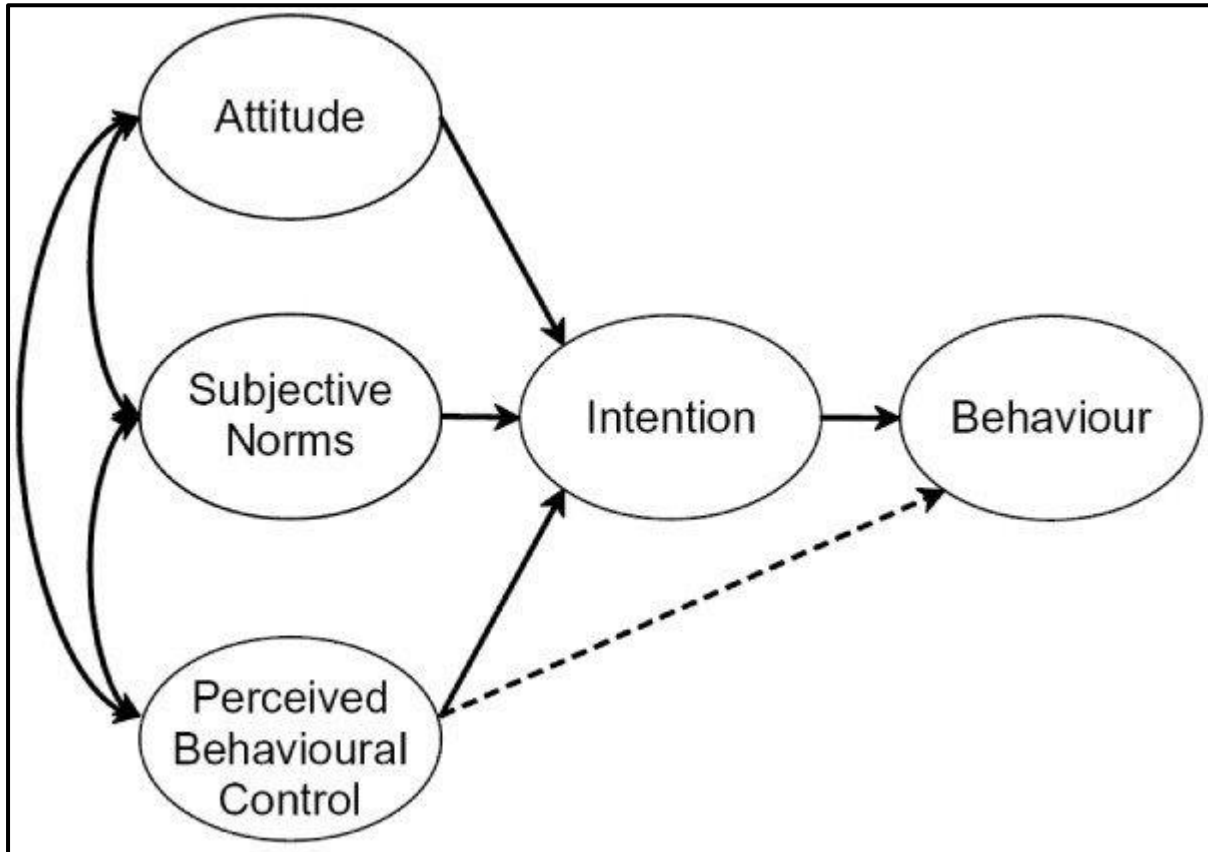
## 2.3 Theory of Planned Behaviour

The Theory of planned behaviour is an extension of the Theory of Reasoned Action through adding the construct perceived behavioural control to account for factors outside an individual's control which may affect intention and behaviour (Davis, 1989). The researcher did not consider using this theory because the TAM which was adopted to provide a cover for the Theory of Planned Behaviour. The perceived behavioural control relates to the extent to which SMEs owners and managers feel



confident about their abilities to implement IT innovations in the day to day running of their business, playing a central role in their intentions and actual behavioural outcomes. See figure 2.3 below.

**Figure 2.3: Theory of Planned Behaviour**



Source: (Ajzen, 1991)

According to Olawale & Garwe (2010) managerial knowledge and skills, behaviours and approaches contribute to value in an organisation and SMEs' managers' competencies are essential to the survival growth of SMEs. The lack of managerial experience and skills due to the absence of education and training in South Africa reduces management capabilities in SMEs to make important decisions such as adopting IT innovations leading to SMEs failure (Elbanna, et al., 2014). It is believed that IT knowledge, skills and capabilities increase managerial confidence and the likelihood of investment decisions. Durst et al., (2015) stated that SMEs' business strategy design should categorise the best profitable use of information technologies and include new technological innovations in their business development strategy. Nylén & Holmström (2014) also emphasised the importance of strategies for enhancing competitiveness when changes occur in the business environment. This was supported by Gareeb & Naicker (2015) and (Afolayan & Harpe, 2020) who stated

that SMEs should establish appropriate criteria for decision making on investment in IT choosing appropriate systems to meet challenges and rapid changes in time. The next section is a review of the Diffusion of Innovations Theory in relation to the extent of adoption and use of IT innovations by SMEs.

## **2.4 Diffusion of Innovations Theory**

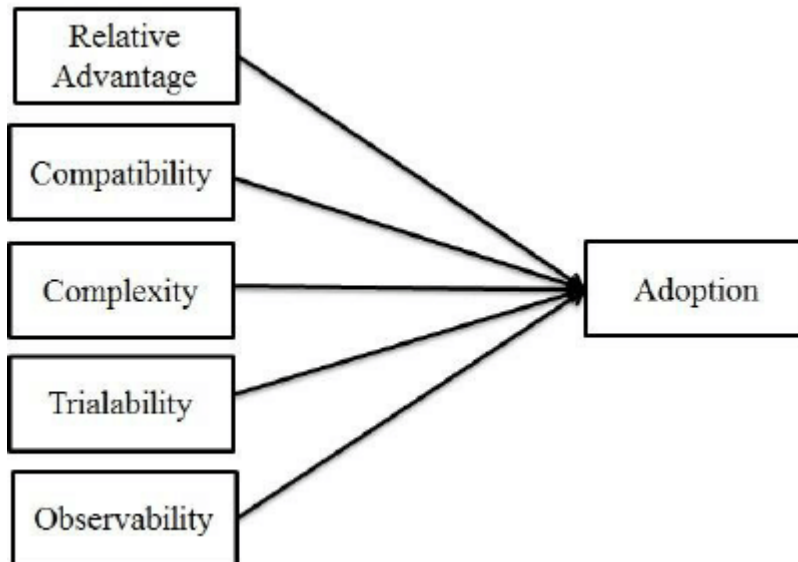
Diffusion is the 'process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1995, p 5) According to Lai (2017), Rogers, (1995) proposed the theory of diffusion of innovations to establish the foundation for conducting research on innovation acceptance and adoption. Rogers' theory explains the process by which an innovation reaches individuals or organisations over time among the members of a social system. Would be adopters of IT innovations seek to understand the type and features of the new technology that fall within their domain.

SMEs find information that enable them to assess the perceived consequences and benefits of the adopted technology. Rogers's diffusion of innovation theory postulates that media and interpersonal contacts are the sources of information that influence a person's opinion and judgment on whether to adopt a technological innovation (Manueli, et al., 2007; Van Akkeren & Harker, 2003). The theory comprises four pillars: invention; diffusion through the social networks; time; and consequences. An innovation is the idea, way of doing things or tool that is developed and is the focus of the adoption. Time is the acceptance rate of an innovation over a given period. Diffusion can also be seen as the process of introducing the innovation or how it is marketed to an individual or groups whilst consequences describe the influence of the adoption of an innovation by organisations and subsystems.

According to Manueli et al., (2007) information filters through networks to an audience that is influenced by opinion leaders through personal contact and by intermediaries such as change agents and gate keepers. For the innovation to be adopted successfully it should have an advantage over the existing tools and practices in as far as compatibility to users' needs, trialability and observability, and ease of use. Despite the fact that innovation adoption may not be desirable to everyone the diffusion of innovation theory provides vital sections of innovation diffusion which are currently effective such as the features of innovations, the phases of the adoption

routine and the outcome of interaction of persons in the communication channel. See figure 2.4 below.

**Figure 2.4: Diffusion of Innovations Theory**



Source: (Rogers, 1983)

Kundu & Mor (2017) alluded that the diversity of organisations often results in differences in their up-take and implementation of IT innovations. On one hand, there are business ecosystem organisations with limited financial resources experiencing irregular or no electricity supply or lack the necessary IT infrastructure and are yet to integrate IT innovations in their business operations. On the other hand, there are other organisations that have fully integrated IT into their day-to-day activities and the whole culture of the organisation. There are four stages in Anderson's model: the emerging stage; the applying stage; the infusing stage; and the transforming stage. At the emerging stage, some SMEs are beginning to acquire IT equipment and are beginning to explore the potential of adopting IT innovations focusing on basic IT skills. In addition, at this stage employees use equipment for simple tasks such as: word processing; internet browsing; and communicating by e-mail. At the applying stage some SMEs have acquired additional IT equipment throughout their organisation, and IT is used for management tasks. At the infusing stage, most offices are equipped with computers and most SMEs have internet access and a wide variety of IT innovation are in use throughout the organisation. At the transforming stage IT innovation are fully integrated in most regular activities and become an integral part of daily activities.

The existence of a social system is important when considering the uptake of IT innovations and the relative rate of adoption by SMEs. When a new technology has been adopted by one or more SMEs, the pace at which other SMEs embrace may vary, leading to what is known as the rate of diffusion. If the new technology has better features than the existing technology or it is available at a lower cost, the diffusion rate will be faster (Brychan, 2000). The main factors that influence the rate of diffusion are both the characteristics of the technology and that of the SME (Brychan, 2000). There are four categories of technology adopters: innovators; early majority; late majority; and laggards. Innovative SMEs are those who delve into latest technologies and establish a connection with suppliers, and customers of other organisations within their network.

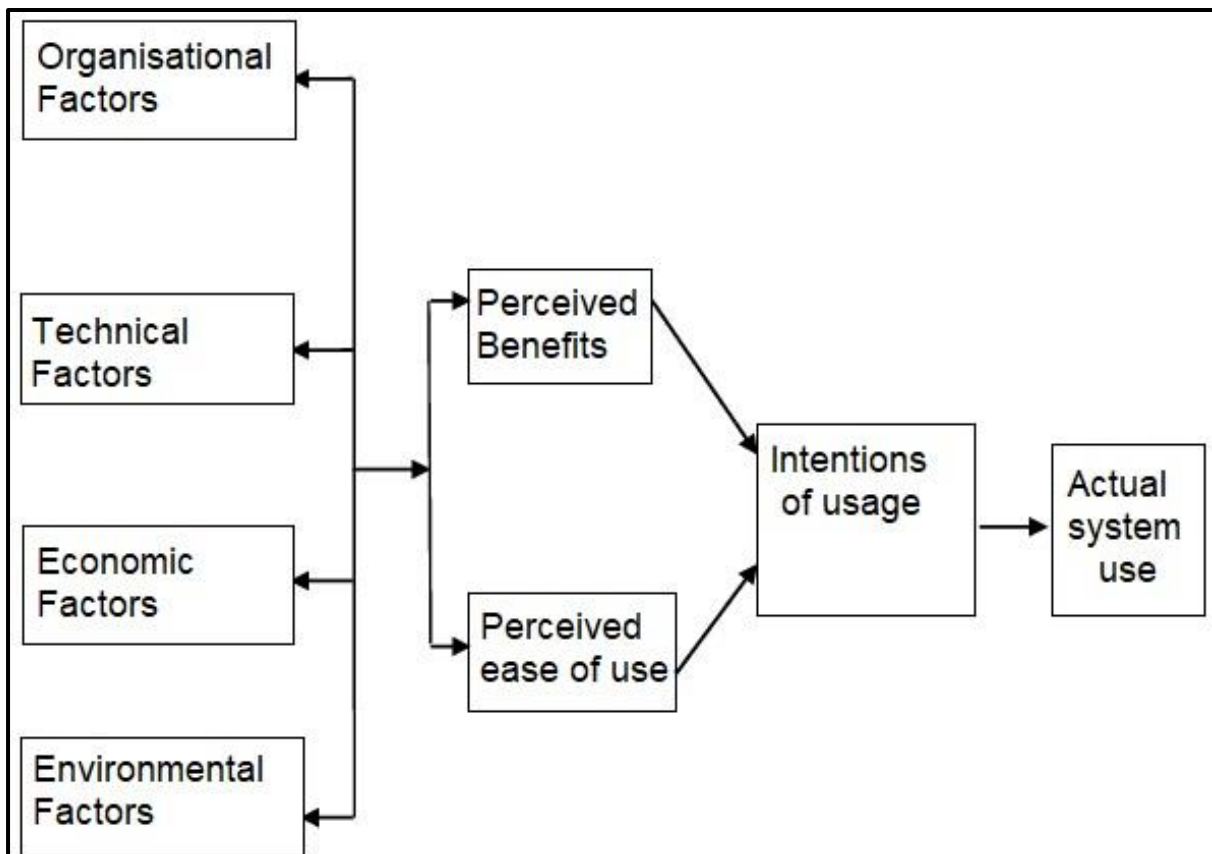
In relation to this study, early adopters are SMEs that adopt a new technology or idea if it is beneficial as it makes them a reference point. The early majority will be deliberate whereas the late majority will be doubtful and will adopt when the technology has diffused. Last on the list are the laggards who will adopt a new technology so late when it is outdated (Brychan, 2000). The speed of diffusion also depends on the knowledge of SMEs to the benefits of new technology adoption, the greater the awareness the faster the diffusion. Communication and the ability of SMEs to understand the merits of technological innovation are crucial (Brychan, 2000). The next section gives a review of the Technology Acceptance Model.

## **2.5 Technology Acceptance Model (TAM)**

TAM model was introduced by Davis in 1989 and has progressed overtime as a template for technology adoption and use. The Technology Acceptance Model is an extension of the theories of Reasoned Action and Planned Behaviour which explains acceptance of IT innovations, across a broad range of user population (Venkatesh & Davis, 2000). The main objective of this study is to establish the influence of IT innovations on SMEs performance. The TAM explains and predicts the adoption and use of IT innovations by SMEs and outlines factors that influence the adoption of technology, among them are perceived ease of use, perceived usefulness, economic factors, outside influences from suppliers, customers and competitors, personal control factors on behaviour (Nkosana, et al., 2016; Manuelli, et al., 2007). Perceived benefits pertain to the value derived such as enhanced performance of SMEs whereas

ease of use relates to the application of little effort on using the technology by SME employees. It can be predicted using the TAM model that whenever individuals or organisations think that usage of a certain technology will improve performance or bring some other benefits to the company, there is eagerness to adopt the technology. If it is perceived that a new technology is easy to implement, SMEs will not hesitate to adopt it. Employees and customers play an important role in the implementation of a new technology as the efficiency and purposefulness of implementing each new technology depends on the evaluation by end users (Kazandjieva & Filipova, 2018). The Technology Acceptance model has evolved over time to suit different contexts. The one adopted for this study is the one developed by Connolly, see figure 2.5 below.

**Figure 2.5: Model of Technology Adoption**



Source: (Rofhök-Björni, 2006)

The model illustrates those factors affecting the adoption of information technologies can be classified as: technical factors, organisational factors, economic factors, and environmental factors. SMEs may be affected by lack of technical expertise and skills and lack of compatible technology to their organisations. According to Mwai (2016) IT innovations investment is costly so that SMEs may be affected by lack of capital to invest in the required infrastructure. Nwakanma et al., (2014) pointed out that most

SMEs are considerably small in size, independent, and family owned which sometimes result in lack of capital.

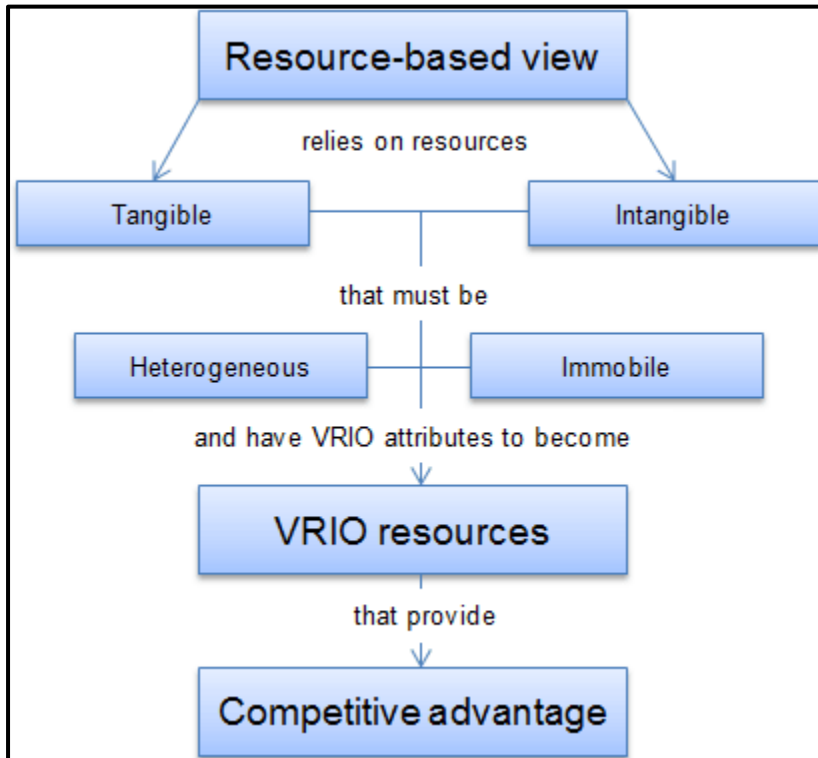
According to Quarshie & Amenumey (2018) a noticeable pattern in SMEs is the reluctance of management to introduce technology innovations in their operations fearing that their employees might not be familiar with the IT innovations. SME owners and managers do not have full control of the external factors in the environment in which their business operates due to their inherent lack of resources. External factors like customer pressure, strong competition, pressure by suppliers, external support, and government intervention are very much likely to affect the performance of small to medium-sized hotels. The next section evaluates the Resource Based Theory.

## **2.6 The Resource Based Theory (RBT)**

The Resource Based Theory will not be used in this study because it misses managerial implications or operational validity thereby failing to explain the usage of a resource to gain competitive advantage according to Priem & Butler (2001). It is important that it explains that for the successful adoption of IT innovations by SMEs, they need to have resources for example financial and human capital. The Resource Based Theory focuses on the internal organisation of firms, regarding them as bundles of resources, that differ across firms, and that resource differences persist over time (Eisenhardt & Martin, 2000; Amit & Schoemaker, 1993). The theory stipulates that organisations with unique, valued, and non-interchangeable resources are capable of achieving durable competitive edge because they tend to create added value which rival firms find difficult to copy (Amit & Schoemaker, 1993; Conner & Prahalad, 1996).

The Resource Based Theory has received a negative critique for an unclear concept definition, tautology, and lack of empirical grounding as it failed to recognise the means whereby resources provide the pathway to gaining a competitive edge (Eisenhardt & Martin, 2000; Mosakowski, 1997; Priem & Butler, 2001). Another issue with the Resource Based Theory is inadequate explanation of the reasons some organisations can outwit their rival in turbulent environments. Teece et al., (1997) argued that in markets where the competitive landscape is shifting, dynamic capabilities' processes by which firms integrate, build, and reconfigure internal and external competencies are the source of sustained competitive advantage.

Figure 2.6: The Resource-Based Theory



Source: (Jurevicius, 2013)

Access to finance is a major problem for the South African SMEs leading to failure (Urban & Mothusiwa, 2014; Masutha & Rogerson, 2015). (Makoza & Chigona, 2012; Masutha & Rogerson, 2015) said that most loan applications by SMEs to financial institutions are rejected resulting in only 2% of new SMEs in South Africa being able to access bank loans. The situation means that SMEs without access to finance are liable to unfavourable conditions affecting their adoption of IT innovations necessary for survival and growth. The next section extends the RBT and discusses the Theory of Dynamic Capabilities.

## 2.7 The Theory of Dynamic Capabilities (DCs)

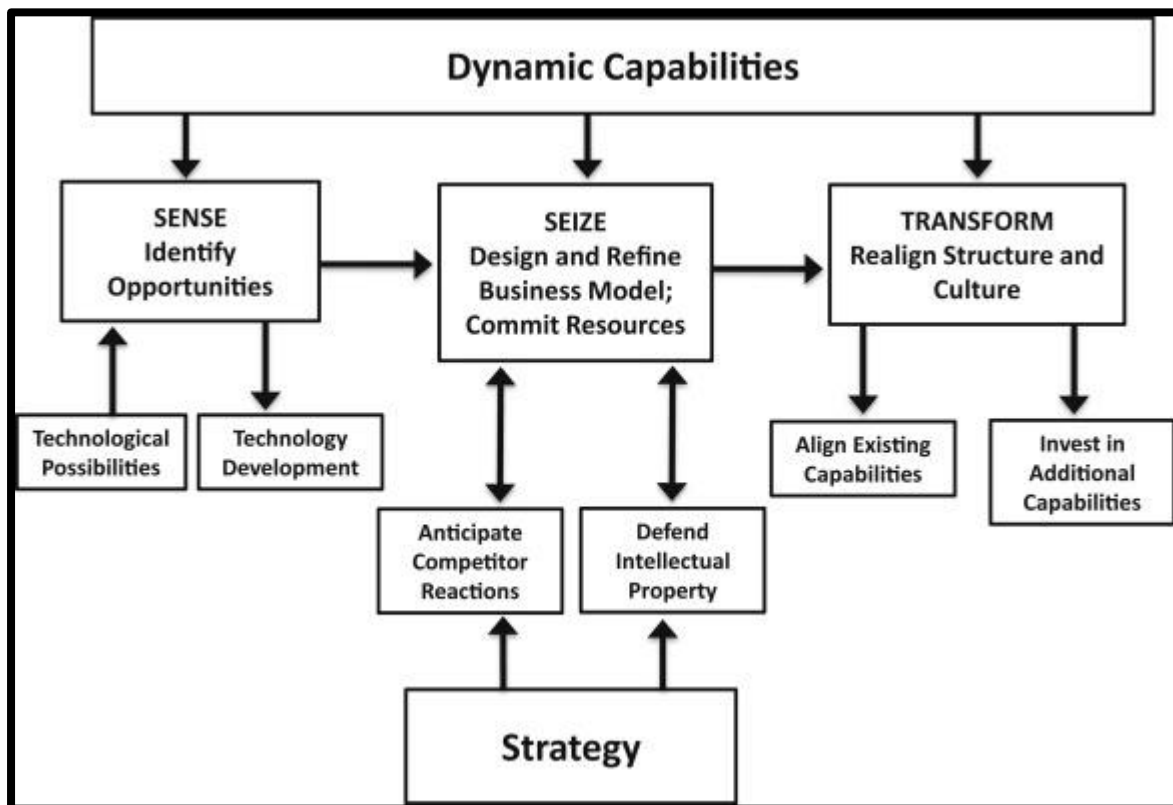
The main line of thought of the DCs is on the need for business organisations to adapt to changing environmental conditions. DCs are concerned with appropriately adapting, integrating, and reconfiguring internal and external organisational processes, skills, resources, and functional competencies in volatile environments (Lin & Wu, 2014). Several studies have alluded to the fact that IT enhances organisational performance (Martinho, et al., 2015; Isnalita, 2021) hence the Theory of DCs fits well in this study to explain the non-performance of SMEs who fail to adopt and use modern IT innovations in today's digital economy. DCs are described further as significant

competencies that control the progress of a firm's specific set of skills (Eriksson, 2013; Cepeda-Carrion & Vera, 2007). DCs are also defined as combinations of simpler capabilities and the routines that enable an organisation to purposefully create, extend, or modify its resource and capability basis to meet changes in its environment (Eriksson, 2013; Eisenhardt & Martin, 2000; Helfat & Peteraf, 2009; Teece & Pisano, 1994). This particularly becomes handy in today's global marketplace that is characterised by intense local and foreign competition due to breaching of geographical boundaries by the advent of e-commerce, putting pressure on SMEs to develop DCs using IT innovations. DCs are both organisational and managerial identifiable processes that develop over time (Eriksson, 2013; Ambrosini & Bowman, 2009; Helfat & Peteraf, 2009; Teece, et al., 1997).

Alliance, supplier relationship management, networking and product development are noticeable procedures which combine resources for focusing on a firm's acquisition (Eisenhardt & Martin, 2000). According to Teece et al., (1997) DCs are considered rare and hard to copy, whereas Eisenhardt & Martin, (2000) believe that firms share common features with some uniqueness in terms of capability pattern and resources which can only be created by DCs. Internal and external factors influence dynamic capabilities stemming from the desire for organisations to maintain and improve their competitiveness in volatile environments thereby prompting performance via the exceptional resource and competent formations developed (Eriksson, 2013; Helfat & Peteraf, 2009; Zollo & Winter, 2002). According to Eisenhardt & Martin (2000) since the outcomes of dynamic capabilities can be reproduced by other firms, their value for enhanced performance comes from the resource configurations that they create, not in the capabilities themselves as DCs can be utilised to improve current resource strategy while striving to achieve a durable competitive edge. See figure 2.7 below.



Figure 2.7: Simplified Schema of Dynamic Capabilities, Business Models and Strategy



Source: (Teece, 2012)

For this study, DCs can be viewed as processes, methods, routines that take advantage of existing resources, intellectual property, collaboration and networking between suppliers, customers, and partners of SMEs. In this instance, they are derived from the ability of individuals within the SMEs to use IT innovations to modify existing procedures and cause differentiation within the existing procedures in response to the changing strategic environment, leading to competitive advantage. The table below in 2.1 will present the evaluation of the models and theories discussed while indicating their advantages, disadvantages, and suitability to the study.

Table 2.1 Evaluation of Models and Theories

Model	Advantages	Disadvantages	Suitability
<b>Theory of reasoned action</b>	Can be used to predict adoption and use of IT innovations.	Failure to give an adequate account of behaviour change especially the intention to adopt IT innovations.	Not used in this study because the TAM which was adopted covers this theory.

<b>Theory of Planned Behaviour</b>	Can be used successfully to predict adoption and use of IT innovations.	It does not account for some variables that factor into the intention to adopt and use IT innovations such as fear, threat, mood, or past experiences and economic and environmental conditions.	Not used in this study because the TAM which was adopted covers this theory.
<b>Diffusion of Innovations Theory</b>	Helps understanding trends in the adoption of modern IT innovations and factoring organisation's tendency groups innovators, early adopters, early majority, late majority, and laggards	Provides a road map for the adoption of IT innovations but there is no guarantee that they will be adopted. The model does not consider factors like culture and economic conditions, ease of use and perceived usefulness.	Used in this study in conjunction with the TAM and the theory of dynamic capabilities to make up for the deficiencies in the DIT.
<b>Technology Acceptance Model</b>	Can be used successfully to predict adoption and use of IT innovations.  TAM is easier to use and supplies general information about ease of use and usefulness.	The TAM model is a better fit for individuals and acceptance of technology instead of corporate use which may involve the combination of Information Technology and is guided by rules.	Used in this study in conjunction with the DIT and the theory of dynamic capabilities to make up for the deficiencies in the TAM.
<b>Resource Based Theory</b>	It provides a direction for firm's strategy, and they are the main source of return for the firm. The RBV recognises the benefit obtained from information capabilities, administrative procedures, and management skills as scarce elements that can produce economic	According to Priem & Butler (2001) the Resource-Based View omitted managerial implications or operational validity. It does explain how managers can develop VRN resources.	Not used in this study

	rents (Sheehan & Foss, 2007)		
<b>Theory of Dynamic Capabilities</b>	Dynamic capabilities grant permission to firms to repeatedly position themselves in the marketing space, with a view to maintaining a big margin between willingness-to-pay and cost than rivals (Brandenburger & Stuart Jr., 1996)	Dynamic capability emanates from internal activities that do not extract from aggressive markets. Therefore, the number of competitors is unlimited as they are afforded an opportunity of developing a personalised version of the capability. A firm that is more capable of identifying combinations, resources and new markets can outwit rival firms with the developed version of those capabilities (Collis & Anand, 2018).	Continuous innovation such as adopting IT innovations is a dynamic capability that may improve a firm's competitiveness. This theory will be used in conjunction with the DIT and TAM to explain the need for the adoption of IT innovations.

Source: Author's Construction

## 2.8. SUMMARY

In this section of chapter two, the following underpinning theories were presented and discussed. The Theory of Reasoned Action to the Theory of Planned Behaviour to the Technology Acceptance Model. It also explained the Diffusion of Innovations Theory, the Resource Based Theory, and the Theory of Dynamic Capabilities in relation to the adoption and use of IT innovations by SMEs in South Africa.

### 2.8.1 Theoretical Framework

It is significant to explore and scrutinise theories because they shape the foundation of IT innovations and adoption before utilising the appropriate ones for the study. Different models and theories were evaluated for this study namely, Theory of Reasoned Action, Theory of Planned Behaviour, Diffusion of Innovations Theory,

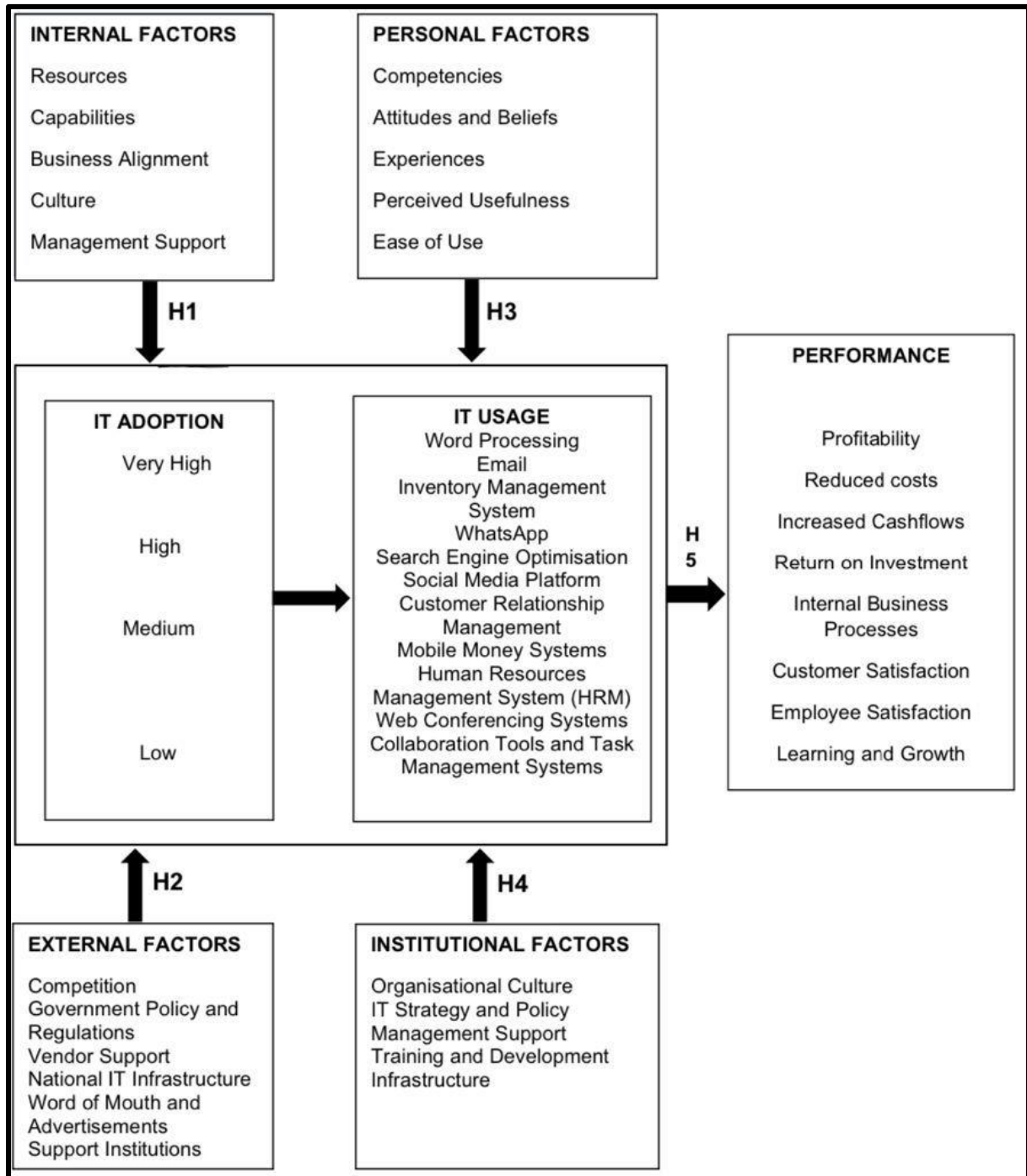
Technology Acceptance Model, Resourced Based Theory and Theory of Dynamic Capabilities. The researcher opted for the Diffusion of Innovations Theory (DIT) because it is instrumental in comprehending the various trends in IT adoption of modern innovations by also figuring out the organisations who are early adopters, early majority, late majority, and laggards. Another theory utilised was the Technology Acceptance Model (TAM) which can be used strongly to predict the adoption and use of IT innovations by SMEs because of its simplicity as it provides a more general information concerning the ease of use and usefulness. Finally, the Theory of Dynamic Capabilities (DCs) was considered suitable because innovation is a continuous process which can be effective toward improving an organisation's competitiveness. The next section will give a detailed discussion of the conceptual framework.

### **2.8.2 Conceptual Framework**

In this study, the conceptual framework was centred around the influence of IT innovations adoption on organisational performance, and of which five hypotheses generated will test them. The dependent variable is organisational performance which is measured by using the four perspectives of the Balanced Score Card namely, financial perspectives, customer perspectives, internal business processes and learning and growth. The researcher explored profitability from the financial perspective. From the customer perspective, the researcher looked at the satisfaction of the internal and external customers. Furthermore, the researcher assessed the efficiency and operational effectiveness, collaboration, networking, and sound decision-making. On learning and growth, the researcher assessed employee knowledge and skills. The independent variables are IT adoption and use because the extent of adoption will be measured from low to very high by the researcher. Low connotes the common or rapid use of basic IT such as Email and Word Processing while medium is the availability of a non-interactive website. High is the adoption and use of electronic commerce tools such as online payment systems and interactive websites. Very high represents the adoption of electronic business platforms or tools such as inventory management systems, collaboration tools and task management systems. With the evolving nature in IT environment, it is pertinent to explore beyond communication when analysing the influence on organisational performance. Therefore, the mentioned Balanced Score Card was utilised to provide an extensive approach to measuring performance as it relates to SMEs adoption and use of basic

and modern IT, see figure 2.8 below. The next chapter presents a detailed review of literature.

**Figure 2.8 Conceptual framework of the influence of IT innovations on organisational performance.**

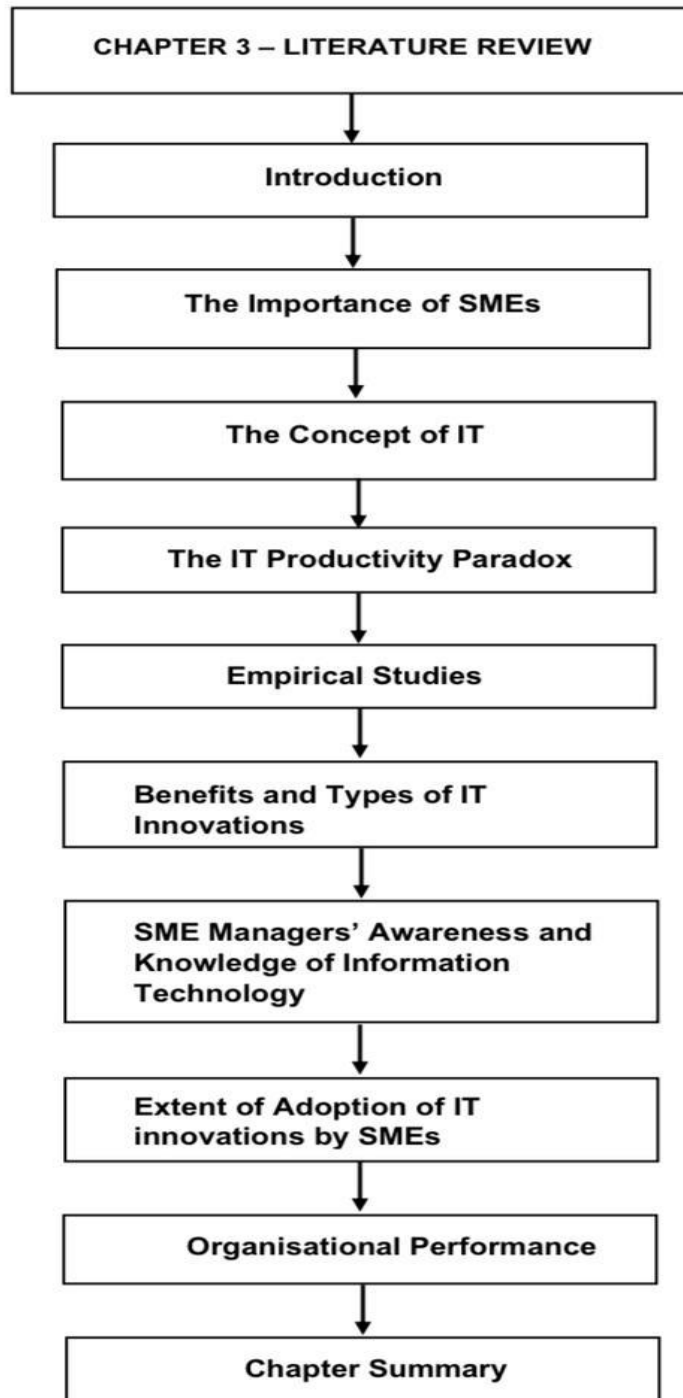


(Source: Researcher's Own compilation)

## **CHAPTER 3: LITERATURE REVIEW**

### **3.1 INTRODUCTION**

In the previous chapter which focused on theoretical context of the study, the researcher adopted three theories namely: TAM, Diffusion of Innovations Theory and DCs. The conceptual framework in chapter two was seen to be in alignment with IT innovations adoption and organisational performance. This chapter focuses on the related literature as it correlates with SMEs performance and IT adoption. In section 3.2 the importance of SMEs will be discussed, followed by section 3.3 presenting the concept of IT. Section 3.4 shall discuss the IT productivity paradox, whereas section 3.5 portrays the empirical studies. In section 3.6, the benefits and types of IT innovations will be discussed, while introducing SME managers' awareness and knowledge of IT innovations in section 3.7. In section 3.8 extent of adoption of IT innovations by SMEs. In section 3.9 organisational performance is discussed while in section 3.10. the chapter is concluded with a summary.



**Figure 3.1: Graphical representation of Chapter Three**  
(Source: Researcher's own compilation)

### **3.2 The Importance of Small to Medium Enterprises**

It is widely recognised that SMEs play an important role in the economy of any country and are crucial to a country's economic stability. They generate employment by increasing revenue and contributing to innovation. SMEs also contribute to efforts to achieve environmental sustainability and inclusive growth (World Economic Forum, 2016; Apulu & Ann, 2009). Information systems are said to be a driver for rapid developments cutting across all sectors of the economy in any country (Ijeoma, 2018) and have become a strategic asset that can spur an organisation's performance and competitiveness (Sharma & Mogdil, 2017). In this view, it is essential for any organisation, particularly SMEs in South Africa, to adopt and use IT innovations relevant to their industry to improve operational effectiveness and efficiency, enhance service delivery and offering customers a unique experience in return for profitability and customer retention (Asare & Prempeh, 2017; Wanjiru & Abdalla, 2015). The fact that SMEs are important to economic development means that they should be a going concern.

Every effort must be made by both the government and SME managers to ensure that they remain afloat and one such measure may be the adoption of IT innovations. This study will establish the effect of IT innovations on the competitiveness of SMEs in the South African context. In developed and developing nations, SMEs are perceived to be the key source of economic growth and the main influence in achieving private sector advancement and partnership (OECD, 2015). SMEs are key for the growth and innovation of dynamic economies creating employment and help diversify economic activity that has significant contribution to balance of payments, are flexible and can adapt quickly to changing market demands (Ongori, 2009). It is important that SMEs survive even in turbulent environments and in the face of competition, hence the assumption that the adoption of IT innovations will make an impact. In interviews that were held, the researcher asked the participants about their financial performance with emphasis on profitability, reduced costs, increased cashflows and return on investment as a result of IT usage.

In South Africa, the number of SMEs increased by 4.4% from 2.44 million in 2018 to 2.55 million in the first quarter of 2019, employing about 10.8 million people, almost



66% of the economy wide employment of 16.5 million people (SEDA, 2019). An analysis by SEDA (2019) showed that a large number of SMEs as much as 26% did not survive beyond the age of two years and that there were low levels of educational attainment skills complexion of the various occupational categories (SEDA, 2019). At least 51% of SME owners had not completed secondary education. The SMEs sector was experiencing financial difficulties due to challenging economic conditions, with the smaller enterprises losing out in comparison to large companies (SEDA, 2019). One strategy that helps SMEs gain a competitive advantage is the adoption and use of Information technologies which are revolutionising the way companies do business, especially with the advent of Internet and web-based services. In this global economy, IT has made it possible for SMEs to compete profitably in larger and more dynamic markets (Osorio-Gallego, et al., 2016). Despite some researchers positing that IT innovations have an enormous contribution to organisational performance, some researchers argue that it is not always the case, see the IT paradox in section 3.4. It is important that this study lays bare the effect of the adoption and use of IT innovations on SMEs performance in South Africa. The next section explains the concept of IT.

### **3.3 The Concept of Information Technology**

According to Okechi & Kepeghom (2013) IT is referred to as any equipment that expedites communication by helping to capture, process, and transmit electronic information. IT deal with the convergence of computing, Telecommunications and Broadcast technologies (Okechi & Kepeghom, 2013). Similarly, World Bank (2003) defines IT as consisting of the hardware, software, networks and media for the collection, storage, processing, transmission, and presentation of information in the form of voice, data, text, and images. For this study, IT will be used synonymously with ICTs and considered as a single or combination of digital technologies that support information gathering, processing, dissemination, and use. Therefore, the researcher observed that there is certain criterion which IT must meet: information must be communicated to the receiver, and in a comprehensive language which must be in a suitable form relevant to achieving a certain purpose.

According to Nkosana et al., (2016) and (Nwakanma, et al., 2014) IT is now an essential element in business environments around the world and is becoming a universal feature of the SMEs as it allows the effective management and

instantaneous dissemination of information thereby transforming the modes of operation of various industries. SMEs need to understand, incorporate, and utilise ITs strategically to serve their target markets, improve their operational efficiency and effectiveness and maximise profitability (Nwakanma, et al., 2014). In developing nations, the capacity to constantly improve business productivity, procedures and functions is not solely for innovation but eventually for business survival, hence the need for SMEs to adopt IT innovations (Olusola & Oluwaseun, 2013). This section gave rise to the introduction of IT productivity paradox and IT innovations which will be discussed in detail in the following section as they provided material for the generation of items on the interview guide to have answered the research questions, and also provided linkages to the theoretical framework adopted for this study. The next section explains the IT productivity paradox.

### **3.4 The IT Productivity Paradox**

A lot of research was carried out over the years to find the relationship between investments in IT and productivity. Initial studies showed that there was no link between investment in IT and productivity whilst other studies showed a link resulting in the IT productivity paradox (Macdonald, et al., 2000) The IT productivity paradox is the perceived discrepancy between IT investment and IT performance, between input and output (Macdonald, et al., 2000). It is important to note that most of the studies on this topic were centred on America, Asia and Europe leaving out Africa (Appiahene, et al., 2018) creating a contextual gap to be filled by this study. The paradox resulted from wrong measurement of productivity, overlooking the fact that productivity cannot be expected from IT alone but also depends on other factors such as effective management (Macdonald, et al., 2000). Another fact that was overlooked was that organisational performance is not measured by productivity alone but other factors, for example the Balanced Score Card looks at a holistic measure of performance with five perspectives.

Even though a number of studies have shown a positive influence of IT on organisational performance. Dimelis & Papaioannou (2010) states that the connection is still obscure and (Macdonald, et al., 2000) says whilst IT creates opportunities for organisations it also poses some problems. On one hand, investments in IT can give a competitive edge to an organisation but also cause serious budgetary constraints,

create skills gap, cause anxiety to workers who are scared of losing their jobs and resistance to change hampering the implementation process (Macdonald, et al., 2000). The IT productivity paradox depends to a certain extent on the different development levels of countries and regions which feature stage characteristics and threshold effects (Qiyang, 2018). When the development of IT breaks through this threshold, the IT productivity paradox disappears, and the contribution of IT investment to organisational performance and economic growth will be noticed (Qiyang, 2018). According to Aaltonen (2019) some IT projects succeed and some fail due to different reasons, for example 90% of ERP implementations are delivered late or are over the budget, enterprise initiatives show a 67% failure rate in achieving corporate goals and are considered negative or unsuccessful and more than 40% of all large-scale projects fail due to system misfit, high turnover rate of project team members, over-reliance on heavy customisation, poor consultant effectiveness and poor IT infrastructure.

This provided the conceptual framework for this study as the researcher assessed the current factors influencing the use of IT innovations by the SMEs under study. These factors can be dynamic capabilities because they are liable to adapt to the business environment even as changes occur. The argument that most studies on the IT paradox were not done in Africa was of interest to the researcher to test its hold in South African SMEs. Therefore, the research participants were asked in interviews whether they were deriving any benefits from the adoption and use of IT innovations or encountering problems that are counter-productive to ascertain or disprove the IT productivity paradox. The researcher found it appropriate to look at past studies that were related to the current topic. The next section is empirical studies table that will provide a summary of studies done on the influence of IT on organisational performance in different contexts by critically analysing the studies to establish time, contextual, knowledge, and methodological gaps.

### 3.5 Empirical Studies

**Table 3.1 Empirical Studies**

Name of author(s)	Title	Methodology	Findings and Conclusions	Comments
(Nkosana, et al., 2016)	Challenges of ICT adoption and utilization	They targeted small restaurants in	Out of all the twelve restaurants,	Their study was done in 2016, yet the use of technology is

	in small rural restaurants: a case study of the KwaZulu-Natal Midlands	the Midlands of KwaZulu-Natal in South Africa. They collected data from 12 restaurants (thriving and struggling). They used a case study design, a qualitative and interpretive approach.	only two had a full property management system. The less thriving businesses had fewer ICT features.  They concluded that the more ICTs adopted the more successful the business could get.	accelerating at a higher rate. With this being said, the researcher perceives a time-gap to be explored to see if this is still the case in 2021.
<b>(Vogiatzi, 2015)</b>	The Use of ICT Technologies Enhances Employees' Performance in the Greek Hotel Industry	Data was collected from the touristic zone of Greece. She used the Technology Acceptance Model as the framework for her study based on employees' perceptions.	The use of ICTs is influenced by individual perceptions on perceived ease of use and perceived usefulness.	The author conducted her study in the tourism sector only, so there is a contextual gap to be explored. The author centred her study around the Technology Acceptance Model without considering other factors such as the external environment that can influence the adoption of IT.
<b>(Kante, et al., 2017)</b>	Influence of Perception and Quality of ICT-Based Agricultural Input Information on Use of ICTs by Farmers in Developing Countries.	They collected data from three hundred cereal farmers in Sikasso region in Mali in the form of survey questionnaires.	The use of ICTs in developing countries is influenced by Relative Advantage, Compatibility, Simplicity, and information quality.	This research was done in the agricultural industry in Mali. So, the researcher sees a contextual gap because the researcher wants to conduct an empirical study on the influence of IT innovations on organisational performance (A case

				study of selected SMEs in the Western Cape, South Africa).
<b>(Almaqashi, et al., 2019)</b>	The Impact of ICTS in the Development of Smart City: Opportunities and Challenges	The researchers used secondary literature for their study while explaining the definition of smart cities, opportunities and challenges based on smart homes, smart energy grid, smart retail, and internet of things. The researchers did not conduct an empirical study.	<p>The researchers found out that large amount of data could not be processed by early developed data management and processing tools as they concluded that the benefits of a smart city outweigh the challenges, and in order to establish a smart city, developers, engineers, and architects must emphasise on certain core fields which are: Data Management, Internet of Things and Renewable energy resources.</p> <p>Therefore, the challenges do exist and cannot be ignored, but they can be tackled through innovative ICT tools.</p>	This research addressed the citizenry, governance, and urbanisation. So, the researcher sees a contextual gap to explore due to the fact that the researcher is conducting a study on the influence of IT innovations in some selected SMEs in Western Cape, South Africa.

<p><b>(Kademeteme &amp; Twinomurinzi, 2019)</b></p>	<p>The Ineffectiveness of Technology Adoption Models in the 4IR era: A case of SMEs in South Africa</p>	<p>The study collected useful data from 222 SMEs and the collected data was analysed using SPSS and AMOS. Frequency statistics were obtained from SPSS and AMOS was used to conduct multi-group analysis. During the process of conducting multi-group analysis, the study used the Structural Equation Modelling method to draw the measurement and the Structural Model.</p>	<p>The researchers found that there are so many moderating factors which influences the adoption of ICTs, which ranges from social, effort experience, performance experience, user satisfaction and behavioural intention to continue using existing ICTs.</p> <p>The study concludes that for South African SME owners, no matter their age, experience with use of existing ICTs and working experience, these characteristics do not differentiate the individual perceptions towards the evaluation of existing ICTs before adopting emerging ICTs.</p>	<p>This study is closely aligned to what the researcher is currently working on. However, the data collection was done using the SPSS and AMOS, of which the researcher is doing an empirical study on the Influence of IT innovations on some selected SMEs in the Western Cape South Africa. This connotes that there is an existing methodological gap that the researcher intends to explore.</p>
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<p><b>(Calvo-Porrall &amp; Nieto-Mengotti, 2019)</b></p>	<p>The Moderating Influence of Involvement with ICTs in Mobile Services</p>	<p>They proposed an Integrative Model of the usage of mobile services to examine the moderating role of involvement with ICTs thereby drawing a sample of four hundred and ninety-three users in Spain. Data were analysed through Multiple-Group Structural Equation Modelling.</p>	<p>The researchers found that the extent of consumer involvement with ICTs influences the behaviour in the mobile services. The researchers concluded that the moderating influence of consumer involvement is affirmative in the sense that the relationship between service quality and loyalty is directly proportional.</p>	<p>This research study was done only in the telecommunications industry in Spain by the usage of Integrative model. So, the researcher sees a contextual gap and methodological gap because he is conducting an empirical study on the influence of IT innovations on organisational performance in selected SMEs in South Africa.</p>
<p><b>(Mbatha &amp; Ngwenya, 2018)</b></p>	<p>Obstacles to the Adoption of E-Commerce by Tourism SME Service Providers in South Africa: The Case of Selected SMEs in Pretoria.</p>	<p>The study target was South African urban tourism SME service providers located in Pretoria in the Gauteng province. The sampling frame consisted of one hundred tourism SMEs that are registered with the Gauteng Tourism Authority. The sample consisted of fifty tourism SME service providers selected using</p>	<p>Some findings indicate that the most visible barrier inhibiting enterprises from adopting e-commerce were high costs, and a fear about privacy and security online. The findings further illustrate that a lack of technical know-how, lack of trust and confidence were impeding the use of e-commerce.</p>	<p>The authors conducted their study on tourism sector with the usage of a qualitative approach as data was collected by face-to-face interviews. One of the recommendations from the authors was the need of an empirical evidence. Of which the researcher sees both contextual and methodological gaps to delve into.</p>

		purposive sampling. The SMEs sampled included twenty bed and breakfasts, twenty guest houses and ten tour operators.		
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Source: (Nkosana, et al., 2016; Vogiatzi, 2015; Kante, et al., 2017; Almaqashi, et al., 2019; Kademeteme & Twinomurinzi, 2019; Calvo-Porrall & Nieto-Mengotti, 2019; Mbatha & Ngwenya, 2018).

Table 3.1 above showed that although extensive work was done globally on the influence of IT on performance, most of these studies looked at basic ITs and were done in different contexts to the South African context and others in the last few years. With the continuous evolution of IT applications, it is important to look beyond communication when analysing the influence of IT innovations on organisational performance. It is also vital to look at several measures of performance to come up with an informed conclusion on the real influence of IT innovations on SMEs performance. The mentioned reasons above informed the decision of the researcher to use the four perspectives of the Balanced Score Card to have a holistic approach of performance measurement in relation to SMEs use of basic and modern IT innovations. The next section gives an overview of the benefits of IT innovations by further discussing the types of IT innovations as found on the conceptual framework and interview guide to provide information for a measurement scale on the extent of use and adoption of IT innovations by the SMEs understudy.

### **3.6 BENEFITS AND TYPES OF IT INNOVATIONS**

In the following sub-sections 3.6.1 to 3.6.11, various types of IT innovations adopted for this study will be discussed by showing their significance to the conceptual and theoretical framework in correlation with the research objectives and research questions.

Technological innovations in recent years have significantly amplified the competitive business environment to the extent that companies now make use of different ITs to enhance the modus operandi of their business (Wereza, 2019). The use of IT innovations by SMEs reduces paperwork, saves time, such that digital files can be retrieved by the touch of a button, operational costs, and risks. IT is beneficial to



organisations for the purpose of enterprise content management which improves customer service by enabling timely availability of information (Erturk, 2019). A study conducted by (Morawczynski & Ngwenyama, 2007) revealed that IT has made it possible to bridge geographical gaps by ensuring that rural or remote areas are reached. The usage of IT has been found to add value to business environments especially in the areas of the five fundamental competitive approaches such as: innovation; alliance; cost, growth; and differentiation, according to (Nikoloski, 2013). It is important to look at various IT innovations (basic and advanced IT) from the sections below which the researcher found relevant to this study in view of the conceptual framework and in relation to the theories and models adopted for this study.

### **3.6.1 Word Processing**

Word Processing has been referred to as the creation of documents by using a Word Processor (Computer) which grants permission to users to create reports, draft newsletters and letters, webpages, tables, charts, and word-centric documents, etc (Bartlett, 2017). According to (Jones 2019) Word Processing programs are specifically designed with the document author in mind thereby offering user interfaces that will simplify the operation for example, copy, paste, find, cut, checking spelling and grammar, and formatting documents, etc. Word Processing is a basic IT skill for users to become computer literate (Ogbonna, et al., 2019). Having seen the meaning and functions of Word Processing, it is vital to investigate SME employees' level of awareness of this useful IT innovation and to establish the extent of use by SMEs. According to (Sevrani & Bahiti, 2013; Kallier, 2017) who found that SME employees are very familiar with basic IT even as SMEs tend to first adopt basic IT communication tools such as Word Processing because of its convenience and cost-effectiveness. Adeniran & Johnston (2012) posited that IT innovations and usage for SMEs are specific to industries because it provides them with a platform of using a computer system with an installed software for the purpose of extracting or communicating information.

A study conducted by Pillay (2016) concluded that there exists the high utilisation of basic IT innovations compared to the modern or advanced IT. Jere & Ngidi (2020) opined that in IT adoption, variables like relative advantage, complexity and compatibility are on the same wavelength. This assisted the researcher to adopt the

TAM because it is capable of predicting the adoption and use of IT innovations thereby providing general information about perceived ease of use and perceived usefulness. Consequently, Word Processing which is a form of IT innovation was included on the research instrument. In the interviews, the participants were asked if they are aware of Word Processing and whether they are harnessing its functions. Furthermore, the respondents were asked on a scale of 1 to 4 to indicate their competency on the use of computer for Word Processing; 1 = Not at all, 2 = Yes but with some difficulties, 3 = Yes with no difficulties and 4 = Expertly. The next section discusses another form of basic IT innovations which is the E-mail.

### **3.6.2 E-mail**

The Electronic mail is among the world's most popular online activities. Users spend quite a significant amount of time to send, read and respond to mails in a bid to communicate with others, archiving personal information or managing tasks (Waheed & Yang, 2017). The email is transmitted and received by the use of a computer system or handheld digital system through the means of a connected network. According to Brush (2019) the email can be used for personal or for marketing purposes to facilitate the exchange of information or products and services. Types of business email are business-to-business (B2B), business-to-customer (B2C), consumer-to-business (C2B), and consumer-to-consumer (C2C). Some of the advantages of the email are speed and simplicity, cost-effectiveness, mass sending, ability to customise audience and can be accessed virtually.

A study conducted by Kallier (2017) in South Africa found that most SMEs make use of email due to its cost effectiveness and simplicity. For the purpose of this study, this section will look at the email marketing aspect of business in a bid to find out if the SMEs under the study are making use of the email for business and marketing purpose. E-mail marketing is outgoing mail from an organisation to prospective or existing clients to boost purchase or branding objectives (Chaffey & Ellis-Chadwick, 2016, p.659). Studies around the globe show that the adoption of e-mail marketing is low in SMEs despite its benefits to the marketing function in an organisation. In a study of over a thousand SMEs in Finland only 22% said they used email advertising, and 14% electronic newsletters (Elisa Oy, 2019). In the US only 23% of SMEs planned to use e-mail marketing in 2019 (Feldman, 2019). The researcher asked participants in

the interview if they were aware of email for marketing purposes and whether they used it in their day-to-day operations? The researcher also enquired if email marketing enhances performance in a bid to investigate SME employees' level of awareness of IT innovations, to establish the extent of use of IT innovations by SMEs and evaluate the effect of the use of IT innovations on organisational performance in SMEs. Inventory management system will be discussed in the next section as an IT innovation.

### **3.6.3 Inventory Management Systems**

According to Mutangili (2019) in today's global and dynamic and competitive business environment, technology-based service is a must for both public and private firms. Information Systems (IS) are critical in organisational operations such as inventory management systems, supply chain management, production, and communication (Ijeoma, 2018). An inventory management system is the activity which controls and organises the availability of items to customers by coordinating the purchasing, manufacturing, and distributive functions in order to meet the marketing needs (Wild, 2017). The inventory management system has been found to support customer services, logistics and manufacturing activities by exhibiting the following benefits: the firm have greater insights to spot sales trend and track recalled products or expiry dates; there is an improved relationship between vendors and suppliers; higher inventory turnover leads to greater profit margin; the warehouse is more organised; helps to avoid stockouts or excess stock which leads to better inventory accuracy; and cost-saving (Jenkins, 2020).

Developed countries have to a large extent adopted IS in their procurement function (Maleki, et al., 2017) but the extent of use in developed nations is influenced by technological, resource-based factors and organisational size, with bigger organisations responding more positively than smaller ones (Kabanda, et al., 2019). It is worth noting that research on the adoption and application of inventory management systems in developing countries have been neglected for SMEs (Adebayo & Evans, 2015). Ngubane et al., (2015) conducted a study which found that majority of SMEs in the Western Cape are aware of inventory management systems, but they encounter huge difficulty in making extensive use of the IT innovation. The inventory management system of IT innovation is correlated with diffusion of innovations theory

because it is utilised by organisations at the infusing stage of adoption which implies that most of the offices are equipped with computers and internet access throughout the organisation. Therefore, it is important to understand these pressures from a developing country and SME context to understand the challenges faced in adopting inventory management systems and the expected benefits to be attained with this technology. The participants in this study were asked if they were aware of inventory management systems and whether they used it in their day-to-day operations? It was the researcher's responsibility to enquire whether inventory management systems enhanced performance in order to investigate SME employees' level of awareness of IT innovations, to establish the extent of use of this IT innovations by SMEs and evaluate the effect of the use of inventory management systems on organisational performance. The next on the list of IT innovations which will be discussed in the upcoming section is WhatsApp.

#### **3.6.4 WhatsApp**

The development of digital revolution and the emergence of new-age technologies have completely transformed the business environment. Firms now dig deeper to explore creative and cost-effective possibilities to enhance their customers' experience in order to maintain an edge over their competitors (Thyagarajan, 2021). One of the multi-channel platforms that facilitates voice calls, video calls, chats and messages where consumers prefer interacting with brands the same way they interact with their relatives is via WhatsApp. According to Godwin (2020) WhatsApp is a multiplatform messaging app that allows users to send text messages, pictures and documents, make voice and video calls, and many more with the aid of an internet connection. This instant messaging application has so many advantages of usage amongst them such as connecting with customers on their preferred channel by injecting brand personality with every interaction, it enables real-time conversation by addressing customer queries, recommending products, and providing delivery updates (Thyagarajan, 2021). A study conducted by Shambare (2014) found that the simplicity, cost-effectiveness and friendly user-interface of WhatsApp influences user's attitude and behavioural intentions to adopt this IT innovation.

One of the research objectives of this study is to assess the current factors influencing the adoption and use of IT innovations, and of which WhatsApp has been considered

on the conceptual framework. Therefore, it was vital that the researcher investigated the adoption and diffusion pattern of WhatsApp technology to provide invaluable insights toward organisational performance within the context of SMEs. This IT innovation being discussed has a massive global audience and the researcher developed the interview guide from the TAM, Dynamic Capabilities and Diffusion of Innovations Theory to evaluate the influence of the use of WhatsApp on performance and to draw insights to increasing the adoption by SMEs. The next section discusses search engine optimisation which is another form of IT innovations as seen on the conceptual framework.

### **3.6.5 Search Engine Optimisation (SEO)**

Search engine is a big business in the world today. The number of search queries powered by search engines in the U.S. in 2018 for Microsoft and Google sites surpassed 16 billion (Comscore, 2018). The global search advertising income of Google in 2017 was \$85.8 billion, and Baidu was \$10 billion, Yahoo! (\$3 billion) and Microsoft (\$1.8 billion) (Statista, 2021). The main purpose of search engines is linking users and websites (Baye, et al., 2016). It is important that a business with a website is found by potential customers through search engine optimisation or search engine advertising. On the other hand, with search engine advertising an organisation pays to be listed on the advertisement section page to get a high rank of getting clicks (Charlesworth, 2014, p.191). The benefits to a high Search Engine Optimisation rank include the following: increase in organic discovery and high-quality website traffic; impressive return-on-investment; provision of real-time website promotions; targeting of the entire marketing funnel by reaching out to your target audience; and provision of a long-term marketing strategy (Wahrman, 2020).

One of the challenges for SMEs is lack of brand recognition. If SMEs make long-term investment in SEO which emphasises the configuration of brand equity by the means of valuable content and a good website, SMEs can harness the benefits of search engine marketing (Zhang & Cabage, 2017). For example, in the US only 57% employ on-scene optimisation and 36% build high class content to earn likes (Clutch, 2017) and in a study of SMEs in the UK only 58% used SEO to appear higher in search rankings (European Commission, 2016). According to Burrows (2015) South African SMEs are aware of the need for online presence but they fail to maximise the

potentials of search engine optimisation. This study unveils the extent of the respondents use of search engine optimisation for competitiveness and cost-effective marketing. Search engine optimisation questions were posed to participants to find out if their business operations engaged in it. The researcher also enquired if the search engine optimisation enhances performance in an attempt to investigate SME employees' level of awareness on the mentioned IT innovation, to establish the extent of use of IT innovations by the SMEs under study and evaluate the effect of the use of search engine optimisation on organisational performance. Social Media Platforms will be discussed next in the section below.

### **3.6.6 Social Media Platform**

The evolution of social networking sites like Facebook, Twitter, and Instagram in recent years has improved customers online purchasing mentality and the manner in which businesses are being conducted as the platform affords business owners and employees to promote their products and services. Business owners and customers interact virtually by mere exchange of opinions and purchasing experiences online without having to meet or interact face to face (Valerio, et al., 2019). Social Media Marketing is the usage of social media platforms, mediums, and software for the promotion of products or services (Tuten & Solomon, 2016 p.21). From the above definition, social media marketing benefits both business organisations and consumers, but highlight consumer power due to the following reasons such as information, crowd, demand, and network (Labrecque, et al., 2013). There are numerous advantages of social media networking. It is cost saving because the majority of the social media sites are free and relatively cheap to access as it paves the way for business owners and employees to create business profile, post information, and manage the content of the posted information (Balanji & Murthy, 2019). The information posted on the various social media sites can be constantly copied and reposted until it reaches the target market.

The social network is also beneficial because it affords business owners and employees to target a particular audience with customised products and services (Howells & Ertugan, 2017). Another merit of the social media marketing is helping businesses to review customers opinions about their company, products, and services as well as enhanced customer relationship management by ensuring real-time feedback (Valerio, et al., 2019). The proportion of SMEs using social media is on the

rise but still very low. For example, in the EU as of 2017, only 42% of SMEs used social networking sites (Eurostat, 2018). In the US, the proportion of SMEs who intended to use social media as a marketing tactic was 48% (Feldman, 2019). The researcher was motivated to explore why SMEs have not adopted social media marketing given the benefits associated with it focusing on the Western Cape Province of South Africa to see the applicability of reasons highlighted in other studies to the South African context. For example, (Karjaluo & Huhtamäki, 2010) are of the opinion that the adoption and usage of social media marketing in SMEs depend on the mindset, education level, skillset and knowledge of the owner-manager, resources, and environmental factors. The above statement was part of what assisted the researcher in the interview guide as they were developed from the TAM to corroborate the conceptual framework of this study. Social media platforms have been booming in recent years, and the researcher investigated the extent of usage and adoption of different social media platforms by SMEs in the Western Cape toward organisational performance. The researcher asked the participants in the interview if they were aware of social media and if they can log on to any of the platforms for business operations on a scale of 1 to 4 to indicate their competency; 1 was assigned to Not at all, 2 to Yes but with some difficulties, 3 was equal to Yes with no difficulties and 4 was assigned to expertly. The researcher enquired if Social Media Platform enhances performance in a bid to investigate SME employees' level of awareness of IT innovations and evaluate the effect of the use on organisational performance. The researcher sought to ascertain information from the respondents on the challenges encountered as a result of IT adoption and recommended measures to improving the adoption and usage of social media by SMEs. The next section is Customer Relationship Management which is an IT innovation and business strategy geared toward managing interactions between customers and potential customers.

### **3.6.7 Customer Relationship Management (CRM)**

Customer Relationship Management (CRM) is an interactive process that aims to achieve an optimal balance between corporate investment and the satisfaction of customer needs. The optimal balance is determined by the maximum profit of both the parties (Pohludka & Štverková, 2019) and (Siu, 2016). Perceived benefits of CRM influence positively on the business and the customers by ensuring that the customers are fully convinced that they are well known, recognised, and understood (Trif, et al.,

2019). Meaning that the business care about their needs, their questions, and their concerns are of utmost priority to the business while the company is always prepared ready to deliver the products and services they mostly need and appreciating their patronage (Maryantia, et al., 2019). CRM system is beneficial to a business as it allows for developing superior services and products that meets the customers' identified needs as well as improved efficiency by providing support and services to customers online via frequently asked questions ( Gronwald, 2017). Another perceived benefit of CRM to a business is increase in loyal customer base by developing new ways to engage in business online (Pohludka & Štverková, 2019). A lot of large organisations use CRM systems, but CRM systems are unpopular in SMEs due to several reasons such as lack of knowledge about CRM, lack of resources and lack of expertise to implement CRM systems (Loh, et al., 2011; Tereso & Bernardino, 2011).

Successful organisations in South Africa received tremendous support from top management by recognising the importance of adopting CRM as a business strategy and philosophy (Berndt & Tait, 2015). In addition, various authors for example (Newby, et al., 2014) asserted that customer relationship management adoption is also influenced by elements such as owner-manager skills and motivation, size of organisation and training which contributes to the growth of business establishments. It is for the above-mentioned reasons that the researcher came up with the conceptual framework by adopting the DCs to understanding IT innovation through the adoption and usage of CRM by SMEs understudy. Given the advantages of this IT innovation to SMEs, it was relevant to investigate the challenges being faced by organisations in the adoption and use of CRM, and to proffer solutions to increasing the adoption and use by SMEs. It was the responsibility of the researcher to make enquiries from the respondents on the usage of CRM by the SMEs understudy on how it enhances performance in order to investigate SME employees' level of awareness, and to establish the extent of use. Mobile Money Systems will be discussed in the next section as an IT innovation because of its significance to e-commerce.

### **3.6.8 Mobile Money Systems**

In today's e-commerce business models, the contributions of IT innovation cannot be over-emphasised. With the aid of a mobile phone, money can be accessed even in remote parts of the world. Mobile Money Systems is an IT innovation that allows users



to send money, receive, store, and spend money by the usage of a mobile phone hence avoiding the inconvenience involved in traveling to banks and the high transfer fee charged for such transactions (WorldRemit, 2015). The mobile money systems have been trending for the past decade and were initially dominated by domestic money transfers but has transformed into a wider-range payment platforms whereby school fees, utility bills, taxes and retail payments can be made (Aron, 2018). Age has been reputed to be the biggest influence shaping mobile money adoption in Sub-Saharan Africa according to (Navis, 2019). A study conducted in Sub-Saharan Africa by Tengeh & Talom (2020) found that the adoption and use of mobile money systems by SMEs in their day-to-day operations had a positive effect on their financial performance. Killian & Kabanda (2017) posited that there is an increase in the South African middle class which provides a good opportunity to understand the mobile money phenomenon while noting that their propensity to adopt this IT innovation was because of their habits and social influences.

The researcher identified the mobile money systems as an IT innovation to assess the factors currently influencing its adoption and use by the SMEs under study. Given the literature in this section, the researcher is aware that there can be multiple factors influencing the adoption and non-adoption of mobile money systems by SMEs in South Africa, and of which he has adopted the TAM in conjunction with the conceptual framework for the study to further investigate the extent of use of this IT innovations. It was important to find out if the SMEs under study accepted the IT innovation of mobile money systems, their usage behaviour and what benefits they derived as a result of usage. During the interview, the participants were asked about their awareness of mobile money systems, and to what extent they make use of it for their day-to-day business activities. The next on the list of IT innovations to be discussed is the Human Resource Management (HRM) which the researcher found to be empowered by IT.

### **3.6.9 Human Resource Management (HRM)**

Human resource management (HRM) has experienced significant transformation over the last decade, evolving from being administrative to becoming a strategic partner of the overall organisational strategy, due to the adoption and use of ITs collectively known as Human Resources Information Systems (Silva & Silva, 2017). Human

Resources Information Systems (HRIS) are IT innovations used to collect, record, store, analyse and retrieve data concerning an organisation's human resources. HRIS is used for recording employee data, payroll administration, benefits administration, training of personnel, performance management, and recruitment (Dusmanescu & Bradic-Martinovic, 2011). The benefits of HRIS include efficiency and effectiveness in collecting, storing, and preparing data for reports, reducing labour costs for HR departments, and providing timely and diverse information to the management of the company, based on which it is possible to make quality strategic decisions related to human capital (Dusmanescu & Bradic-Martinovic, 2011). Supporting this view, Silva & Silva (2017) stated the effects of using information systems in HRM are the availability of timely, accurate and relevant information such as personal details, performance appraisal results, benefits and rewards, employment conditions to name a few.

Organisations in developed countries including SMEs use HRIS for strategic purposes, however, SMEs in developing nations such as Cameroon seemed to have been slow in deploying HRIS (Noutsu, et al., 2017). In a study by Srivastava & Teena (2014) in India, SMEs were also found to be lagging behind in utilisation of HRIS, as compared to large organisations and the few that used HRIS only used it for administrative purposes. Noticing such a trend in SMEs in other developing countries, it was imperative to investigate the usage of Human Resource Management as an IT innovative tool by SMEs in the Western Cape. Having seen the benefits of HRM for organisations, the researcher visualised that dynamic capabilities can possibly be created through an organisation's human resource management while being amplified by IT. The conceptual framework of the influence of IT innovations was structured to include HRM because of the study objectives. Therefore, in the interviews held, the participants were asked if they were aware of HRM systems and whether they used it in their business day operations? The researcher also enquired if HRM systems enhances the SMEs performance in an attempt to investigate their level of awareness, to establish the extent of use of HRM systems by the SMEs and evaluate the effect of the use on organisational performance in the following aspects: Internal business processes; employee and customer satisfaction; learning and growth. Web conferencing systems were discussed in the next section as an IT innovation because it emerged as a powerful and persuasive business tool which can improve team collaboration, streamlines the client review process, allows e-learning professionals to

host interactive webinars and online training events by eliminating geographical limitations (Pappas, 2016).

### **3.6.10 Web Conferencing Systems**

Many business organisations including some but not all SMEs are using modern technologies in communicating when compared to the use of fixed telephone lines. Web conferencing allows people in different geographic locations to engage in online meetings. The users can be business partners, workers in other office branches, customers, and prospective customers (Rivera, 2018). The package can be applied in different settings ranging from webinars, e-learning, product displays, conference calls, group meetings, remote employee meetings, and live trainings (Headley, 2019). Lots of merchants offer features like Q&A, dial-in with screen sharing functionalities, audience polling, live chat, file sharing with standard audio and video conferencing (Headley, 2019). Some examples of web conferencing tools are Zoom, BlueJeans, Lifesize, WebEx Meetings, GoToMeeting, Skype for Business and Adobe Connect, etc. There are advantages associated with the usage of this IT innovation for a business establishment (Rivera, 2018). There is reduction of costs for organisers of conferences, seminars, and meetings because it eliminates booking of rooms, catering, and travel. There is reduction of costs for participants because there is no traveling required, and most times no fee payment to attend (Viewsonic, 2019). Web conferencing software affords participants the flexibility of attending single sessions or the entire conference, and opportunity to combine social life with daily work routines (Cameron, 2017).

It can be seen from the literature that if SMEs harness the power of web conferencing, they can successfully compete in the same market with other big corporations. Mike et al., (2019) opined that this IT innovation can help SMEs operate efficiently in a cost-effective manner and also promote team cohesion. The Diffusions of Innovations Theory was very resourceful to the researcher in enlisting the web conference systems on the conceptual model for this study. The following questions were asked: Are SME managers and employees in the Western Cape of South Africa aware of the existence of web conferencing systems? Do these SMEs use web conferencing systems? Are there any benefits being derived in using web conferencing systems? Are there any challenges encountered in the adoption of web conferencing systems and what are

likely suggestions to improving its adoption? The next section is collaboration tools and task management systems which is the last on the list of IT innovative type as seen on the conceptual framework.

### **3.6.11 Collaboration Tools and Task Management Systems**

Collaboration and task management are two sides of the same coin. Timely collaboration is key when it concerns effective task management because the ability of visualising a task ahead of completion in every stage is dependent on individual productivity as it helps team members to forecast, prioritise and coordinate their tasks. Becker & Rodriguez (2010) simply defined task management systems as the process of managing a given task through the completion of its lifecycle, and tracking the progress of the task by sharing further information about the task with other people. Similarly, Lenihan (2019) posited that task management system is a way of disintegrating an entire project into a series of tasks that need to be undertaken. The advantages of this IT innovative tool for project management is highlighted by Becker & Rodriguez (2010) citing that employees and project managers are informed about the status of current projects and resources needed, the business processes are streamlined while enabling teamwork and collaboration to be achieved.

A study presented at a conference in Dublin by McGrath & Kostalova (2020) found that in this technology-driven world where change is constant, project managers will require a different set of knowledge and skills to remain relevant which is needed for growth in project-based organisations. Managing a team, tasks, and projects can be very delicate irrespective of the size, hence Freefind (2019) suggested that task management system tools can be used in South Africa to address the frustration in order to keep track of the entirety in a business. For example, Monday.com, Flowdock, Slack, Jira, KanbanFlow, Asana; etc can be utilised to improve the quality of work, drive collaboration and reduce waste, meet deadlines by managing and organising workloads (Freefind, 2019). DCs was useful to the researcher in this section to formulate the conceptual framework thereby including the task management systems on the interview guide because organisational capabilities and technological advancements can lead to competitive advantage. Therefore, the researcher included collaboration tools and task management systems on the research instrument. In the interviews, the participants were asked if they had knowledge of collaboration tools

and task management and if they made use of the tools. The participants were asked to give their opinion on the challenges they encountered in adoption and use of IT innovations. The researcher ascertained if the collaboration tools and task management systems has been beneficial to the SMEs in terms of profitability and reduced costs; operational effectiveness and productivity; employees satisfaction; customers satisfaction; learning and growth. The next section will further present a review of related literature on SME managers' awareness and knowledge of Information Technology in a bid to dissect some of the objectives of this study.

### **3.7 SME Managers' Awareness and Knowledge of Information Technology**

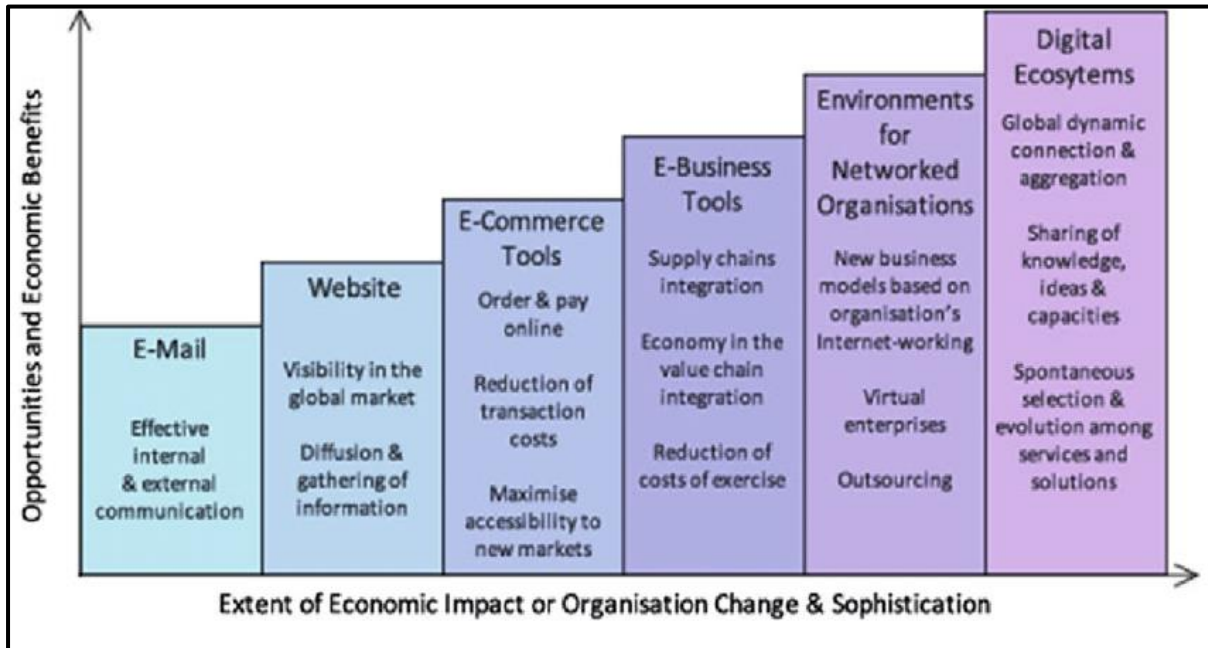
According to the Diffusion of innovations Theory, lack of awareness of the existence and of the benefits of technology is one reason that delays adoption of technologies. According to Taruté & Gatautis (2014) SMEs are characterised as lacking knowledge of the benefits of the adoption of ITs which is a major factor affecting their adoption. In the same vein Nkosana et al., (2016) cited challenges to adoption and utilisation of IT, owner managers' lack of familiarity with IT, and a corresponding lack of IT skills amongst staff. According to OECD (2014) SMEs generally lack the human and technological resources needed for IT and e-commerce, because they focus on day-to-day operations and lack strategic planning and do not have enough time to understand the benefits of new technologies. Even when SMEs managers become aware of the perceived benefits of adopting digital technologies, they require the know-how or qualified personnel, which is often absent (OECD, 2014). This study investigated SME managers' awareness and knowledge of IT innovations. The interviewees were asked if they were familiar with the following: word processing; email; inventory management system; WhatsApp; search engine optimisation; social media platforms; customer relationship management; mobile money systems; human resource management; web conferencing systems; collaboration tools and task management systems.

Despite advances in ITs and the acceptance of such technologies by large organisations, the same level of adoption is not evident among SMEs (Okwuonu, 2013). Many SME managers are not familiar with using computers and become doubtful of the benefits and value that IT gives to the business and have the belief that IT is only for larger companies (Ladokun, et al., 2013). It is important that vendors of

IT equipment, governments and support organisations make known the benefits of integrating IT in SMEs day-to-day operations. Bvuma & Marnewick (2020) in a study of SMEs in townships in KwaZulu Natal found out that some owner-managers of SMEs in South African townships lack IT skills and knowledge, relevant information on government support, business acumen, management skills, education, and awareness of useful IT innovations and these negatively affected SMEs adoption of modern IT innovations. The researcher believes education level and IT literacy is a crucial factor to be aware of what is happening in one's environment. Whilst the challenges above were identified in the townships, they could also be prevalent in the cities, hence the need for an investigation. The interview guide sought to obtain personal information regarding participants' level of computer literacy, level of education and age which may have a bearing on their level of awareness of modern IT innovations. The next section is presented to address one of the research objectives which discusses some related literature on the extent of adoption of IT innovations by SMEs.

### **3.8 Extent of Adoption of IT Innovations by SMEs**

This section will look at the extent of adoption of IT innovations by SMEs in different settings to enable the researcher to understand the behaviour of SMEs globally and to link the findings to theory. The researcher analysed information provided by respondents to the current study and determined if there were similarities or differences in the behaviour of SMEs in Western Cape South Africa as compared to existing literature as far as the extent of adoption of modern IT innovations was concerned. Though the realisation that IT adoption among SMEs may differ between various contexts, several stage models for ICT adoption have been suggested. An example is the Cisco ladder of ICT adoption in figure 3.2 below.



**Figure 3.2 Modified Cisco ICT Adoption Ladder** (Source: Dini & Nachira, 2007)

The ladder shows six stages of adoption: e-mail; website; e-commerce tools; e-business tools; environments for networked organisations and digital ecosystems. There are several benefits derived at each stage, e-mail allows for effective internal and external communication, websites enable visibility in the market and assist in the gathering and diffusion of information. E-commerce tools make it possible for customers and business organisations to order and pay online reducing costs and maximising accessibility to new markets. Environments for networked organisations makes possible the creation of virtual enterprises and working online. Digital ecosystems allow global dynamic connection and aggregation, sharing of knowledge, ideas, resources and capabilities and spontaneous selection and evolution among services and solutions (Dini & Nachira, 2007).

As early as 2004, the OECD reported that the use of basic IT by SMEs was increasingly common in OECD countries. A Eurostat survey on e-commerce showed that nine out of ten SMEs had access to computers by 2001 and that internet access was prevalent among SMEs. OECD (2014) further opined that though internet saturation was mostly higher in larger firms, the use of the internet by SMEs was increasing in most OECD countries. A separate study in the UK by Taruté & Gatautis (2014) acknowledged three distinct stages in IT use in small businesses as: basic (minimal usage of IT), substantial (several applications and machines in use),

sophisticated (integrated various systems and constantly developed use of technology with companies progressing from simple to enabling technologies). The modified Cisco ladder was adopted for this study to measure the extent of IT adoption. For all technologies, small businesses are sluggish than large businesses to adopt new ITs and are less innovative compared to large firms (OECD, 2004). Small firms are about half as likely as large enterprises to have a website for online transactions and only one-third as probable as large companies to be utilising Enterprise Resource Planning (ERP), an integrated management of core business processes in real-time powered by software (OECD, 2018). In a study by Ahmed et al., (2010) on the use of IT by SMEs in Pakistan, the use of Word Processing and Spreadsheets was comparatively high, but the use of communication software was very low. Nkosana et al., (2016) said that business organisations in less developed countries, including underdeveloped parts of South Africa, struggle technologically, finding it difficult to compete in a marketplace in which others are highly geared to IT innovations. This notion is supported by Oyebiyi et al., (2017) who opined that SMEs in developing nations have not fully explored the merits of ICT.

A study by Nugroho et al., (2017) in Bali Indonesia showed that the level of IT usage in SMEs in Yogyakarta is very low. On the contrary, in a separate study by Jaganathan et al., (2018) of SMEs in rural Malaysia revealed a relatively high adoption of IT among rural based SMEs but that the main challenges to the successful adoption and implementation of ICT was lack of funds and attitude. From the studies above one can tell that the adoption of ITs in developing countries is lower than that of developed countries, but one cannot be 100% sure as adoption of technologies depends on several factors. Whilst many business organisations including SMEs use IT innovations for communication, the adoption of modern IT is not common hence the need to explore the extent of adoption of the said innovations in the Western Cape.

### **3.9 Organisational Performance**

Performance is a broad topic but for this study the researcher found it necessary not to narrow down the influence of IT as measuring one attribute might give false results known as the IT paradox. As such the Balanced Score card was used to measure organisational performance. The Balanced Scorecard is a performance measurement system that takes into consideration both financial as well as non-financial



perspectives. It is a holistic approach to measuring performance which provides a strategic view on managing a business as directed by the organisation's vision, mission, and strategy (Benková, et al., 2020). The four perspectives of the Balanced Score Card (BSC) are: customer; internal processes; innovation and learning; and financial perspective (Benková, et al., 2020). For this study, performance was measured using both financial and non-financial measures in relation to the adoption and use of IT innovations by SMEs. The financial perspective had the following dimensions: reduced operating costs; high return on investment; increased cash flows (Ardekani, et al., 2013, p.84). The customer perspective was measured using customer satisfaction and employee satisfaction (Panicker & Vinita, 2013, p.64). Internal business processes were measured using operational efficiency and effectiveness, and collaboration. Learning and growth was measured using skills and capabilities of the employees and the organisation acquired. Early researchers in the 1980s and 1990s investigating the influence of IT on organisational performance obtained contradictory results giving rise to the IT productivity paradox because they only looked at the financial perspective overlooking the fact that there are non-financial aspects that are also affected by the adoption and use of IT innovations (Brynjolfsson, 1993).

However, recent researchers adopted better and broader analysis of how IT influences organisational performance (Mazidi, et al., 2014). The researcher considered the four perspectives of the Balanced Score Card mentioned above to assess the influence of IT innovations on SMEs performance. The researcher asked respondents in interviews their opinions on the effect of the adoption and use of IT innovations concerning financial performance (profitability, reduced costs, increased cash flows, return on investment), internal business processes (efficiency, operational effectiveness, productivity), customer satisfaction and learning and growth (employee skills and knowledge) in order to evaluate the effect of the use of IT innovations on organisational performance. The next section gives the chapter summary.

### **3.10 SUMMARY**

This section brings this chapter to a close by comprehensively reviewing the relevant literature to unearth how IT can influence organisational performance. The IT productivity paradox and empirical studies relating to this current topic were highlighted as organisational performance was seen to be a dependent variable in this study. This precedes the next chapter which outlines the methodology used in the study.

## **CHAPTER 4: METHODOLOGY**

### **4.1 INTRODUCTION**

In the previous chapter, the literature on the influence of IT innovations on organisational performance were extensively reviewed. Empirical studies were briefly outlined, and IT productivity paradox were discussed. This chapter will give a critical analysis of several distinct research methodologies from which the researcher selected the most suitable ones for the study guided by underlying theories and literature review, in a bid to achieve the research objectives and to answer the research questions. In section 4.2 the research questions and objectives will be re-stated followed by research methods in section 4.3. Section 4.4 presents the research philosophies, and in section 4.5 the research design is discussed. Delimitations of the study is portrayed in section 4.6 whereas section 4.7 presents the population of the study. In section 4.8 the sampling procedure is outlined, and data collection instruments are presented in section 4.9. The Pilot study is discussed in section 4.10. In section 4.11 data analysis is discussed whereas ethical considerations are portrayed in section 4.12. This chapter is concluded in section 4.13 with a summary.

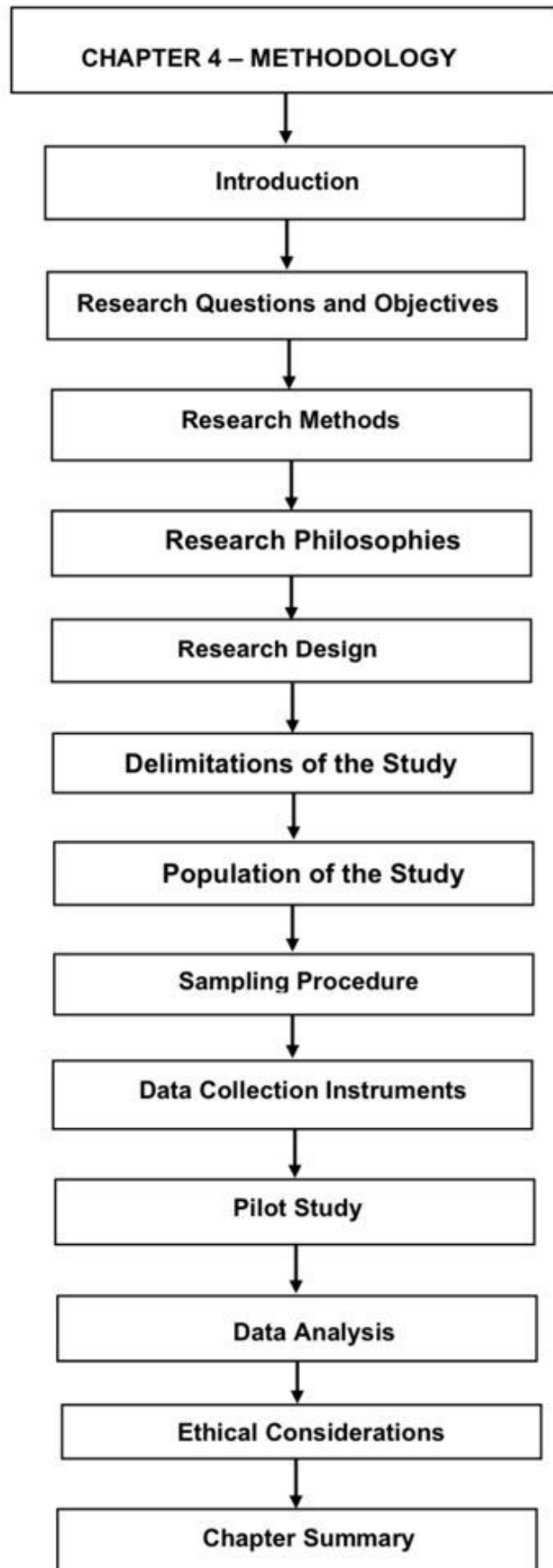


Figure 4.1: Graphical representation of Chapter Four  
(Source: Researcher's own compilation)

## **4.2 Research Questions and Objectives re- stated**

As stated, before in Chapter 1 the main aim of this study was to find the relationship between the adoption of IT innovations by SMEs in the Western Cape Province in South Africa and organisational performance. The following objectives below guided the study.

1. To investigate SME employees' level of awareness of useful IT innovations.
2. To establish the extent of use of IT innovations by SMEs.
3. To establish the factors that are currently influencing the use of IT innovations by SMEs.
4. To evaluate the influence of the use of IT innovations on organisational performance.
5. To draw insights to increasing the adoption of IT innovations by SMEs.

In an attempt to meet the above stated objectives, the following research questions were formulated:

1. What is SME employees' level of awareness of useful IT innovations?
2. What is the extent of use of IT by SMEs?
3. What factors are currently influencing the use of IT innovations by SMEs?
4. What is the influence of the use of IT innovations on organisational performance?
5. What insights can be drawn to increase the adoption of IT innovations by SMEs?

The next section is research methods adopted for this study.

## **4.3 Research Methods**

The methods adopted for a study are dependent upon the research purpose (Saunders, et al., 2009). Explanatory studies seek to establish causal relationships between variables. The focus is on studying a problem in order to explain the relationship between variables. For this type of study, quantitative methods are more appropriate whilst qualitative methods are more appropriate for exploratory studies. If the study is descriptive, mixed methods are more suitable (Cohen, et al., 2007). The current study is both descriptive and explanatory with the main aim of investigating the effect of the adoption of IT on the performance of SMEs in the Western Cape Province of South Africa and to establish challenges being faced by SMEs in the adoption and

use of modern IT innovations, hence the mixed methods approach was used. According to Saunders et al., (2009) citing Robson (2002) exploratory studies are suitable where one wants to find out: what is happening or wants to seek new insights and to ask questions and to assess phenomena in a new light. A descriptive study on the other hand has the objective of portraying an exact profile of persons, and events (Robson, 2002:59) in Saunders et al., (2009). For this type of study, it is necessary to have a clear picture of the phenomena on which one wishes to collect data before the collection of the data. The next section will discuss the research philosophies.

#### **4.4 Research Philosophies**

The philosophy adopted for this study is pragmatism which encompasses both qualitative and quantitative research choices resulting in mixed methods. The choice of philosophy is justified in the following discussion. According to Saunders et al., (2009) the research philosophy is an approach that relates to the development of knowledge and the nature of that knowledge. It contains key assumptions about the way in which the researcher views the world underpinning the choice of research strategy and the methods used. In the pragmatism philosophy the nature of knowledge, acceptable knowledge and the researcher's values are determined by the research questions. The findings from this type of study can be external and either or both observable phenomena and subjective meanings can provide acceptable knowledge. In this type of philosophy, the focus was on mixing various perspectives to help interpret data with values playing a huge role in interpreting results and the researcher applying objective and subjective viewpoints. Mixed or multiple method designs, and the collection of both quantitative and qualitative data were deemed most appropriate since the extent of use of IT innovations and level of awareness of IT innovations are quantitative in nature, whereas the factors influencing the adoption of these innovation and benefits realised can be qualitative in nature as they are based on employees' perceptions. The next section is the research design.

#### **4.5 Research Design**

In the following sub-sections 4.5.1 to 4.5.3, various research strategies, choices and time horizons will be discussed. According to Saunders et al., (2007, p.144) the research design is the process through which the researcher goes about answering the research question, it constitutes research strategies, research choices and time

horizons. According to Kawulich & Chilisa, (2012) research designs are plans that are developed to answer research questions elaborating how a study is to be conducted. Ponto (2015) says that the research design is a rigorous approach to understanding suitable data to be collected to answer a particular research question. From the above definitions the research design in this study is a master plan for data collection and analysis to answer research questions on the influence of the adoption of IT innovations by SMEs on their performance. The next section is research strategies which is a sub-section of the research design.

#### **4.5.1 Research Strategies**

This section gave rise to five sub-sections. In sub-section 4.5.1.1 to sub-section 4.5.1.5, action research, grounded theory, ethnography, survey, and case study was discussed. The researcher explored a number of strategies and settled on the multiple case study strategy. The choice was from experiment, survey, case study, action research, grounded theory, ethnography, and archival research strategies. In archival research strategies, researchers use archival documents namely: minutes of meetings; newspapers; and articles on websites; writings; and interviews to write a story (Bryman, 2012; Saunders et al., 2009). IT innovations are changing fast with improved and new ones coming on the market such as big data analytics, internet of things and cloud computing, therefore relying on archival data would be out of context in this digital economy. The researcher only used archival documents to build on theory and to inform the methodology used in the study and collected primary data to establish the influence of IT innovations on performance of SMEs in South Africa rendering the archival strategy on its own inappropriate. In experiments, the researcher studied causal relationships between variables, that is whether a change in one independent variable produces a change in another dependent variable (Saunders et al, 2009; Hakim, 2000). An experiment was not suitable for this study since the philosophy adopted was pragmatism which involves mixed methods utilising both qualitative and quantitative data. The researcher also relied on the perceptions of SME managers on the influence of IT innovations on profitability, customer satisfaction, efficiency and operational effectiveness and learning and growth. In this study, values also played a vital role in the sense that the research was of benefit to several stakeholders and the researcher included.

#### **4.5.1.1 Action Research**

Action research has four common themes, the first has an emphasis on research in action rather than research about action (Coghlan & Brannick, 2005) in Saunders et al., (2009) for example, a study meant to find solutions to organisational problems. The second is to involve practitioners in the research forming a partnership between researchers and practitioners to solve a problem that is of sincere concern to the researcher and organisation. This type of study was not suitable to the researcher as it may need a lot of time whilst the researcher is part of the organisation leaving his other pressing commitments.

#### **4.5.1.2 Grounded Theory**

According to Goulding (2002) in Saunders et al., (2009) a grounded theory is for a study to predict and explain behaviour through developing and building theory. This type of strategy was not found suitable since the researcher instead was testing the common belief from empirical studies that the adoption of IT innovations has a positive influence on organisational performance by improving operational efficiency and effectiveness. This assumption was tested using primary data in the context of South African SMEs at present.

#### **4.5.1.3 Ethnography**

Ethnography is deeply rooted in the inductive approach with a purpose to describe and explain the social world, the population under investigation live in ways that describe and explain it (Saunders, et al, 2009). Ethnography is very time consuming as the researcher needs to be in the social world being researched. The research process can evolve adapting to change because the researcher will be developing new patterns of thought about what is frequently observed (Saunders, et al, 2009). The Ethnography strategy was found inappropriate for this study due to time constraints.

#### **4.5.1.4 Survey**

The survey is mostly connected with the deductive approach, but also works with the inductive approach with questionnaires and face to face interviews for data collection. Use of the survey strategy allows for the collection of huge amounts of data from a large population of SMEs in an efficient way. However, whilst the survey strategy



would have worked for this kind of study, it was not chosen due to time constraints. It was going to be challenging for the researcher to obtain consent from a large number of SMEs given the limited time allocated for the research by the University and the Covid-19 Pandemic and subsequent National Lockdown.

#### **4.5.1.5 Case Study**

The researcher adopted the multiple case study due to reasons outlined below. The researcher was interested in conducting a research that comprises an empirical investigation of a certain trend surrounded by real-life perspective by the usage of several sources of evidence (Saunders et al., 2009; Robson, 2002:178). Further justification is given by Yin (2003) in Saunders et al., (2009) who emphasises the importance of context, saying that, within a case study, the context is not controlled unlike in an experiment. The researcher developed a keen interest in multiple case study strategy since he wished to acquire a deep insight on the influence of IT innovations on the performance of selected SMEs in South Africa using the mixed methods approach instead of studying a single case. The pilot study revealed that SMEs are heterogeneous as far as the adoption and use of IT innovation is concerned, thereby influencing the researcher to study multiple cases instead of a single case. The next section explains the research approaches for this study which is a sub-section of research design.

#### **4.5.2 Research Approaches**

According to Saunders et al., (2009) research approaches can be combined as in the case with this study where mixed methods were utilised to answer the different research questions. The choice of approach was between two main approaches deduction and induction. Collis & Hussey (2003) in Saunders et al., (2009) says that the deductive approach is mostly associated with the development of theory which is then tested using data and is mostly used in the natural sciences, where explanations were given by law like generalisations, allowing the anticipation of phenomena, predicting their occurrence under a controlled environment. This was supported by Bryman (2012) who said that in the deductive approach the researcher makes use of what is identified in a specific area and on significant concepts to create a hypothesis that can be interpreted to operational conditions. Deduction often follows the following steps: deducing a hypothesis from the theory; expressing the hypothesis in operational

terms; testing the hypothesis; examining the specific outcome of the inquiry and if necessary, modifying the theory in the light of the findings. For the purpose of this study, hypothesis formulation was not deemed relevant given that research questions and objectives were already generated.

An alternative approach to deduction is the inductive approach which considers humans as thinkers and not objects. In this approach, theory follows data, theory is deduced from an analysis of data collected to gain an insight of the meaning humans affix to events, realising that the researcher is a component of the research procedure and less concern with the need to generalise (Bryman, 2012; Saunders et al., 2009). This approach is mainly concerned with the collection of qualitative data to give an in-depth knowledge of the research problem. As stated above this study combined approaches since some research questions were answered qualitatively and others quantitatively. The next section is a sub-section of research design which explains the time horizon adopted for this study.

#### **4.5.3 Time Horizons**

When planning a research, it is important to decide whether the study will be a snapshot (cross-sectional) taken in a small space of time or a series of snapshots (longitudinal) taken in a longer period of time. Due to time constraints the time horizon for this study was cross-sectional and adopted the multiple case study strategy. Case studies were based on semi-structured interviews conducted over a short period of time. A snapshot was also justified by the fact that IT innovations are constantly evolving and the SMEs themselves are also evolving which means the extent of adoption and use of IT innovations by one SME might change even in a month's time. The next section gives the delimitation or scope of the study.

#### **4.6 Delimitation of the Study**

The study was focused on a number of SMEs due to time constraints from each of the following sectors: manufacturing; health and fitness; financial services provider; hospitality; audio-visual communication; business consultancy services; retail services; automotive sales; agriculture; education; auto-technical services; and pharmaceutical services. The study was restricted to the extent of adoption and use of IT innovations by SMEs in the Western Cape and the effect of IT innovations on

their performance, using the four perspectives of the balanced score card: financial perspective; customer perspective; internal processes and learning; and growth. The next section describes the study population.

#### **4.7 Population**

For this study, the population comprised of participating SME employees and managers from each of the following industries: manufacturing; health and fitness; financial services provider; hospitality; audio-visual communication; business consultancy services; retail services; automotive sales; agriculture; education; auto-technical services; and pharmaceutical services. The main reason for choosing multiple SMEs was that the adoption of IT innovations differs between industries and between individual SMEs, so studying a single case would not give a general picture of the effect of the adoption of IT on organisational performance. This is in line with Collins & Hussey (2003) who stated that a population is the complete group of members about whom a research intends to establish facts. In support, Fraenkel et al., (2015) opined that a population is the entire group of persons or set of objects the researcher is interested in gaining information and drawing conclusions about. The researcher investigated the influence of IT innovations on organisational performance. The next section explains the sampling procedure.

#### **4.8 Sampling procedure**

This section gave rise to sub-sections 4.8.1 to 4.8.3 where purposive sampling, convenience sampling and the sample size will be discussed. Sampling is the process of selecting a representative sub-set from a population for the purposes of data gathering or experimental purposes (Saunders et al., 2012; Cohen, et al., 2007). Important factors to consider in sampling are sample size, representativeness, sample parameters, access to the sample and the sampling strategy to be used (Taherdoost, 2016). In most cases collecting data for the whole population would be expensive and time consuming (Field, et al., 2012). There are basically two categories of sampling namely probability and non-probability sampling. Non-probability sampling was used to select participating SMEs, participating employees, and managers. In probability sampling the population is known and the selection of subjects is random with an equal chance of each subject being selected yet in non-probability sampling the selection of participants is not random and is a subjective selection of subjects (Saunders, et al.,

2009). Non-probability sampling techniques are prone to bias because the chosen sample may not be representative of the population as compared to probability sampling techniques (Bryman, 2016). Non-probability sampling was suitable for this study because the participants need to have special characteristics in this case in-depth knowledge of the case study SMEs and were close to the researcher to minimise costs and save time while conducting interviews.

#### **4.8.1 Purposive Sampling**

Purposive sampling, a non-probability sampling technique was used in selection of SME managers and employees who participated in the study considering their in-depth knowledge of the organisations they work for. The facts they provided, their views and opinions were important in answering the research questions. This was in line with Saunders et al., (2009) advising that the researcher can apply non-probability sampling technique to permit the researcher to select particular elements or subjects for a study to make sure that the elements have certain characteristics pertinent to the study.

#### **4.8.2 Convenience Sampling**

In convenience sampling, subjects are selected for convenience to the researcher and that they will be easy to recruit (Cohen et al., 2007; Collis & Hussey, 2014). One of the major challenges in conducting research is obtaining informed consent from targeted participants often resulting in the researcher obtaining a small non-representative sample. The researcher looked for contacts of 10 to 15 SMEs in the telephone directory and on the World Wide Web belonging to each of the sectors: manufacturing; health and fitness; financial services provider; hospitality; audio-visual communication; business consultancy services; retail services; automotive sales; agriculture; education: auto-technical services; and pharmaceutical services that were in close proximity to the University's main campus. He then sent letters inviting the SMEs to participate in the study, seeking informed consent. For convenience and time pressure the SME that responded first in each category was drafted for the study. More letters were sent out until a confirmation was obtained for categories without a confirmation. The organisations chosen were subjected to scrutiny to see if they fit the definition of SME in South Africa. Due to Covid-19 pandemic the participants were chosen according to availability to suit the researcher.

### **4.8.3 Sample size**

The number of participating SMEs has been conveniently set between 10 and 15 one from each of the main sectors of manufacturing, health and fitness, financial services provider, hospitality, audio-visual communication, business consultancy services, retail services, automotive sales, agriculture, education, auto-technical services, and pharmaceutical services. According to Dworkin (2012) several articles suggest that 5 to 50 participants are sufficient for in-depth interviews. On a similar note, Ragin (2008) recommends 20 interviews for a master's thesis and 50 interviews for a doctoral dissertation. For this study, the number of participants targeted for each SME was 5 to give a number of about 60 interviews which satisfies recommendations in literature. The next section describes the data collection instruments.

## **4.9 Data Collection Instruments**

This section will discuss five sub-sections namely: validity; reliability; data collection; and field work; the researcher as observer and interview guide. The main data collection methods in research are document analysis, interviews, observations, and questionnaires (Bryman, 2016). Validity, reliability, and objectivity were the research instruments considered.

### **4.9.1 Validity**

Multiple case studies were conducted for SMEs from the selected sectors to increase the validity of the findings which are to some extent generalisable. The interview guide was designed to answer the research questions. The research questions were broken down into sub-questions that gave in-depth information of the extent of use of IT innovations by SMEs, the perceived influence of IT innovations on organisational performance and the challenges being faced by SMEs in the adoption and use of IT innovations. A pilot test was carried out to test the validity of the interview guide.

### **4.9.2 Reliability**

Reliability is to do with repeatability, whether the same or similar results will be obtained when the study is repeated with different subjects. The research instrument was standard, and all participants were asked the same questions to ensure reliability and consistency.

#### **4.9.3 Data collection and Field Work**

This study used questionnaires and interviews for data collection. The research instruments were constructed to have validity, reliability, and objectivity. The researcher used consistent and reliable instruments that permitted validation of conclusions about the influence of IT innovations on firm performance. Mellenbergh et al., (2011) stated that an interview guide is a research instrument comprising of a string of questions and other prompts to assist the researcher in conducting interviews. In this study, a semi-structured interview guide was used. The first section requested demographic information. The second section focused on the extent of use of IT innovations by SMEs in the Western Cape. The third section sought to gather information on the challenges faced by SMEs in adopting IT innovations, the fourth section collected information on the effect of IT innovations on organisational performance and the fifth section gathered information on how to improve the usage of IT innovations.

The researcher scheduled interviews with selected SME employees and to collect both quantitative and qualitative data. The researcher had several options for the interview depending on what the interviewee preferred due to Covid-19 pandemic. The options included visiting the offices of the interviewee and conducting the interview via telephone or video call by using Skype and Zoom. The researcher asked questions and recorded responses in a notebook, probing further where necessary to clarify issues. The researcher also recorded all the interview proceedings using a recording device with permission from the interviewees and committed to deleting the recordings after transcribing the data. Each interview was expected to take an average of 30 minutes to complete.

#### **4.9.4 The Researcher as Observer**

An observation is the usage of the researcher's senses to assess a specific group of interest to obtain useful information with a view to answering the research questions (Saunders, et al., 2009). The main advantages of observation are that they give a clear picture and understanding of what is happening first-hand. A major disadvantage is that it may be time consuming. It is advised that in social research, observation is used in conjunction with other instruments to include the human factor and get a wider view

of the research (Bryman, 2016). In this study the researcher took a tour of selected SMEs to personally observe any IT innovations in use at these SMEs.

#### **4.9.5 Interview Guide**

To obtain both quantitative and in-depth qualitative information the researcher opted to use a semi-structured interview guide and questionnaires. Interviews refer to verbal communication between parties and can be structured, semi-structured or unstructured (Saunders, et al., 2009). The interview guide was made up of five sections: Section A, Section B and Section C, section D and section E designed to answer the research questions in Chapter 1 following concepts and underlying theories from empirical literature. The interview guide was designed following the order of the research questions and to answer them. It was designed to have validity, reliability, and consistency (Bryman, 2012). Instruments should be designed to measure what they are supposed to measure, this study measured the extent of use of IT innovations by SMEs, the perceived influence of IT innovations on organisational performance and the challenges being faced by SMEs in the adoption and use of IT innovations. The structure of the interview guide is given below.

**Section A:** This section will contain personal information including participants' knowledge and ease in using IT innovations in line with the TAM.

**Section B:** Assessment of the extent of use of IT innovations by SMEs. The items on this section were informed by the TAM and the Diffusion of Innovations Theory (DIT).

**Section C:** This section contains questions meant to identify challenges being faced by SMEs in the adoption and use of IT innovations.

**Section D:** This section contains questions meant to establish the effect of the adoption and use of IT innovations on organisational performance as informed by the Theory of Dynamic Capabilities.

**Section E:** Solicited for recommendations for the improvement of the adoption of IT innovations by SMEs.

Table 4.1 below explains which questions on the interview guide answers which research questions and how the data was analysed.

**Table 4.1: Aims of the interview guide**

Questions	Research Questions	Research Objectives	Envisaged Data Analysis Methods
<ol style="list-style-type: none"> <li>1. How often do you use computer hardware and software at this organisation?</li> <li>2. How would you describe your level of computer hardware and software knowledge and skills?</li> <li>3. Can you start and shut down a computer system?</li> <li>4. Can you use a computer system for Word Processing?</li> <li>5. Can you use Spread Sheets for processing data?</li> <li>6. Can you save and retrieve documents?</li> <li>7. Can you send and read emails?</li> <li>8. Can you use search engines such as Google?</li> <li>9. Can you log on to social networking sites? (e.g., Facebook)</li> <li>10. Are you aware of any of the following IT innovations?                -Inventory Management Systems.                -WhatsApp.                -Search Engine Optimisation.                - Social Media Platforms.</li> </ol>	<ol style="list-style-type: none"> <li>1. What is the level of awareness of useful IT innovations of SME employees?</li> </ol>	<ol style="list-style-type: none"> <li>1. To investigate SME employees' level of awareness of useful IT innovations.</li> </ol>	<ol style="list-style-type: none"> <li>1. Quantitative Data Analysis</li> <li>2. Quantitative Data Analysis</li> <li>3. Quantitative Data Analysis</li> <li>4. Quantitative Data Analysis</li> <li>5. Quantitative Data Analysis</li> <li>6. Quantitative Data Analysis</li> <li>7. Quantitative Data Analysis</li> <li>8. Quantitative Data Analysis</li> <li>9. Quantitative Data Analysis</li> <li>10. Quantitative Data Analysis</li> </ol>



<ul style="list-style-type: none"> <li>- Customer Relationship Management.</li> <li>- Mobile Money Systems.</li> <li>- Human Resource Management.</li> <li>- Web Conferencing Systems.</li> <li>- Collaboration Tools and Task Management Systems.</li> <li>-Email.</li> </ul>			
<p><b>11.</b> Does your organisation have a well-established IT department?</p> <p><b>12.</b> Do employees receive IT training?</p> <p><b>13.</b> Does your organisation use any of the following IT innovations for day-to-day business?</p> <ul style="list-style-type: none"> <li>-Word Processing</li> <li>-Email</li> <li>-Inventory Management Systems</li> <li>-WhatsApp</li> <li>-Search Engine Optimisation</li> <li>-Social Media Platforms</li> <li>-Customer Relationship Management</li> <li>-Mobile Money Systems</li> <li>-Human Resource Management</li> <li>-Web Conferencing Systems</li> <li>-Collaboration Tools and Task Management Systems</li> </ul>	<p><b>2.</b> What is the extent of use of IT innovations by small to medium sized enterprises?</p>	<p><b>2.</b> To establish the extent of use of IT innovations by small to medium sized enterprise.</p>	<p><b>11.</b> Quantitative Data Analysis</p> <p><b>12.</b> Quantitative Data Analysis</p> <p><b>13.</b> Quantitative Data Analysis</p>

<p><b>14.</b> Are you using any other IT innovations not mentioned above in your day-to-day business? If yes, please explain</p> <p><b>15.</b> What challenges is your organisation facing in the adoption and use of IT innovations?</p>	<p><b>3.</b> What factors are currently influencing the use of IT innovations by small to medium sized enterprises?</p>	<p><b>3.</b> To assess the factors currently influencing the use of IT innovations by small to medium sized enterprises.</p>	<p><b>14.</b> Qualitative Data Analysis</p> <p><b>15.</b> Qualitative Data Analysis</p>
<p><b>16.</b> Please explain how and to what extent the usage of IT innovations positively influences your organisation in each of the following areas: Profitability. Reduced Costs. Increased cash flows. Return-on-investment. Efficiency. Operational effectiveness. Productivity. Employee satisfaction. Customer satisfaction. Employee skills and knowledge</p> <p><b>17.</b> Are there other areas IT innovations are influencing your organisation? Please explain.</p>	<p><b>4.</b> What is the influence of the use of IT innovations on organisational performance for SMEs?</p>	<p><b>4.</b> To evaluate the influence of the use of IT innovations on organisational performance.</p>	<p><b>16.</b> Qualitative Data Analysis</p> <p><b>17.</b> Qualitative Data Analysis</p>
<p><b>18.</b> In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?</p>	<p><b>5.</b> What insights can be drawn to increase the adoption of IT innovations by small to medium sized enterprises.</p>	<p><b>5.</b> To draw insights to increasing the adoption of IT innovations by small to medium sized enterprises.</p>	<p><b>18.</b> Qualitative Data Analysis</p>

(Source: Author's Construction)

The interview guide was subjected to scrutiny. See pilot test section 4.10 below.

#### **4.10 Pilot Study**

This section gave rise to ten sub-sections which will be discussed. A pilot study was conducted in February 2020 through semi-structured interviews with CEOs, IT managers and IT users of two SMEs. The SMEs which were involved in the pilot were not part of the main study to avoid maturation effects.

##### **4.10.1 The objectives of the pilot study**

The objectives of the pilot study were:

1. To have an initial perspective of the extent of adoption and use of IT innovations by SMEs in Cape Town
2. To identify which factors identified in literature review as currently affecting the adoption of IT innovations were recognised in SMEs in the Western Cape.
3. To have an idea of the influence of IT innovations on SMEs performance from the respondents' perspective.
4. To develop and test the structure of the interview guide for the main study.
5. To strengthen the researcher's interviewing skills and techniques.
6. To gauge the time interviews were expected to take in the main study and to plan accordingly.

Each interview took between 30 and 45 minutes and all interviews were recorded using an electronic recording device. All interviews were conducted in a relaxed environment, and all interviewees expressed interest and were very cooperative, however the CEOs could not divulge the financial status of the SMEs.

##### **4.10.2 Results of the pilot study**

###### **4.10.2.1 SME A: Hotel**

The first SME was a hotel with 25 regular employees. The interviewees were the owner CEO, Shift manager, Receptionist and Accountant.

#### **4.10.2.1.1 Extent of Adoption and use of IT Innovations**

The first SME has laptops for senior managers, a desk top computer in accounts, and a desktop computer at the reception, land line telephone and mobile telephone. They are connected to the internet and have a point of sale. SME A has a website that shows directions and contact numbers but is not interactive. SME A has no IT manager and does not use IT consultants. They use the services of IT technicians where necessary for servicing and repairs. The main uses of computers were for communication, that is sending and receiving emails and for accounting purposes using Excel spread sheets and QuickBooks. The mobile phone was used for WhatsApp messaging with the customers. SME A uses only basic IT innovations.

#### **4.10.2.1.2 Factors Affecting the Adoption and use of IT Innovations**

The study revealed that there were several factors affecting the adoption of IT innovations in SME A such as: lack of financial resources to buy IT equipment due to depressed business; lack of management's lack of awareness of some modern IT innovations in particular cloud computing; procurement information systems; supplier relationship management; and customer relationship management software. The SME also lacked advanced in-house IT expertise and most staff members lacked IT knowledge and skills. The CEO also showed reluctance in spending lots of money in buying expensive IT equipment which he said may not improve the fortunes of the company.

#### **4.10.2.1.3 Influence of IT Innovations on Performance**

SME A owner manager believed that the performance of the hotel depends more on the face-to-face interaction of staff members with customers and that he needed to do research on how modern IT innovations could help his business since his level of IT was basic, that is word processing, sending, and receiving emails.

#### **4.10.2.2 SME B: Financial Institution**

The second SME was a micro-finance company with 16 office-based staff and 30 field sales agents. The Owner CEO, Operations manager, Sales manager, and Accountant participated in the interviews.

#### **4.10.2.2.1 Extent of Adoption and use of IT Innovations**

SME B has a server, laptops at all workstations, 3 land line phones and 5 smart mobile phones at the office. All 30 field sales agents have smart phones but no laptops. SME B has an interactive website and a Facebook page. All office staff except the receptionist are university graduates and are computer literate. SME B uses IT for communication, customer relationship management, accounting, and marketing. The SME uses Excel Spreadsheets for keeping records and Quick books for accounting. The SME employed an IT consultant who is responsible for updating the website and troubleshooting of any network problems and giving IT advice to the owner CEO. The company has not yet adopted search engine marketing but uses e-mail and social media marketing. SME B is progressing in the use of modern IT innovations but has yet to embrace modern IT innovations such as cloud computing and search engine optimisation.

#### **4.10.2.2.2 Factors Affecting the Adoption and use of IT Innovations**

SME B's owner manager said that there was a lot of competition in the financial services sector therefore they had to keep abreast with market developments, hence the need to communicate with customers regularly via WhatsApp and Facebook. Management was aware of some advanced IT innovations but that they were not necessary for the current microfinance institution's operations.

#### **4.10.2.2.3 Influence of IT Innovations on Performance**

According to the interviewees, IT helps a lot in retaining existing customers and bringing in new customers through e-mail and social media marketing. Positive feedback on Facebook has helped bring in new customers. The company's website also provided important information to customers. Customer information is easy to access, and queries are handled in time. Communication is also made easy through WhatsApp messaging which is cost free. Use of IT makes the job easy for office staff and enables communication with customers in remote areas. Field sales agents get a lot of customers through referrals via WhatsApp and Facebook.

#### **4.10.3 Summary of findings of the pilot study**

The pilot study revealed that SMEs were at different stages of the adoption of IT innovations and faced number of challenges in the adoption of IT innovations such as:

lack of management by in, staff members lack of IT knowledge and skills, lack of financial resources and lack of in-house IT expertise. All double-barrelled and ambiguous questions identified by the pilot test subjects were restructured to remove any ambiguity. The interview guide was also subjected to the scrutiny of the research supervisor who advised the researcher to restructure sensitive questions so that participants to comply with academic research ethics. The researcher learnt to be tactful in asking sensitive questions, especially those involving the financial status of SMEs. The pilot study helped the researcher gain some interviewing, recording and transcribing skills. The pilot study also revealed that SMEs owner managers were elusive when it came to questions regarding the financial performance of the company and employee wellness. The next section explains the data analysis.

#### **4.11 Data Analysis**

For the purpose of this study, mixed methods were used to analyse data. Quantitatively, fixed responses were pre-coded prior to data collection which made it easy to enter the responses onto an SPSS template for analysis. Code 1 was assigned to the 1st option, code 2 to the 2nd option and so on. Frequency tables were generated using SPSS for interpretation to answer the research questions. Pie charts and bar graphs were drawn to give a visual picture of the frequency distributions. The chi-square test was not used to test if there was a correlation between IT innovations and SMEs profitability performance because there was no hypothesis formulated. Therefore, the researcher made use of the Balanced Scorecard to measure the relationship between IT innovations and SMEs profitability performance.

Qualitatively, open-ended questions were analysed as the researcher engaged in sentence by sentence, reading, assigning key concepts numerical codes for grouping. Similar responses were assigned the same code.

##### **4.11.1 Quantitative Data Analysis**

Quantitative data was analysed quantitatively. Quantitative responses from research participants were entered into SPSS for analysis and frequency tables were generated to show proportions of responses to the following questions: What is your Gender? In which age range are you? What is the highest level of education you attained? For how long have you worked continuously for this organisation? How would you describe

your level of computer hardware and software knowledge and skills? What is your Level of IT competency? Does your organisation have a well-established IT department? Do employees receive IT training? Are you aware of the following IT innovations?

#### **4.11.2 Qualitative Data Evaluation and Transcription**

It is vital for researchers to analyse qualitative data separately from quantitative data (Bryman, 2012). Some of the different methods used in evaluating qualitative data are the use of computer software packages and thematic analysis (Cohen et al., 2007; Bryman, 2012). For this study, SPSS was used for the analysis of fixed response data whilst an Excel spread sheet was used for the analysis of qualitative data since the number of respondents was limited. The next section is ethical considerations.

#### **4.12 Ethical Considerations**

Saunders et al., (2009) refers to ethics as the appropriateness of the researchers' behaviour in relation to the rights of those who become the subject of one's work or are affected by it. The researcher followed the University's ethical guidelines. He sought permission to conduct the study from the university. He obtained a letter from the institution to seek permission to conduct the study at the SMEs in the Western Cape. The researcher followed the steps below: notice of the intention to conduct the research; seeking informed consent from participating SMEs and managers; and respect for confidentiality and anonymity. No names of SMEs and individuals was written on questionnaires. Information obtained in the study has been used for academic purposes only and will not be given to third parties except with the permission of the participating SMEs. Finally, there was no physical or emotional harm to participants. The researcher was truthful in conducting the research. He reported things as they are and did not tamper with the data. The researcher informed the participants of the nature of the study and how the data collected will be used and how the study may affect the participants if any. The researcher ensured that research participants remained anonymous, and the information collected was kept confidential. When referring to direct quotes the researcher used pseudonyms. The face to face, video calling, and telephone interviews were conducted in private and not in groups.

The researcher ensured that participants made their own judgement by not asking misleading questions. The researcher was fair and free from bias and treated all participants equally and afforded them enough time to express their opinions (May & Holmes, 2012). The researcher ensured that the research participants voluntarily participated in the study and that they know aim, objectives, limitations, methodology and how potential harm will be minimised before they gave consent to participate. A consent letter from the University was used to seek informed consent. This study benefitted SME owners, employees and customers through enhanced efficiency and operational effectiveness. The researcher tried by all means to minimise harm to participants by making sure there was no segregation of participants and that no sensitive or degrading questions were asked in interviews. The next section is the chapter summary.

#### **4.13 Chapter Summary**

This chapter discussed in detail the research methods used in this study to answer the research questions. It explained how data was collected, analysed, and outlined, the ethical conduct to be followed. The next chapter will present the data and findings of the study in relation to literature.



## **CHAPTER 5: RESEARCH RESULTS/FINDINGS**

### **5.1 INTRODUCTION**

In the previous chapter, the research methodology was detailed by explaining the research design, research instrument used, the process of data gathering, sample size and sample analysis for this study. Therefore, this chapter presents the data analysis, in-depth interviews, questionnaires, and the findings to answer the research questions outlined in chapter 1. The findings were done using frequency tables which were compiled by the researcher using tables generated from pie charts and SPSS. Section 5.2 will discuss methods of data presentation followed by the sections of the interview guide in 5.3. up to section 5.9 and concluded with a summary in section 5.10.

### **5.2. Methods of Data Presentation**

Interviews were conducted, the data collected was gathered, coded, and analysed using SPSS see Appendices attached. As stated in chapter 4, the interview guide was drawn to answer all the research questions in line with ethical principles. The sample of the research was drawn from 12 SMEs as stated in Chapter 4. The sample comprised of 60 participants and the researcher managed to collect data from 47 respondents as 13 were not available. The researcher had already reached saturation from the data collected. Saturation is the point when no new information is discovered in data analysis which enables the researcher to repeat concepts in the same way according to (Trotter, 2012). The questionnaire and interview sample comprised of SME owner-managers, departmental managers, top level executives and junior level employees. The next section will address the data presentation for this study.

### **5.3 Sections of the Interview Guide**

For the purpose of this study, data will be presented separately according to each section on the interview guide. Section A indicates personal information and computer knowledge and skills of participants which will be presented in a table form. Section B will indicate the extent of adoption and use of IT innovations by the organisation. Section C for challenges faced in the adoption of IT innovations. Section D will indicate

the effect of IT innovations on organisational performance while Section E outlines the recommendations to improving the adoption and use of IT innovations by organisations. In Chapter 2, Models and Theories Models were used as a guide to analyse the data that was obtained from the sections of the interview guide. Chapter 2 indicated that the TAM concentrates on the adoption and use of IT innovations: among them are perceived ease of use; perceived usefulness; economic factors; outside influences from suppliers; customers and competitors; personal control factors on behaviour according to (Nkosana, et al., 2016). Therefore, the researcher used the TAM, DIT and DCs to offset the weakness of each other. It should be noted that continuous innovations such as adopting IT are dynamic capabilities that may improve a firm's competitiveness. This assisted the researcher to further evaluate the perceived usefulness of IT innovations at the 12 SMEs and how it influences organisational performance. The next section will present the data analysis from the sections of the interview guide.

**Table 5.1: Respondents Demographics**

<b>Characteristic</b>	<b>Attribute</b>	<b>Percentage</b>
<b>Gender</b>	Male	51.1
	Female	48.9
<b>Age</b>	18-30	19.1
	31-40	29.8
	41-50	36.2
	51-60	14.9
<b>Highest Educational Level</b>	Secondary	10.6
	Tertiary	89.4
<b>Service Years</b>	Below 1 year	12.8
	1-5 years	34.0
	6-10 years	36.2
	Above 10 years	17.0

<b>IT Knowledge</b>	None	2.1
	Basic	17.0
	Expert	80.9

Source: Author's Construction

### **5.3.1 Gender**

The results of table 5.1 show that there was a fair representation of all gender groups in the study, where 51.1% of the respondents were male and 48.9% were female. It also shows a high number of women in management. The information provided represents all segments by gender and therefore is free of bias.

### **5.3.2 Age**

The results of table 5.1 show that all age groups from 18 years and above were represented in the study. It can be noted that about 50% of the respondents were between 18 and 40 years old. This group is considered as technophiles. The information provided is balanced age wise and can be relied on.

### **5.3.3 Highest Educational Level**

From table 5.1 above all the respondents have attained secondary education or higher, with as much as 89.4% having acquired tertiary qualifications. The information provided is thus of high quality and can be relied on.

### **5.3.4 Service Years**

The majority of the respondents, 87.2% have been with the SME for more than one year meaning that they have in-depth knowledge of the organisations.

### **5.3.5 Respondents IT Knowledge**

The majority of the respondents had IT knowledge with 80.9% at expert level, 17% at basic level. Only 2.1% of the respondents did not have any knowledge of information technologies. The information provided narrates a true reflection of the on-goings in the organisation and can be relied on. The next section will give a detailed profile of the 12 SMEs under study.

## **5.4 SME PROFILES**

### **5.4.1 SME 1 (MANUFACTURING)**

The first SME specialises in printing and manufacturing of African traditional textile fabrics. The SME has been in operation since 2002 and has 61 permanent employees. The SME is managed by the CEO who is also the owner. The SME has 7 departments: Human resources; IT; Finance; Pattern making; Trimming; Sales; and marketing. There were five respondents in this SME. The CEO and the line manager are males, while the HR administrator, sales manager and supervisor are females. All the respondents have tertiary degrees.

### **5.4.2 SME 2 (HEALTH AND FITNESS)**

The second SME concentrates on a range of health products with retail emphasis on wellness and nutrition. They deliver on-the-go snacks for offices, shared workspaces, virtual meeting rooms, schools, and universities. The SME has been in existence since 2012 and has 47 permanent employees. The SME is managed by the CEO who doubles as the owner. There are various departments in the SME which are distribution, communications, sales, and marketing. There were five respondents in this SME. The CEO, sales manager, line supervisor for senior employees and the line supervisor for junior level employees who are both males, while the general manager is a female. Four respondents have tertiary degrees with IT proficiency except the supervisor for the junior level employees who has a matric qualification.

### **5.4.3 SME 3 (FINANCIAL SERVICES PROVIDER)**

SME 3 deals mainly with tax and accounting consultancy by offering services to sole proprietors, small, medium, and large businesses for bookkeeping, payroll administration and individual tax services. This SME has been functional since 2009 and has 23 permanent employees. This SME is managed by the CEO who is also the director, and has different departments such as payroll administration, sole proprietorship, bookkeeping and internal audit. There were three respondents in this SME. The CEO and the line supervisor are females, while the internal audit manager

is a male. The respondents have tertiary degrees and are proficient in the use of IT innovations.

#### **5.4.4 SME 4 (HOSPITALITY)**

The fourth SME are specialists in catering services and events planning. They have an onsite restaurant, and they offer delivery services. This SME is managed by the owner and has over 17 employees with only four departments, namely: IT; catering; events coordinating; and finance. This SME has been in existence since 2009. There were four respondents in this SME: the owner-manager; events coordinator; line manager; and front office administrator. The owner-manager and events coordinator are both male between 31-40 years old, while the front office administrator is a female between 18-30 years old. The line manager is a male between 51-60 years with a tertiary degree and has been working in this organisation for over 10 years. The remaining three respondents have tertiary degrees. Out of the four respondents, the front office coordinator and events coordinator have little knowledge of IT applications while the owner-manager and the line manager have expert knowledge of computer hardware and software applications.

#### **5.4.5 SME 5 (AUDIO-VISUAL COMMUNICATION)**

This SME is an audio-visual communication laboratory which provides bespoke meaning curation to ensure the reach, accessibility, and effect of contents. This SME has been in operation since 2010 and has 28 permanent employees. The SME is managed by the CEO who is also the owner. There are three main departments in this SME: localisation; talent; and production. The localisation department has two teams: adaptation and subtitling while the production department has the media and engineering teams. Two respondents emanated from this SME: The CEO and operations manager. The CEO is a male between the age of 41-50 years old with a tertiary degree and is proficient in the use of IT software and hardware applications. The operations manager is a female between the age of 31-40 years old with a tertiary degree and has been employed in this SME between 1-5 years. The operations manager is also an expert in the use of computer software and hardware applications.

#### **5.4.6 SME 6 (BUSINESS CONSULTANCY SERVICES)**

The sixth SME specialises in business consultancy services such as management consulting, business plan creation and business capital raising. This SME has been in operation since 2008 and has 48 employees managed by the owner. This SME has five departments: business education; sales/marketing; risk management; HR and IT. There were four respondents in this SME, the owner, business development specialist, line supervisor, and the general manager. The owner is a male between the age of 41-50 years with a tertiary degree and has been the CEO for over 10 years. The general manager is a female between the age of 41-50 years old with a tertiary degree and has been working in this organisation between 6-10 years. The business development specialist is a female between the age of 18-30 years with a tertiary degree and has been in this SME for 1 year. The line supervisor is a male between the age of 31-40 years with a tertiary degree and has been working in this organisation between 1-5 years. The respondents are proficient in the use of IT software and hardware applications.

#### **5.4.7 SME 7 (RETAIL SERVICES)**

This SME is in the retail industry with specialty in supplies of generic and compatible ink/toner cartridges. This SME has been in existence since 2006 and has 18 permanent employees. This SME is managed by the CEO who doubles as the owner. This SME has two departments: Sales/marketing and distribution. There were four respondents in this retail SME: the owner; distribution manager; sales manager; and a junior level employee. The owner is a female between the age of 41-50 years with a matric qualification and has expert knowledge in the use of IT software packages. The distribution manager is a female between the age of 31-40 years with a tertiary qualification and has been working in this organisation between 1-5 years. The sales manager is a male between 41-50 years with a matric qualification and has proficiency in the use of IT innovative packages. The junior level employee is a female between the age of 41-50 with a tertiary degree and has been working in this SME for one year. The junior level employee has basic knowledge of computer software and hardware applications.

#### **5.4.8 SME 8 (AUTOMOTIVE SALES)**

The eight SME is in the automotive industry with specialisation in servicing and sales of three brands of motor vehicles and auto spare parts. This SME started in 1950 and it is reputed to have 197 employees. The SME is managed by the CEO who is also the director, but not the owner. This SME has departments such as new sales, service, parts, IT, sales and marketing, communications, HR, and administration. There were three respondents from this SME: The CEO; international sales executive; and sales department manager. The CEO is a male between the age of 51-60 years with a tertiary degree qualification and proficiency in the use of IT innovations. The international sales executive is a male between the age of 41-50 years with a tertiary degree and has been working in this company between 6-10 years. The international sales executive has expert knowledge in the use of computer software and hardware applications. The sales department manager is also a male between the age of 51-60 years with a tertiary degree and proficiency in the application of IT. The sales department manager has been working in this company between 6-10 years.

#### **5.4.9 SME 9 (AGRICULTURE)**

This SME is in the agriculture industry with specialty in nurturing and grafting fruit tree, pears production, figs, nectarines, peaches, almonds, and pomegranates etc. This SME has been functional since the year 1999 and has about 73 employees. The SME is not managed by the owner, it has five departments such as IT, HR, sales, finance, and nursery. There were four respondents in this agricultural SME. The designation of the respondents were as follows: the manager; sales manager; nursery manager and the line supervisor for the junior level employees. The manager is a male between the age of 31-40 years with a tertiary degree and has been working in this SME from 1-5 years. The sales manager is a female between the age of 18-30 years with a tertiary degree and has an expert knowledge in the use of computer software and hardware applications. The nursery manager is a female between the age of 18-30 years old with a tertiary degree and basic knowledge in the use of computer packages, while the line supervisor is a male between the age of 41-50 with a tertiary degree and has expert knowledge in the use of computer software and hardware applications.

#### **5.4.10 SME 10 (EDUCATION)**

The tenth SME is an English language academy with an emphasis on education consultancy. This SME has been in operation since 2008 and has 18 employees. This

education SME is managed by the CEO who is the owner and has two main departments, HR, and communications/linguistics. There were four respondents from this education SME. The owner, academy manager, senior tutor, and the head of linguistics department. The CEO is a male between the age of 41-50 years with a tertiary degree and expert knowledge in the use of IT applications. The academy manager is a female between the age of 31-40 years with a tertiary degree and IT proficiency. The senior tutor is a male between the age of 31-40 years with a tertiary qualification and expert knowledge in the use of computer software and hardware application. The head of linguistics department is a female between the age of 18-30 years with a tertiary degree and has basic knowledge of IT applications.

#### **5.4.11 SME 11 (AUTO-TECHNICAL SERVICES)**

This SME is a power-steering specialist in the auto-technical service industry. It has been in existence since the year 2004 and managed by the CEO who is also the owner. This SME has about 13 employees with two departments: service and operations. There were five respondents from this SME: the owner-manager; service advisor; assistant service advisor; diagnostic technician; and a junior intern. The owner-manager is a male between the age of 51-60 years with a tertiary degree. The service advisor is a male between the age of 31-40 years with a matric qualification. The assistant service advisor is a male between the age of 41-50 with a tertiary degree. The diagnostic technician is a female between the age of 18-30 years with a tertiary qualification while the junior intern is a female between the age of 18-30 with a matric qualification. The respondents indicated that their SME does not have a well-established IT department while employees do not receive IT training. The owner-manager, the service advisor, and the diagnostic technician have expert knowledge in the use of IT applications. The assistant service advisor and the junior intern have basic knowledge in the use of computer software and hardware applications.

#### **5.4.12 SME 12 (PHARMACEUTICAL SERVICES)**

The twelfth SME is a pharmacy, and it is part of the drug store industry where medicinal drugs and other retail healthcare products are sold. This SME has been in operation for over 10 years. The owner is not directly involved in the management of this pharmacy. The pharmacy has 8 permanent staff members with departments such as finance and administration, operations, quality assurance. There were four



respondents in this SME namely: pharmacy manager; chemotherapy pharmacist; pharmacy assistant; and pharmacy dispenser. The pharmacy manager and chemotherapy pharmacist are females between the age of 41-50 years and have been working in this organisation between 6-10 years. The pharmacy assistant is a female between the age of 31-40 years and has been working in this organisation between 1 and 5 years. The pharmacy dispenser is a male between the age of 41-50 years and has been working in this organisation for about 6-10 years. It is worth noting that the respondents are proficient in the use of IT applications with tertiary qualifications. The next section will address research objective one which was to investigate SME employees' level of awareness of IT innovations.

In a bid to address the research objective stated above, the questions contained in table 5.2 were posed to the respondents.

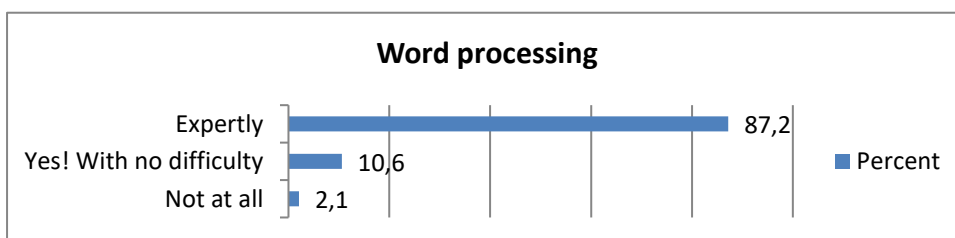
1= Not at all    2= Yes but with some difficulties    3= Yes with no difficulties    4= Expertly

**Table 5.2: Respondents' competency in the use of computer**

		1	2	3	4
A7	I can use a computer for word processing				
A8	I can start and shutdown a computer				
A9	I can use spreadsheets for processing data				
A10	I can save and retrieve documents				
A11	I can send and read emails				
A12	I can use search engines such as Google				
A13	I can log on to social networking sites (e.g., Facebook)				

Source: Author's Construction

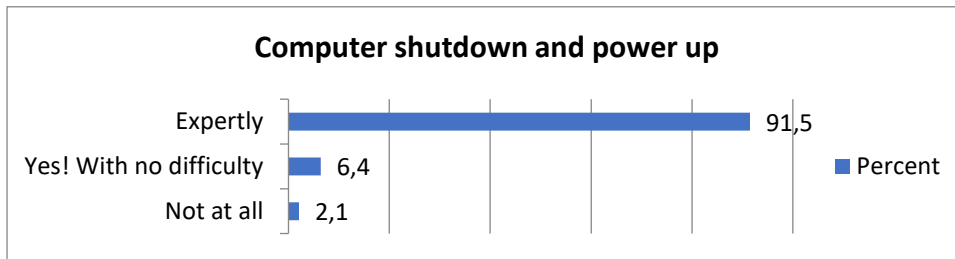
**Table 5.3: Employees' Level of Computer usage for Word Processing**



Source: Author's Construction

The respondents were asked if they can use a computer for word processing. From the table above, it can be seen that 87.2% of the respondents had expert knowledge in the use of word processing while 10.6% had basic knowledge and 2.1% of the respondents were not able to use computer for word processing. A similar finding conducted by Kallier (2017) reporting that SME employees has awareness of basic IT such as Word Processing, etc.

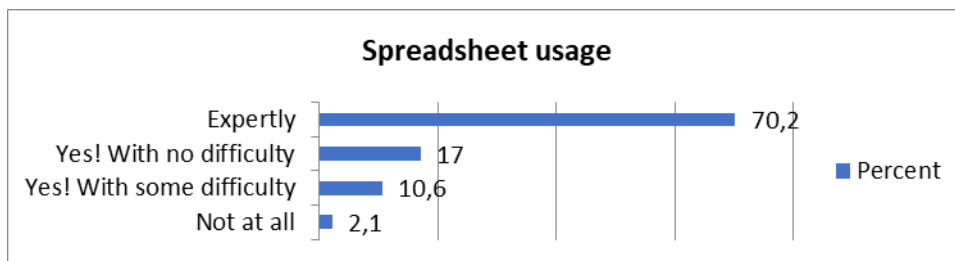
**Table 5.4: Employees' Level of Computer shutdown and power up**



Source: Author's Construction

The respondents were asked if they can start and shutdown a computer system. From the above table, it can be seen that 91.5% of the respondents can expertly shutdown and power up a computer while 6.4% were able to do that with no difficulty and 2.1% was not capable of carrying out the mentioned activity.

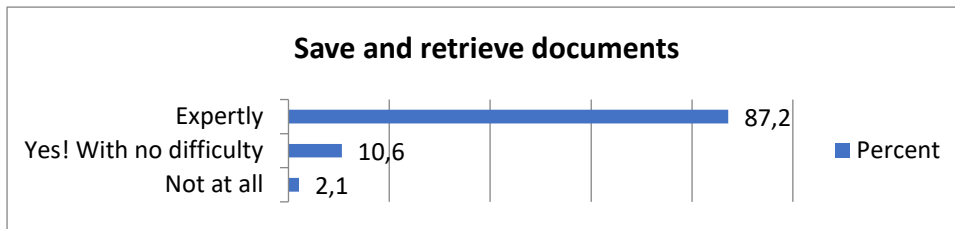
**Table 5.5: Employees' Level of Computer usage for Spreadsheets.**



Source: Author's Construction

The discovery on table 5.5 indicated that 70.2% of the respondents were proficient in the usage of Spreadsheet, and 17% had basic knowledge. It can be seen that 10.6% were able to use Spreadsheet but with some difficulties and 2.1% of the respondents representing one participant could not make use of it. The finding in the above table is in consonance with the study conducted by Rakovic et al., (2015) revealing that employees attain most of their Spreadsheets' knowledge and skills at their universities.

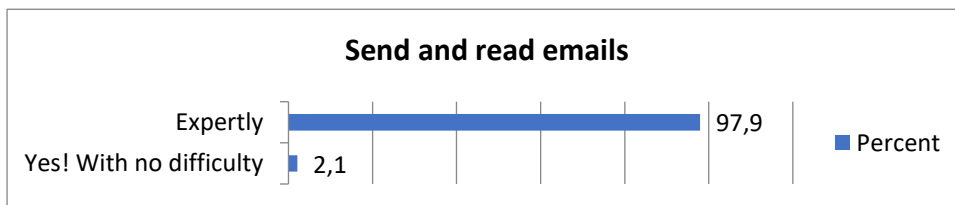
**Table 5.6: Employees' level of saving and retrieving documents.**



Source: Author's Construction

The respondents were asked if they can save and retrieve documents using a computer system. The findings from the table above indicated that 87.2% were experts in saving and retrieving documents while 10.6% had basic knowledge and a respondent representing 2.1% of the study population was unable to save and retrieve documents. However, a study conducted by Kittanah et al., (2016) was contradictory to the findings in table 5.6 indicating that whether or not an employee saves and retrieves a document, it does not affect performance. This study has proven that the ability of employees to manage electronic documents has a positive influence on the adoption and use of IT innovations at the workplace.

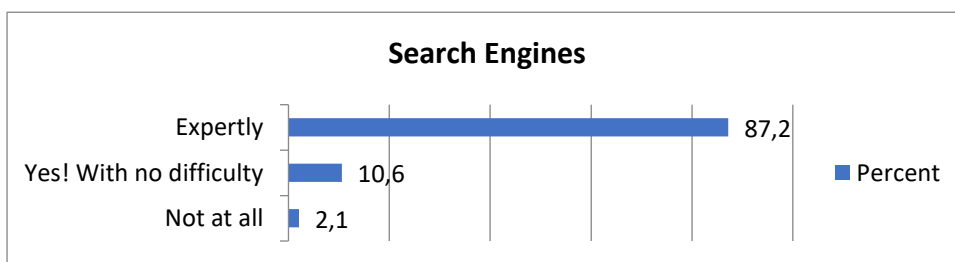
**Table 5.7: Employees' level of sending and reading emails.**



Source: Author's Construction

From the above table it can be seen that 97.9% of the respondents can expertly send and read emails while 2.1% representing a respondent was incapable of carrying out the stated activity. Kallier (2017) found that majority of SME employees in South Africa are able to use emails conveniently because of its popularity as a basic form of IT.

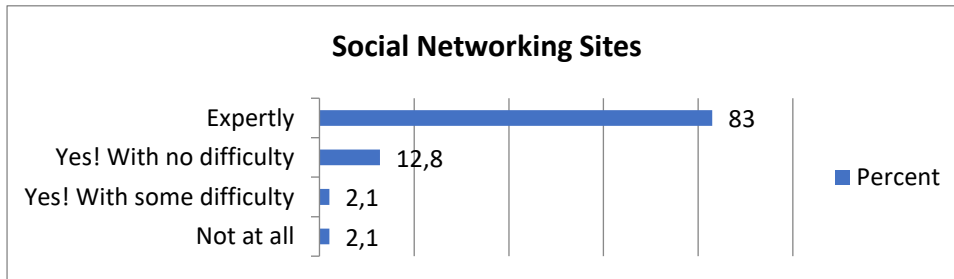
**Table 5.8: Employees' level of using search engine (Google, etc).**



Source: Author's Construction

The respondents were asked if they can use search engines such as Google. It was seen that 87.2% of the respondents had expert knowledge in SEO while 10.6% had basic knowledge and 2.1% did not have any idea of search engine usage.

**Table 5.9: Employees' level of using social networking sites.**

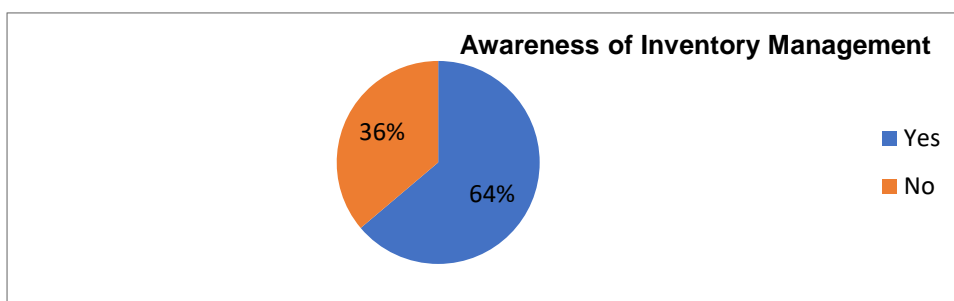


Source: Author's Construction

The table above indicated that 83% of the respondents were proficient in the usage of social networking sites while 12.8% had basic knowledge and 2.1% find it difficult to use sometimes. Interestingly, 2.1% were incapable of making use of social media platforms. A similar finding by Scheers & Makhitha (2016) revealed that SMEs rely on internet marketing activities such as social media networking because it focuses on the business community by customising individual pages and incorporating them into their own social network pages where organisations can relay the information to their target audience. The next section is part of section A on the interview guide which will elaborate the results based on employees' awareness level of IT innovations as the respondents were asked if they were aware of the IT innovations in the figures below from 5.1 to figure 5.10.

### 5.5. Awareness of Use of Modern Information Technologies for Business

**Figure 5.1: Employees' awareness level of inventory management systems.**

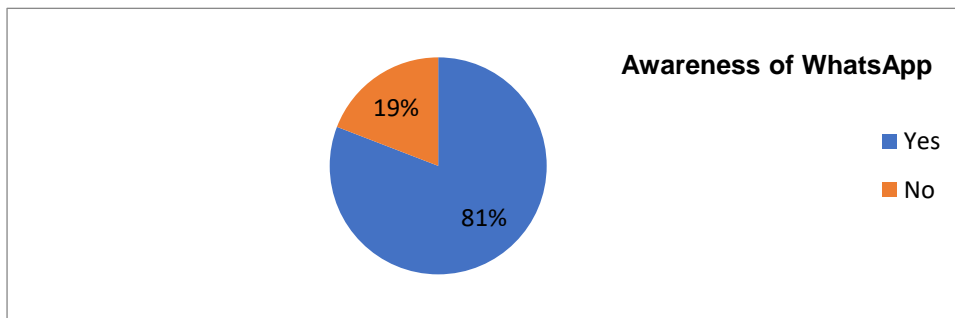


Source: Author's Construction

From the above figure, it can be seen that 64% of the population understudy were aware of inventory management systems while 36% had no knowledge of the mentioned IT innovations for business. A similar finding by Ngubane et al., (2015)

concluded that majority of the SMEs were aware of formal inventory management systems but making extensive use of them was a challenge

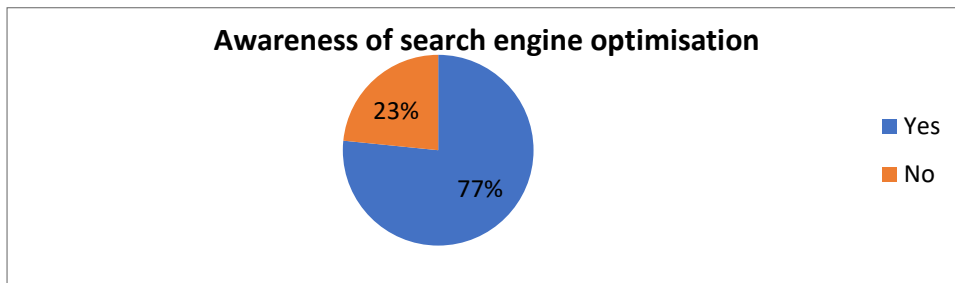
**Figure 5.2: Employees' awareness level of WhatsApp for business.**



Source: Author's Construction

Notable findings in figure 5.2 indicated that 81% of the respondents were aware of the usage of WhatsApp for business. The finding is similar to a study conducted by Shambare (2014) who concluded that organisations are now aware of WhatsApp messaging application because it provides invaluable insight into IT usage due to its blend of ease, low-cost, and the capacity to function on multiple platforms which prompts and influences users' behavioural intentions to adopting it.

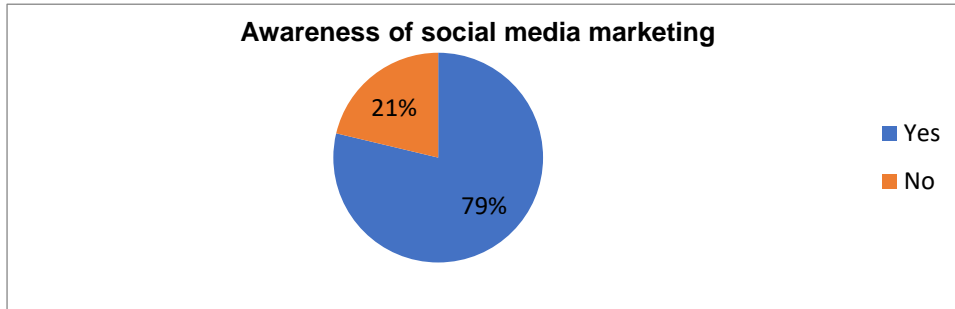
**Figure 5.3: Employees' awareness level of search engine optimisation.**



Source: Author's Construction

From the figure above it was seen that 77% of the respondents had awareness of using search engines for business while 23% stated they had no knowledge of it.

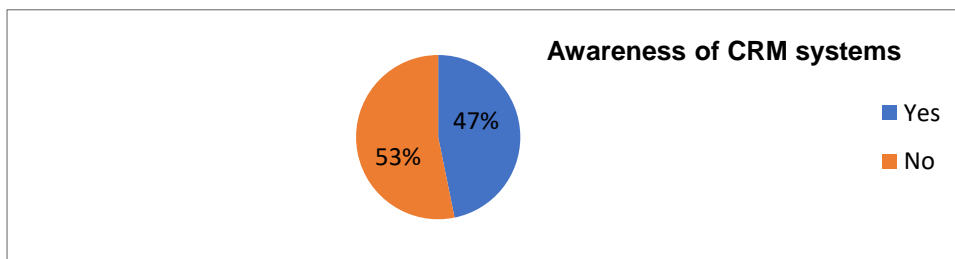
**Figure 5.4: Employees' awareness level of social media marketing.**



Source: Author's Construction

The information seen on figure 5.4 indicated that 79% of the respondents had awareness of social media marketing while 21% of the respondents stated otherwise. Similar findings by Scheers & Makhitha (2016) revealed that SMEs are fully aware of social media marketing because of its capability of attracting customers by ensuring that loyalty is achieved.

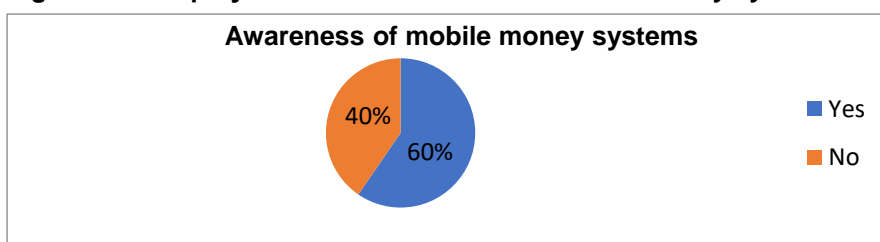
**Figure 5.5: Employees' awareness level of customer relationship management systems.**



Source: Author's Construction

From the figure above, it can be seen that 47% of the respondents indicated their awareness of CRM systems and 53% stated they had no awareness. The results found above is similar to the findings in a study conducted by Adeniran & Johnston (2012) which found that SMEs are aware of social media marketing and customer relationship systems as IT tools because they enhance communication between SMEs and their customers.

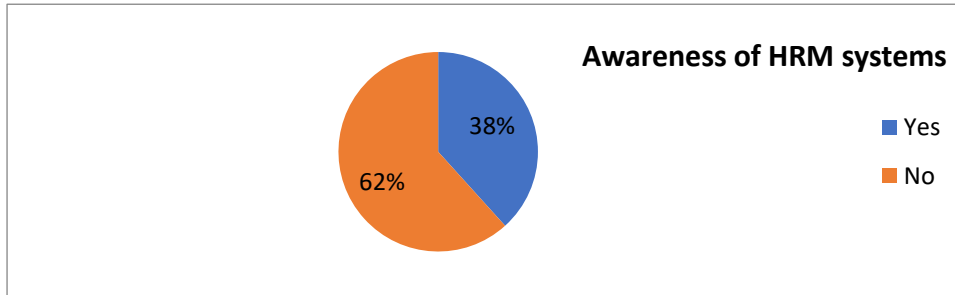
**Figure 5.6: Employees' awareness level of mobile money systems.**



Source: Author's Construction

On being asked if they were aware of the use of mobile money systems for business operations, 60% of the population understudy were affirmative while 40% of the respondents stated otherwise.

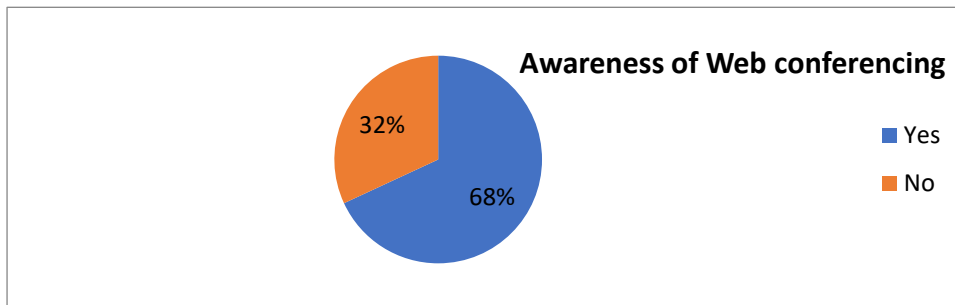
**Figure 5.7: Employees' awareness level of human resource management systems.**



Source: Author's Construction

The statistics seen on figure 5.7 indicated that 38% of the participants had awareness of HRM systems compared to 62% of the participants, who had no awareness of HRM tools for business operations.

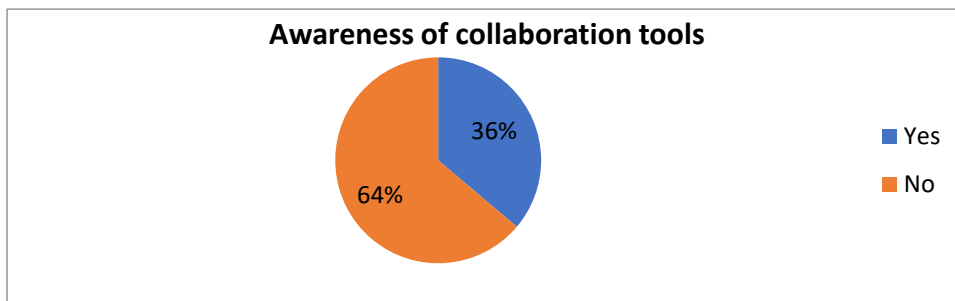
**Figure 5.8: Employees' awareness level of web conferencing systems.**



Source: Author's Construction

From the figure above, it was seen that 68% of the respondents were aware of web conferencing systems while 32% of the respondents stated otherwise.

**Figure 5.9: Employees' awareness level of collaboration tools and task management systems.**

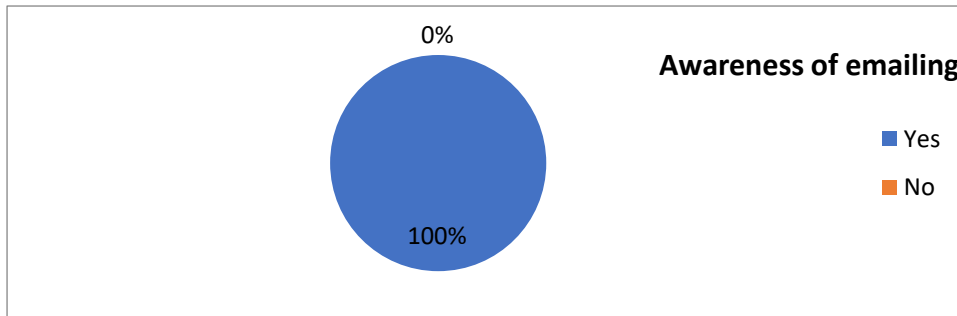


Source: Author's Construction

On being asked if they were aware of the use of collaboration tools and task management systems, 36% of the population understudy were affirmative while 64%

of the respondents indicated they were not aware. A study by Chauma (2017) was similar to the findings in figure 5.9 who concluded that IT firms are experiencing growth but there is a need to establish a more mature project management tools while also indicating that financial constraints was a barrier to obtaining these tools.

**Figure 5.10: Employees' awareness level of emailing for business communication.**



Source: Author's Construction

The statistics seen on figure 5.10 above indicated that 100% of the respondents were fully aware of email usage for business communications. The finding is similar to the study conducted by Patil & Bhakkad (2014) which stipulated that the email is cost-efficient and has become a more viable option for SMEs. The next section will summarise the discussion of the results found on research objective one.

### **5.5.1 Summary discussion of the results on research objective one**

The results indicated that all the respondents were aware of the electronic mail (e-mail) which had been serving as one of the basic forms of communication for business establishments since the advent of Information Technology. The popularity and usage of email by organisations to reach out to their audience cannot be over-emphasised. The results of the email awareness by the respondents were similar to the findings conducted by Kallier (2017) which found that most SMEs in South Africa were aware of e-media platforms like emails and are used as marketing communication tools because of its simplicity and cost-effectiveness. In figure 5.1, the results indicated that 64% of the respondents were aware of inventory management systems. This result is different from the findings by Kanguru (2016) who found that SMEs may be aware of inventory management systems but there is shortage of inventory and errors because of incompetent staff which had led to incorrect records and inability to measure-up to the demands of their customers. The results above were also similar to the findings of a study conducted by Adeniran and Johnston (2014) which concluded that IT



awareness and utilisation for SMEs are specific to industries while further stating that these sets of advanced IT enable SMEs to use a computer with an advanced software for the purpose of extracting value from information. Therefore, it can be seen from the results above that IT awareness and IT knowledge is associated with adoption following the results in figure 5.1 to 5.10 which revealed that the electronic mail (e-mail) and WhatsApp were mostly popular amongst the SMEs in this study because of their user-friendly interface and cost-effectiveness.

It is possible for SME employees to be aware of these IT innovations via academic qualifications, search engines and word of mouth, induction training programs or skills acquisition. On this research objective, one can conclude that there is a low priority attached to the modern IT innovations by SMEs and the lack of knowledge has affected their adoption. The findings in this section have addressed research objective one which was “to investigate SME employees’ level of awareness of useful IT innovations”. The next section will address research objective two which was to establish the extent of use of IT innovations by the SMEs in this study.

#### **5.6 Research objective two: To establish the extent of adoption and use of IT innovations by SMEs**

This section will further address research objective two. The results were analysed according to each SME while appendices were attached. The following questions were posed to the respondents in table 5.10 in attempt to answer research question two.

**Table 5.10: Extent of adoption and use of IT innovations by SMEs**

<b>SECTION B: EXTENT OF ADOPTION AND USE OF IT INNOVATIONS BY THE ORGANISATION</b>
<b>B1. Does your organisation have a well-established IT department?</b> Yes..... No.....
<b>B2. Do employees receive IT training?</b> Yes..... No..... Yes! but not all the time...
<b>B3. Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate.</b>
<ul style="list-style-type: none"> <li>- <b>Word Processing.</b> (    )</li> <li>- <b>Email.</b> (    )</li> <li>- <b>Inventory Management System.</b> (    )</li> <li>- <b>WhatsApp or Instant Messaging.</b> (    )</li> <li>- <b>Search Engine Optimisation.</b> (    )</li> <li>- <b>Social Media e.g., Facebook, Twitter, Instagram, YouTube.</b> (    )</li> <li>- <b>Customer Relationship Management Systems CRM.</b> (    )</li> <li>- <b>Mobile Money Systems.</b> (    )</li> <li>- <b>Human Resources Management Systems HRM.</b> (    )</li> <li>- <b>Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc.</b> (    )</li> <li>- <b>Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.</b> (    )</li> </ul>
<b>B4. Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain</b>

Source: Author's Construction

### 5.6.1 SME 1

According to the CEO/Owner manager, sales manager and line supervisor interviewed the SME has a well-established IT department with an IT manager. Some members of staff receive IT training depending on their job tasks. It is worth noting that all the respondents are very good at using computers with the CEO and sales manager at expert level and the participating supervisor at basic level. All respondents can perform basic tasks with computer hardware and software namely: word processing; emailing and use of spreadsheets. The SME uses some modern IT innovations for communication, emailing, WhatsApp, Facebook, Twitter, and Web-conferencing. The other applications of IT innovations mentioned by the respondents are textile software design, advertising through Search Engine Optimisation and social media networks that include Facebook and Twitter and the use of cloud computing. The SME is lagging behind in the adoption and use of some IT innovations such as Inventory Management Systems, Human Resources Management Systems, CRMs and Mobile Money Systems. According to Matikiti et al., (2018) management's awareness and knowledge of IT innovations is positively associated with an organisation's adoption of these

innovations since they appreciate their usefulness which is in tandem with the Technology Acceptance Model.

### **5.6.2 SME 2**

Based on the information supplied by the CEO, general manager, sales manager, line supervisor and the supervisor for the ordinary employees, the SME does not have a well-established IT department with an IT manager. The SME does not offer IT training to their employees. It is to be noted that the ordinary employee supervisor, has no knowledge of computer hardware and software applications, while the other four respondents' have expert knowledge in the use of IT applications. Some of the IT innovations used by this SME for day-to-day business includes word processing; email; inventory management systems; WhatsApp or Instant messaging; social media platforms (Facebook, Instagram, YouTube), customer relationship management systems, mobile money systems and web conferencing systems. The SME owner's office is lagging behind in the adoption and use of some IT innovations such as search engine optimisation, HRM systems and collaboration tools for task management, while the ordinary employee supervisor makes use of only email and word processing. Similar findings in a study conducted by Alharbi et al., (2018) revealed that the owner-managers' personal skills, experience and training have a moderating effect on the organisation's performance.

### **5.6.3 SME 3**

According to the CEO/Director, internal audit manager and line supervisor, the SME does not have a well-established IT department with an IT manager, but employees receive IT training while the organisation places emphasis on IT proficiency upon recruitment. The respondents make use of the most important IT tools for their business operations such as word processing, email, inventory management systems, WhatsApp, customer relationship management, social media, search engine optimisation, mobile money systems, HRM systems, web conferencing, and task management systems. One of the respondents made mention of usage of other accounting packages called "Quantivate" which is an accounting IT innovation software that helps in governance, risk management and compliance. Despite not having a well-established IT department with an onsite IT manager, this SME does not lag in the adoption and use of IT innovations mentioned in the interview guide. The

findings in this section are similar to the research results conducted by Jere & Ngidi (2020) which emphasised that organisation and technology contexts are significant determinants to adopting IT amongst SMEs while recommending them to prioritise relevant IT innovations to pave way for successful adoption.

#### **5.6.4 SME 4**

According to the respondents, this SME has a well-established IT department with an IT manager. Some staff members receive IT training based on their job specifications. All respondents can perform some basic tasks like emailing, word processing, spreadsheets, social media networking, inventory management systems, WhatsApp, etc. The findings in this SME is similar to a study conducted by Wet & Koekemoer (2016) who found that SMEs in South Africa had high adoption of basic IT innovations such as email and websites for cost and convenience purposes. This SME also makes use of modern IT innovations such as mobile money systems, search engine optimisation, CRM and HRM systems, web conferencing systems for communication purpose, etc. The other applications of IT innovations mentioned by one of the respondents is “Microsoft Teams” which is a hub for team collaboration that integrates staff members, work content and tools. This hospitality SME does not make use of any task management system and collaboration tools.

#### **5.6.5 SME 5**

According to the respondents, the SME has a well-established IT department. It must be noted that “it is a prerequisite in this SME to offer IT training to employees prior to signing employment contract”. The respondents make use of word processing, email, inventory management systems, WhatsApp, search engine optimisation, social media networking to reach out to clients, customer relationship management, web conferencing, and task management systems, etc. Interestingly, the CEO does not make use of any human resources management systems while the operations manager indicated that her office does not make use of any mobile money systems of IT innovations.

#### **5.6.6 SME 6**

The respondents’ stated that this SME has a well-established IT department with an IT manager. Some members of staff receive IT training depending on their job task.

This SME makes use of the IT innovations listed on the interview guide for their business operations and are not lagging behind in the adoption and use of IT innovations. Olsen et al., (2013) argue that the capacity of an organisation to adopt IT innovations is reliant on its employees' skills and capability to use their already existing IT knowledge.

#### **5.6.7 SME 7**

According to the information supplied by the respondents', this SME does not have a well-established IT department. It is to be noted that this SME does not offer IT training to employees. The respondents revealed that they make use of the basic IT innovations such as emailing, word processing, spreadsheets, WhatsApp, etc. The CEO's office is lagging behind in the use of customer relationship management systems, mobile money systems, human resources management systems, web conferencing systems and collaboration tools. The distribution manager's office does not make use of CRM systems and collaboration tools as the sales manager is also lagging behind on HRM systems and web conferencing systems. Furthermore, the sales manager for this SME stated that an IT innovation known as "salesforce" has been vital in their department for day-to-day business operations. A study conducted by Lu et al., (2019) revealed that the differences in value perception developed in the course of adopting IT is the reason why SMEs tend to adopt basic and less expensive IT innovations.

#### **5.6.8 SME 8**

According to the respondents, this SME has a well-established IT department with an onsite IT manager, while the SME offers IT training to their employees. This SME makes use of IT innovations for communications: emailing; WhatsApp; Facebook; Twitter; Instagram; and web conferencing platforms. The other applications of IT innovation mentioned by the CEO and sales manager was "salesforce" which is a cloud computing service as software (SaaS), it enables their SME to connect better with their partners, customers, and potential customers. This SME is not lagging behind in the adoption and use of IT innovations mentioned on the interview guide. Few SMEs have sufficient IT platforms and employees with necessary IT knowledge which can help an organisation to effectively adopt new IT innovations (Alshamaila, et al., 2013).

### **5.6.9 SME 9**

Information retrieved from the respondents indicates that the SME has a well-established IT department with an onsite IT manager. This SME offers IT training to some members of staff depending on their job tasks. It is worth noting that the line supervisor's office only makes use of email and social media platforms while the nursery manager's office makes use of email, WhatsApp, and social media networking to reach out to their audience. Furthermore, the sales manager's department is the most equipped with IT innovations amongst the respondents as it is lagging behind on collaboration tools and HRM systems. The manager's office does not make use of inventory management systems, WhatsApp, search engine optimisation, mobile money systems and HRM systems. Overall, this SME is lagging behind on mobile money systems and HRM systems despite having a well-established IT department. The respondents did not indicate if they are using other forms of IT innovations apart from the ones listed on the interview guide.

### **5.6.10 SME 10**

This SME offer training to the employees on a routine schedule where necessary. The CEO makes use of all the IT innovations listed on the interview guide, while the office of the academy manager is lagging behind on inventory management systems, social media platforms, CRM systems, mobile money systems, HRM systems and collaboration tools. The academy manager mentioned that another IT innovation that is being used in the language school is "Kahoot" which is a teaching application that promotes game-based learning to increasing student engagement.

### **5.6.11 SME 11**

The respondents make use of basic IT innovations for day-to-day business operations such as emailing, word processing, spreadsheets, WhatsApp, inventory management systems and search engine optimisation except for social media networking platforms, CRM and HRM systems, web conferencing systems and collaboration tools. According to one of the respondents, "other IT innovations used by this SME for their power steering services is the Pico Scope which is an electrical mechanic pressure NVH CAN and flex ray testing".

#### **5.6.12 SME 12**

The respondents in this SME have expert knowledge in the use of IT applications while the SME does not have a well-established IT department with an IT manager. The respondents revealed that this organisation does not offer IT training to employees. The manager's office uses some IT innovations for communication namely: WhatsApp and Facebook to reach out to their customers whenever there is a new product or when the SME decides to have sales promotions. Furthermore, this SME is lagging behind in the use of HRM systems, web conferencing systems and collaboration tools and task management systems. Other IT innovation that has been beneficial to this SME is the EPCS (Electronic Prescribing of Controlled Substances) and Prescription Drug Monitoring Programs (PDMPs). The next section will present a summary of detailed discussion of findings on research objective two.

#### **5.6.13 Summary discussion of the results on research objective two**

Six of the twelve SMEs have a well-established IT department while the other six SME do not have a well-established IT department. Thirty-eight respondents have expert knowledge in the use of IT innovations while eight respondents have basic knowledge in the use of IT and one respondent does not have any knowledge, illustrating that the majority of respondents have knowledge of IT. The results show that all the SMEs use basic IT innovations like email, word processing, spreadsheets, WhatsApp, social media networking platforms. Most of the SMEs do not use modern IT innovations namely: inventory management systems, HRM and CRM systems, collaboration tools and task management systems, web conferencing systems and search engine optimisation. However, only a few respondents in SMEs 1, 3, 4, 6, 8 and 10 use modern innovations namely: Inventory management systems, CRM and HRM systems, search engine optimisation, mobile money systems, web conferencing systems, task management systems and collaboration tools. The results in this section are similar to the findings by Pillay (2016) who indicated that there is a low utilisation of modern IT innovations by SMEs. Incredibly, all participating SMEs in this study have adopted some form of IT innovations, but most SMEs are only adopting technologies that might be relevant to their business operations. Jere & Ngidi (2020) concluded that in terms of IT adoption, variables such as relative advantage, complexity and compatibility are correlated. This connotes that technology context is a notable

determinant of intention to adopt Information Technology. Gareeb & Naicker (2015) opined that compatibility and relative advantage are the most significant contributors. Most SMEs in the Western Cape have adopted basic IT innovations such as: emailing, word processing, spreadsheets, and WhatsApp. There is a different level in the adoption of modern IT innovations with only a few SMEs having adopted modern innovations namely: task management systems and collaboration tools, search engine optimisation, CRM and HRM systems, inventory management systems, etc. It can be seen that the adoption and use of IT innovations by SMEs in the Western Cape is “high for basic IT innovations and low for modern IT innovations”. The next section will address research objective three which was to assess current the factors influencing the use of IT innovations by the SMEs in this study.

**5.7 Research objective three: To assess the current factors influencing the use of IT innovations**

This section will further address research objective three. The results were presented according to each SME as appendices were attached. The following question were posed to the respondents in table 5.11 in attempt to answer research question three.

**Table 5.11: Challenges faced in the adoption of IT innovations by SMEs.**

<b>SECTION C: CHALLENGES FACED IN THE ADOPTION OF IT INNOVATIONS</b>
<b>C1.</b> What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business? Please explain.

Source: Author’s Construction

**5.7.1 SME 1**

All three respondents were of the opinion that their department was not facing any major challenges in the adoption and use of IT innovations. Top managers were proficient in the use of IT innovations and employees were trained in using computer software and hardware. According to the CEO and sales manager an anticipated challenge was continuous training of staff due to continuous evolution of software supplied by vendors and continuous entry of new IT innovations. The respondents were seeing a scenario where there are too many applications to use for work processes overloading employees’ brains. Akande & Van Belle (2014) agree that the



ever-changing IT environment is a challenge for SMEs because it makes employees to be afraid of usage thereby affecting adoption and diffusion.

#### **5.7.2 SME 2**

The general manager and sales manager shared the same opinion that high costs of acquisition and maintenance of IT equipment was a major challenge encountered by their SME in the adoption of IT innovations. The line supervisor said that employees' lack of knowledge of ITs was a major challenge to usage of IT innovations in his department. The line supervisor also said that at first there was resistance by management to upgrade IT systems due to cost. The findings corroborated with that of Bvuma & Marnewick (2020) which revealed that variables such as high IT costs and lack of IT awareness were also part of the challenges for SMEs in adopting IT innovations.

#### **5.7.3 SME 3**

The company's CEO and the internal audit manager said that the costs of buying, setting up and training various employees in different departments was one major challenge they faced in the adoption and use of IT innovations. The line supervisor opined that resistance by customers to accept new IT innovations was a major challenge in her department. He went on further to say it was not enough to set an established IT department, but to make staff members and customers aware of the benefits of using such innovations. Claudy et al., (2014) agree that the perception of adopting innovation differs because they influence customers' decisions, and it has vital implications for theorists and managers.

#### **5.7.4 SME 4**

According to the owner-manager, the major challenge their SME encountered was switching their operations from manual to digital system which has resulted in high costs of training some of the employees. It must be noted that the front office coordinator had this to say about the adoption and use of IT innovations by their SME, "as much as it makes life easier, it is also a human replacing tool in terms of employment, so there is resistance to the adoption of IT innovations by employees for fear of losing their jobs". She also said that when there was electricity load shedding, some departments did not operate due to lack of power to operate IT equipment.

#### **5.7.5 SME 5**

The CEO of SME 5 believed that the benefits of IT innovations should justify costs and training, and he admonished SMEs to embrace the use of IT innovations specific to their industry. The major challenges being experienced by SME 5 is the constant modification of IT innovative tools, platforms, and costs. The above statement was supported by the operations manager who stated that their company faced the problem of raising money for training and retraining of employees, though where necessary they modify the tasks to suit employees' skills". The findings in this SME are similar to the study conducted by Akande and Van Belle (2014) who argue that the constant changes or modification in IT had made it more complex while the majority of IT consumers (SMEs) are not able to acquire the desired equipment for their organisation.

#### **5.7.6 SME 6**

The CEO was very firm that high costs of purchase, staff empowerment with IT tools and maintenance were the major challenges for their SME. The findings in this SME are similar to that of Dixon et al., (2002) who argue that the cost of technology is a determinant and influencing factor in the adoption and use of IT by most SMEs. The line supervisor stated that an upgrade of IT equipment was required in his department, but the cost was a major challenge inhibiting the acquisition of new equipment.

#### **5.7.7 SME 7**

According to one of the respondents in the sales department, the major challenge in her unit is that the organisation does not have a well-established IT department and it has been affecting new workers in the sense that most of them have insufficient knowledge of IT innovation. Echoing the same sentiment was the head of sales department who indicated that the cost of IT acquisition, servicing and maintenance has been a big blow for their SME. Mutula & Brakel (2006) concluded that the owner-manager's attitude and skills toward IT need to change because SMEs require expertise to work with. Furthermore, the manager mentioned that the broad or complex nature of IT has been a restraint for the organisation towards coming to terms with adopting the current IT innovation for their day-to-day business.

### **5.7.8 SME 8**

According to the CEO, this SME is challenged with the time frame to train employees whenever there is a new technology, and the costs incurred are quite high posing a big strain on the finances of the organisation. In agreement with the CEO's statement, the sales manager added that, "the need for training and retraining is a daunting task with massive costs involved in acquiring sophisticated equipment for business growth and stability." IT innovations are deemed too expensive for SMEs, so they do not make a budget for it and most times when there is a budget, the costs far exceed the budget (Modimogale & Kroeze, 2011). Also, the CEO believed that resistance to change by staff was a major problem resulting in IT innovations not being fully utilised.

### **5.7.9 SME 9**

The line supervisor said that, "system breakdown was a major challenge in his department." He further mentioned that slow internet or network connectivity issues in his office had been causing system failure and that his computer shuts down unexpectedly. He insisted that the reason for the system breakdown was due to the complex nature of the department's computer system. The nursery manager who has basic knowledge in the use of IT mentioned that lack of knowledge and skills were her major challenges considering the fact that she has been working in the SME for less than 1 year. The findings in this SME were similar to a study conducted by Sitharam & Hoque (2016) which revealed that lack of technological implementation and infrastructure can prevent an organisation from growing or even competing.

### **5.7.10 SME 10**

The CEO believe that the turn up of IT usage by SMEs is very low and perhaps they think it is not crucial to the kind of services they render. "In my opinion, I think every service being rendered by SMEs should have a relation to IT innovations in one way or another", said the CEO. The CEO mentioned that they are faced with challenges in the academy such as some students preferring online learning while some prefer onsite, some students cannot afford the costs of setting up a working IT system for their classes and some find online learning distracting without motivation. Information retrieved from the academy manager tallied with the CEO's statement. The senior tutor indicated that the adoption of IT innovations by SMEs might be slow due to some

archaic belief systems that IT renders people's job redundant, while affirming that IT innovations enhances tasks in any organisation. It is worth noting that the head of linguistics department mentioned she never liked anything relating to IT, until she got employed in the academy and was trained. In her words, "I think some people are unaware of the importance of IT, so they downplay the roles and end up not wanting to use it or being disinterested to learn how to use IT." It can be seen in this SME that TAM had an influence on the employees' especially on the formative, normative and continuance stages of IT. Davis (1989) posited that intention to use IT is determinant of IT adoption behaviour by two factors: usefulness and ease of use.

#### **5.7.11 SME 11**

SME 11 is faced with the challenge of not having a well-established IT department which can take care of training staff in the use of IT innovations. The diagnostic technician said, "the organisation cannot afford to send employees for IT training due to high costs involved, and when we made a request for training, we were told that the company's income was incapable of addressing the situation." The owner-manager did not want to spend money on training the staff. Martinelli (2018) revealed that some SMEs are not prioritising staff training and development as lack of training or inadequately trained employees are prone to poor performance and increased rate of work-related stress.

#### **5.7.12 SME 12**

The chemotherapy pharmacist mentioned that this SME does not have all the necessary IT innovations due to costs of purchasing, training employees and setting them up. While the pharmacy assistant also expressed the same view. In her words she wished that "variables such as staff training costs, maintenance, and software licencing can be addressed to curb the barriers of IT adoption at their workplace." Neirotti et al., (2017) asserted that IT can produce competitive advantage in the SMEs environment if challenges confronting the adoption are handled effectively. The next section will present a summary of detailed discussion of findings on research objective three.

### **5.7.13 Summary discussion of the results on research objective three**

Bvuma & Marnewick (2020) indicated that SMEs are challenged in diverse ways such as high costs of IT acquisition and training, retraining and maintenance, knowledge-gap, and initial resistance to change by employees, constant modification and upgrade of IT innovative packages, lack of infrastructure leading to system breakdown, lack of funding and relevant information on government support. Cant & Wiid (2013) echoed the same sentiment that the most rated challenges to using IT innovations for business conducts were lack of financial resources, and high costs of IT innovative systems followed by lack of technical know-how and knowledge-gap amongst employees and clients. The results echo what has been predicted in the literature according to (Macdonald, et al., 2000). Therefore, we can conclude that the major challenges being faced by the SMEs understudy in the adoption of IT innovations were high cost of acquiring IT equipment and training of staff, resistance to change by staff, lack of skills in the use of IT innovations and lack of awareness of the usefulness of IT innovations by senior management. SMEs also faced the challenge of continuously needing to upgrade IT systems and training employees due to the fact that IT innovations are always evolving, and new ones being constantly introduced. Electricity blackouts were also a major challenge as they rendered IT equipment redundant. The next section will address research objective four which was to evaluate the effect of the use of IT innovations on organisational performance.

### **5.8 Research Objective four: To Evaluate the Effect of the use of IT Innovations on Organisational Performance**

This section will further address research objective four. The results were presented according to each SME while appendices were attached. The following questions were posed to the respondents in table 5.12 in attempt to answer research question four.

**Table 5.12: Effect of IT innovations on organisational performance**

<b>SECTION D: INFLUENCE OF IT INNOVATIONS ON ORGANISATIONAL PERFORMANCE</b>
Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas:
<b>D1.</b> Financial performance (profitability, reduced costs, increased cash flows, return on investment) ...
<b>D2.</b> Internal business processes (efficiency, operational effectiveness, productivity) ...
<b>D3.</b> Internal customers (employees' satisfaction) ...
<b>D4.</b> External Customers satisfaction...
<b>D5.</b> Learning and growth (Employee skills and knowledge) ...
<b>D6.</b> Are there other areas IT innovations are influencing your organisation? Please explain...

Source: Author's Construction

### **5.8.1 SME 1**

According to the CEO IT innovations help their organisation in several ways. They have enhanced Business to Business communication eliminating the use of middlemen and outsourcing of some functions reducing costs drastically. Some tasks that used to be outsourced such as fabric testing, pattern making, and computer aided designs are now being done using some IT applications.

The organisation has been able to synchronise its work improving operational efficiency and effectiveness. Ordering of raw materials is being done directly online and payments are also being done online eliminating the risk of carrying large amounts of cash. Customers can also pay online or using the point of sale. The SME's employees are highly motivated due to the fact that the use of IT innovations has made job tasks easier and has equipped employees with additional life skills. Communication between employees and top management has also been made easier by use of email and WhatsApp. Employees can contribute to group discussions via Web-conferencing and WhatsApp. In agreement, the sales manager said that communication with customers was enhanced using IT innovations such as WhatsApp, Facebook and Twitter and emailing the process improving efficiency and in turn increasing customer loyalty and retention. She also stated that "employee morale is high due to the effectiveness of IT innovations in helping employees attain set targets even as the use of IT innovations has ensured high quality products

increasing customer satisfaction.” The sales manager also pointed out that IT innovations have also been useful in the training and development of employees including proficiency in the use of IT tools. The line supervisor echoed the same sentiments as the CEO and sales manager pointing out efficiency and operational effectiveness, job satisfaction, customer satisfaction as the main effects of the use of IT innovations. According to Nwakanma et al., (2014) IT usage is capable of incorporating SME strategies to serve their target markets, improve their operational efficiency and effectiveness with a view to maximising profitability.

### **5.8.2 SME 2**

Information retrieved from the CEO stipulates that the mobile payment systems such as SnapScan, Payfast, and Shopify have had the greatest positive influence on their business operations in that it has increased their financial performance in terms of profitability, costs reduction, increased cashflows and return on investments. Furthermore, the CEO said that IT basics such as Spreadsheets has been invaluable towards their operations and has been useful for the organisation’s internal business processes thereby bringing about efficiency, operational effectiveness, and increased productivity. The SME also run a VOIP and a network server which also enables the company to share documents on a network. According to the general manager, the employee derives job satisfaction in the usage of IT innovations as they encourage information sharing on the cloud computing technology thereby giving rise to accessing information virtually. Furthermore, their customers are satisfied with the services rendered, and this SME monitors customers’ satisfaction comments via their customer review forms. The findings were similar to a study conducted by Mathu & Tlare (2017) who said that benefits of IT usage by SMEs includes: customer service; relationship building; and inventory management enhancements which brings about competitive advantage.

### **5.8.3 SME 3**

The CEO said that IT innovations in this SME has resulted in high profit margin, increased cashflows, while the return-on-investment has been impressive. The CEO further stated that employees derive satisfaction due to the usage of IT innovations because they make job tasks easier ensuring a high level of motivation amongst staff members. IT innovations have helped the organisation by synchronising internal

business processes using an IT software known as “Salesforce” which allows real-time update of employees’ tasks. “This SME does keep an eye on the customers’ viewpoint about the services they receive through the SME’s google response form,” said the CEO. Wereza (2019) argue that IT innovation is a game changer for SMEs as it allows organisations to synchronise all the entirety of the operations to pave way for efficiency and effectiveness.

#### **5.8.4 SME 4**

The owner-manager stated that IT innovations has made work easier while the line manager also highlighted that information retrieval and quick decision-making has been enhanced. Therefore, employees’ knowledge and skills has increased. One of the respondents said that this SME has been experiencing profitability and cost reduction because instead of printing pamphlets or using MS Word document, information is sent on a voice-note format via WhatsApp which will enable people to read, reply and ask questions via voice-notes formats as well. The front office coordinator pointed out that both employees and their customers are satisfied with the usage of IT innovations because easy communication and cost-effectiveness has been the norm at the workplace. A book by Kumar & Krishnamurthy (2020) revealed that online advertisement and marketing platforms such as WhatsApp which is a cost-effective application enables SMEs to reach out to their customers across the globe and it is also used to carry out satisfaction surveys and other services.

#### **5.8.5 SME 5**

The CEO indicated that “the advent of IT innovations has eliminated the need for outsourcing their tasks mostly in audio communications as they do all tasks in their onsite studio with the appropriate software”. Conforming to the above statement, the operations manager said that financial performance and high profitability has been achieved due to the absence of outsourcing. “This SME has been able to achieve speed in task accomplishments due to necessary IT innovations being up-to-date thereby leading to massive productivity” says the CEO. The operations manager mentioned that the SME developed a system of internal business processes whereby tasks are synchronised to achieve high efficiency and productivity as IT innovations enable them to track every task assigned to individual employees. In addition, the CEO commented that “response time to access accurate information contributes to



customer satisfaction.” Therefore, “our customers are extremely satisfied without reservation because we are prompt in response which is the key to service delivery and earning customers’ trust.”

When asked about the learning and growth amongst the employees, the operations manager mentioned that “the learning process is tedious because there are lots of things to do or learn in IT, so employees are encouraged to have a focus on a particular skillset needed for their specific tasks.” On other areas that IT innovations are influencing this SME, the operations manager said that the development of latest IT packages for animation studios has taken a new toll in their business, because in the past, animation characters were drawn by hand before forwarding to the studio for the finished product, but in recent years, IT animation software for all computer types has been saving costs and time for animation studios. Ma et al., (2018) agree that IT innovations has expanded the animation industry and of which internal knowledge and open innovation which is a dynamic process has been pivotal to achieving the growth in the industry.

#### **5.8.6 SME 6**

As stated by the CEO, “the financial performance index for this organisation is great due to IT usage while profitability and return-on-investment are encouraging but I would not completely agree that IT innovation has reduced costs because it is quite expensive to keep abreast with IT innovations.” “The employees in this organisation are satisfied with their job due to an effective team cohesion strategy as IT enables employees to communicate or interact with each other via various instant messaging and team collaboration platforms,” said the CEO. The business development specialist indicated that better usage of IT innovations leads to more profit for the SME. On customers’ satisfaction, “the CEO stated that their customers are happy with services offered, and for their clients to derive maximum satisfaction then IT usage cannot be undermined.” The general manager supported the CEO’s statement by indicating that “our clients’ satisfaction is our utmost priority and IT innovations has been enabling us to affirm this in a way that we use these tools during our business consultancy forums in other for them to experience the influence that IT usage can have in their businesses.” The line supervisor mentioned that other areas IT innovations are

influencing their SME is “the provision of user-friendly interface and information per time.”

#### **5.8.7 SME 7**

The CEO said that “the influence of Covid-19 has affected our profitability ratio because the subsequent lockdowns ensured that most customers’ were doing their printing-related tasks electronically and it reduced the rate at which cartridges or papers were bought, and it is a well-known fact Covid-19 made paper works to be minimised.” The distribution manager’s statements corresponded with that of the CEO stating that they were hit hard by Covid-19. According to the CEO, IT innovations has contributed to the organisation’s internal business processes because it allows them to monitor staff members activities at the workplace then make amends where necessary.

On employees’ satisfaction, the CEO commented that employees are satisfied with their job; the inventory management system is readily available to monitor the movements of items at the store and warehouse. On customers’ satisfaction, the sales manager said, “our customers are satisfied with our services as we have made it a mandate to focus on inks, toners and cartridges which have empowered us to gain mastery in the industry.” On employees’ skills and knowledge, the CEO mentioned that this SME do not offer any IT training to the employees but employ people that were already familiar with basic knowledge of IT skills. Therefore, the employees keep growing in retail skills. This is similar to observations by Gono et al., (2013) who found that most SMEs do not employ non-technical staff because it is expensive to train employees on new technological skills while time constraint is another issue, so they would rather channel their time and resources into recruiting qualified technical staff to minimise or avoid training costs.

#### **5.8.8 SME 8**

Information retrieved from the CEO reveals that the usage of IT innovations in their automotive business has helped them attain a higher level of financial performance, increased cashflows and return-on-investment. On the SME’s internal business processes, the CEO mentioned that IT innovations has made communication easy at the workplace and synchronisation has been achieved to meet demands of

productivity. “The employees in this organisation are satisfied with the high level of IT innovations in place to ease their tasks, while the customers are happy due to the unmatched excellent services received”, said the CEO. The international sales executive responded to the financial performance question by adding that “IT innovations has enabled this SME to communicate with their counterparts in Europe and across the nations of the world, as it has brought about reduced traveling costs”; with IT innovations we place orders online and expect delivery in few working days, while payment system is very fast and convenient.”

Furthermore, the international sales executive stated that their organisation is committed to customer satisfaction and of which it has been proven for decades even as they receive strong reviews from their inestimable customers. On employees’ skills and knowledge, the organisation engages in training of its employees to yield maximum degree of skills and know-how amongst staff members. The CEO explained that other areas whereby IT innovations are influencing their organisation is how they monitor automobile trending technologies such as onboard computer GPS, cruise control, advanced driver systems, 360-degree camera, automobile emergency braking, teen driver technology and so much more. This SME ensures they gain first-mover advantage by keeping abreast with automobile technology trends in terms of skills and servicing. Channon & Sammut-Bonnici (2015) argue that IT usage is a mechanism for first-mover advantage which a competitor or competitors find very difficult to overcome.

#### **5.8.9 SME 9**

According to the manager, this SME has been experiencing great financial performance due to the speed and cost reduction that IT innovations has contributed to their SME. With IT usage, they do not have to travel often to meet their customers, but they make use of communication systems for ease. Manochehri et al., (2017) argue that the need for physical transportation of goods or meetings has been minimised due to the inputs of email, e-commerce, social media platforms which enables advertisement and online purchase of goods. This SME indulges in various forms of trainings to develop employees’ skills while their finance has experienced transformation due to IT innovations. The line supervisor indicated that his office has been accustomed to operational effectiveness while the employees and customers

are satisfied. A striking revelation from the nursery manager indicated that “the employees in the department are not satisfied with their job because they lack knowledge and skills while insisting that trainings are needed in her department.” According to Martinelli (2018) employees who do not get training in their organisation feel undervalued and they seek opportunities elsewhere for progression to increase their development and technological skills.

#### **5.8.10 SME 10**

According to the CEO, IT innovations has increased cashflows while the return-on-investment in the academy has been encouraging. The productivity level in the SME has decreased because they switched to online tutoring since the outbreak of Covid-19. The employees are said to be satisfied with their job, but the students are not completely satisfied since the academy switched to online learning. On employees learning and growth, the CEO said, “employees’ skills and growth has improved because of online tutoring which entails the usage of IT innovations to reach out to the students.” The CEO further revealed that other beneficial areas of IT innovations to the SME is their ability to monitor and assess the inputs of their tutors via the tracking system tools for online learning i.e., they have real-time monitoring app as the tutors are busy with the students online.

The academy manager stated that IT innovations has increased profitability even though the advent of Covid-19 pandemic has made it possible for the SME to completely switch to online tutoring, and this has reduced cost. In agreement with the CEO, the academy manager stated that the students are not entirely satisfied with the online class attendance as they feel distant to some extent in understanding what is being taught. Other areas whereby IT innovations has been notably beneficial to this SME is the massive intake of students because at the outbreak of Covid-19, prospective students found it easy to enrol and learn from the comfort of their homes. Similar to the findings in this SME is that of a study conducted by Azevedo & Almeida (2021) who found that IT innovations is capable of a more informed decision-making in real time throughout the entire business processes of the value chain in an organisation.

#### **5.8.11 SME 11**

The CEO stated that as far as financial performance is concerned in their SME, IT is a major driver to achieving profitability, cashflows and return-on-investment. The diagnostic technician revealed that IT innovations has empowered them to increase speed and accuracy by minimising mechanical errors while their customers speak highly of the services rendered to them. According to Leong & Rasli (2014) which found that the application of IT innovations and innovative work behaviour are capable of boosting both financial and non-financial prospects of an organisation. The respondents further indicated that IT innovations has brought about job satisfaction amongst the employees. On employee skills and knowledge, the service advisor mentioned that they teach themselves new skills acquired amongst staff members. Other areas of IT innovations which are influencing this SME is synergy, team dynamics and synchronisation. The assistant service advisor stipulated that this SME benefits immensely from personal skill development amongst employees. This is in line with Saunders et al., (2012) which revealed that “learning helps to cultivate innovative ideas or activities in the workplace because using a variety of innovation is paramount to survival strategy in business for SMEs.”

#### **5.8.12 SME 12**

According to the manager, IT innovation has been beneficial to their organisation in several ways. They have achieved a stable financial performance and increased cashflows while their operational effectiveness has increased productivity. The manager explained further that she believes their employees are satisfied with their job and so is their customers. On learning and growth in the organisation, the manager had this to say, “we encourage growth and idea sharing amongst the employees because knowledge shared is power.” The findings in this SME are similar to that of a study conducted by Michna & Kmieciak (2020) who found that there is a connection between innovation and performance in a way that an organisation’s culture is capable of influencing employees’ attitudes toward changes thereby implementing innovative solutions. The pharmacy assistant insisted that IT has been a burden lifter in their organisation and should be encouraged in all facets of an SMEs’ operations. The next section will present a summary of detailed discussion of findings on research objective four.

### **5.8.13 Summary discussion of the results on research objective four**

A study by Cant & Wiid (2013) emphasised that SMEs in South Africa had high adoption of basic IT innovations such as email and websites for cost and convenience purposes. The results revealed that customer and employee morale were enhanced by usage of CRM and inventory management systems. This was supported by Enagi & Van Belle (2019) found that IT adoption for SMEs can enable them to navigate their way to success by maintaining the trend of technological advancements. The SMEs who adopted modern IT innovations in this study deployed them fully by benefiting through customer satisfaction, operational effectiveness, and efficiency in contrast to (Marnewick, 2014; Bvuma & Marnewick, 2020) who found that modern IT innovations adopted were not fully deployed by SMEs, while the tools adopted were used as a basic tool for business operations and they are not considered as integral part of the business.

IT innovations are a vital tool for the growth, development, and stability for SMEs. IT innovations also enabled SMEs to synchronise their services by improving operational efficiency and effectiveness. IT innovations improved communication between management and staff and between staff and customers. The use of some social networking platforms brought about an increase in customer loyalty and retention which boosted employee morale through attaining set targets. Some other benefits derived from IT were time saving and cost reduction. It was also noted that IT innovations increased efficiency in administrative and decision-making processes. In summary, the adoption of IT innovations by SMEs enhanced organisational performance. The next section will address research objective five which was to draw insights to increasing the adoption of IT innovations by SMEs.

### **5.9 Research Objective five: To draw Insights to Increasing the Adoption of IT Innovations and Use by SMEs**

This section will further address research objective five. The results were presented according to each SME while appendices were attached. The following question were posed to the respondents in table 5.13 in attempt to answer research question five.

**Table 5.13: Recommendations for improving IT adoption and use by SMEs.**

<b>SECTION E: Recommendations for Improving IT Adoption and Use.</b>
<b>E1.</b> In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Source: Author's Construction

### **5.9.1 SME 1**

All three respondents from SME 1 believed training employees in the use of IT innovations encourages their acceptance by employees. They believed that it is not the buying of computer hardware and software that improves organisational efficiency but the effective use of IT innovations. Rabie et al., (2016) argued that training and retraining of employees and stakeholders are prerequisites for the adoption and use of IT innovations.

### **5.9.2 SME 2**

From the CEO's point of view, IT equipment should be less costly to make IT innovations more accessible to SMEs. African countries should engage in research and development to manufacture ICT equipment to avoid importation of IT equipment in a bid to reducing costs. The other respondents agreed with the CEO that IT innovations should be made less costly and accessible to SMEs. The recommendation by this SME is similar to a recommendation by Solesvik et al., (2013) who agrees that many SMEs in developing countries have difficulties in sourcing for financial support especially with the high costs of IT set-up while it is imperative for SMEs to ensure a collaboration in research and development to curb the menace of IT costs. The line supervisor was of the opinion that employees should be encouraged to use IT equipment by pointing out the benefits of IT usage and also through training to improve ease of use.

### **5.9.3 SME 3**

According to the CEO and internal audit manager, SMEs should be afforded the opportunity to get some of these IT innovative packages at a subsidised rate, while government has a role to play in ensuring that SMEs receive funding or technological training with emphasis on their line of business. In agreement, the line supervisor

issued a statement for employees to be continually trained. The recommendation by this SME on training is similar to a study conducted by Njoroge & Gathungu (2013) who agree that training and entrepreneurial education can transform and facilitate SME activities with the main focus of stimulating performance.

#### **5.9.4 SME 4**

The owner-manager believed SMEs should invest more into technology awareness of every staff. In agreement with the above comment, the line manager said that SMEs should provide IT training budgets, while managers should be on the lookout for latest IT software that will help them run their SMEs. The front office administrator and events coordinator believed more training and research should be done and urged the government to support individuals on free trainings by establishing training centres so that SMEs would not have to spend much on trainings during employment. A study Levey & Powell (2000) stated that technological advancements can improve SMEs performance because the adoption of those IT applications can further help an organisation to process information, relay them to customers and stakeholders by reducing the operating expenses.

#### **5.9.5 SME 5**

The CEO of this SME stated that IT-related organisations or SMEs should address the real need of businesses to increasing service delivery, profits, and productivity, while the operations manager admonished SMEs to embrace IT innovative trends which concerns their business operations. Maisiri et al., (2021) which emphasised that some of these challenges can be overcome by adopting and streamlining IT innovations relevant to the business processes of the SMEs, strengthening policies, creating awareness to ensure collaboration between partners.

#### **5.9.6 SME 6**

According to the CEO, SME board should liaise with SMEs to educate them about the influence of IT innovations and reach out to IT providers to subsidise the costs of IT innovations to better suit the needs of SMEs. Modimogale & Kroeze (2011) posited that the onus is on SMEs stakeholders to monitor the kind of technologies used by clients to ensure they are on par in order to serve them. The general manager gave a stunning opinion that “new IT innovations be invented to pave way for more



competition so that costs can be reduced”, while also calling for more awareness to be carried out concerning the functionality of these IT innovations. She said that this will enable SMEs to get IT message in a concise manner. The business development specialist and the line supervisor recommended that “more technology-based training be done by SMEs to empower and motivate their employees.”

#### **5.9.7 SME 7**

The owner-manager has this to say, “for SMEs to fully adopt IT innovations, they would need to be sensitised on what their business will benefit and how they can gain competitive edge over their rivals who do not intend to adopt and use IT.” Furthermore, “the costs of acquiring these IT tools must be reduced to accommodate small businesses because the major aim of venturing into business is to make profit.” The sales manager re-echoed the above statement while the distribution manager suggested that training of SMEs on IT innovations should be done according to their business specialisation. Sharma & Mogdil (2017) concluded that employees’ training is pertinent to the exponential growth and IT adoption for SMEs and stakeholders. The junior level employee recommended that IT innovations be advertised in print media and visuals so that SME employees and owners can fathom the importance to their businesses and tasks.

#### **5.9.8 SME 8**

The CEO recommended that government should play a massive role by assisting SMEs to swiftly adopt IT innovations by ensuring that regulations such as costs of acquisition or pricing are monitored for equitable training process. The international sales executive recommended that IT innovations be made affordable and accessible to SMEs while clamouring for it to be customised for SMEs operations with a decent level of media awareness. The sales manager also supported the statement from his colleagues by insisting that “public awareness should be done to bring to light what SMEs will benefit by adopting and using IT innovations.” Tlabela et al., (2007) opined those upgrades or improvements on access level of IT can only be achieved when the issues relating to the costs of acquisition, and the availability of IT infrastructure are adequately resolved.

### **5.9.9 SME 9**

According to the manager, one of the strategies to improve the adoption and use of IT innovations by SMEs is frequent and repetition of trainings, while the line supervisor recommended that IT systems must be given a timely servicing before breakdown occurs. The nursery manager further stated that more IT practical trainings should be carried out by SMEs while the sales manager insisted that SMEs must have all the necessary IT applications needed by employees in relation to their business processes. Bvuma & Marnewick (2020) agreed that overcoming IT adoption challenges can be overcome by adopting and streamlining IT in the business processes of SMEs.

### **5.9.10 SME 10**

According to the CEO, easy accessibility for SMEs in terms of costs, maintenance and public awareness would help in the adoption of IT innovations to gain competitive advantage over rival firms who have not subscribed to technological advancements. As reported by Osorio-Gallego et al., (2016) agreeing that there is increase in the competitive nature of the business world to the extent that companies now utilise IT to enhance the modus operandi of their business to gain competitive advantage over their rivals. The academy manager recommended that social awareness relating to a particular need of an SME be done by IT providers while costs of acquiring such IT innovations should be reviewed to encourage full participation by SMEs. The senior tutor gave his opinion by highlighting that “it is very expensive to have a full working IT system at the workplace.” He further stressed that costs of acquisition should be reduced or subsidised according to the financial prowess of an SME. The head of linguistics department indicated that “there needs to be a form of interaction between family and friends on the usage of IT; people must realise that it is not a daunting task to learn how to actually use IT.”

### **5.9.11 SME 11**

The owner-manager recommended that “every SME take note of what works for their business operations and adopt them.” It is costly to acquire every type of IT innovation, but business owners ought to know what works for their specific type of business said, “the owner manager.” Asare & Prempeh (2017) argued that SMEs ought to adopt IT

relevant to their line of business. The diagnostic technician made a case for cost reduction involved in the procurement and maintenance of IT equipment. The service advisor for this SME mentioned that a decent level of sensitisation on IT innovation be done with the advantages for SMEs to be highlighted and costs to be evaluated or reviewed. The assistant service advisor and junior intern shared same opinion with their colleagues.

#### **5.9.12 SME 12**

The pharmacy manager said, “training and retraining of employees or IT users must be done constantly while not neglecting the costs of acquisition and servicing this IT equipment.” The chemotherapy pharmacist recommended that prices must be regulated to accommodate SMEs. In agreement to the above statement, the pharmacy assistant insisted that global price regulation of IT innovation should be done to encourage SMEs. Finally on the strategies for the adoption and use of IT innovation, the pharmacy dispenser indicated that public awareness of IT software be done to draw attention of SMEs on the benefits involved by mere adoption of such technological advancements. IT knowledge, skills and capabilities increase managerial confidence and the likelihood of investment decisions according to Fischer & Sliwka (2018). The next section will present a detailed discussion on the strategies to increasing the adoption of IT innovations by SMEs based on the literature reviewed and the opinions of the respondents.

#### **5.9.13 Summary discussion of the results on research objective five**

The results from this section indicated that the SMEs under study in the Western Cape recommended some vital strategies for the adoption and use of IT innovations. The results are as predicted by the Diffusion Innovations Theory where organisations adopt technology at different rates. This is also expected as predicted by the TAM. The strategies recommended were training and retraining of employees, price regulation by government and policy makers to make IT affordable and accessible to SMEs. Other suggestions were that SMEs should only adopt IT innovations relevant to their business operations to curb costs of acquisition, maintenance, and training. One of the respondents hinted that funding from governmental agencies and SME board will be beneficial toward the adoption of current IT innovations. These recommendations were similar to the findings by Gono et al., (2016). At every level of an organisation,

there exists goals and objectives. Some of the respondents mentioned that SMEs need to align technology and strategy. Addition of an IT innovation should be geared toward helping the organisation achieve their strategic goals according to Span (2017) and supported by Abduli & Arifi (2017). This connotes that every organisation should only adopt IT innovations relevant to their business operations as suggested by some of the respondents.

Some SMEs manage to acquire new IT innovations because of the similarity to the one being used before. As a result, they do not make provisions for training costs while drafting the estimates in the adoption process. Governmental agencies and policymakers have huge roles to play to ensure that costs of acquiring IT innovations are properly regulated, reviewed, and equitably distributed to enhance full functionality of the SME sector according to (Nagy, 2018). Therefore, there is need for SMEs to perform a current system analysis because IT innovations requires frequent upgrade, and this gives rise to huge compatibility risk. It is pertinent for SME owner-managers to ensure that the functionality of their current systems is compatible with the new upgrade to prevent system redundancies and reduce costs. The researcher is of the opinion that given that everyone will not learn and adapt to new technology in the same way, multiple training methods should be considered for example, classroom interaction, electronic methods, and learning incubators for stakeholders and employees to be prepared. IT innovations in an organisation can only help achieve its desired objectives when adopted by the stakeholders and employees, but if adoption becomes a failure, IT acquisition becomes a wasted effort on resources. It is imperative to maximise adoption by placing equal focus on the IT innovations and the stakeholders according to (Span, 2017). The next section will present the chapter summary.

### **5.10 Chapter Summary**

This section brings this chapter to a conclusion by presenting in detail the analysis of data collected from all the SMEs under study, the findings to answer all the research questions as outlined in Chapter 1 and the interpretations in line with IT innovations literature. The next chapter shall present the conclusions and recommendations of the study.

## **CHAPTER 6: CONCLUSIONS AND FUTURE RESEARCH**

### **6.1 INTRODUCTION**

The purpose of this study was to evaluate the influence of IT innovations on the performance of organisations. In the previous chapter, detailed analysis of the data collected and interpreted were seen to be aligned with IT innovations literature. Therefore, the objective of this final chapter is to sum up the study. Review of previous chapters will be briefly discussed in section 6.2, while restating the research questions and objectives in section 6.3. Results will be discussed in section 6.4 followed by conclusions in section 6.5. Limitations and recommendations will be portrayed in section 6.6 and the chapter is concluded in section 6.7 by presenting the areas of further research.

### **6.2 Review of Previous Chapters**

Chapter One gave a detailed background and introduction to the study by clearly stating the contribution of SMEs to a given economy which cannot be ignored because IT is seen as an amplifier for SMEs in deriving competitive edge. The aim of the study was to examine the correlation between the adoption of IT innovations by SMEs and organisational performance. It was important that this study utilised the four perspectives of the Balanced Score Card to have a holistic approach to measuring performance as it relates to SMEs use of modern IT innovations. The research methodology which consisted of design, study population, sampling procedure, data collection and research limitations were presented, followed by outlining the structure of the dissertation.

Chapter Two presented and explained the underpinning theories adopted for the study in a manner that was more comprehensive to the reader because these theories shape the foundation of IT innovations. The theories explored include Technology Acceptance Model, Diffusion of Innovation Theory, The Resource-Based Theory, Theory of Reasoned Action, Theory of Dynamic Capabilities, and the Theory of Planned Behaviour. Three theoretical frameworks were adopted for the study due to their instrumentality to understanding the various trends in IT adoption. The chapter also presented the conceptual framework of the influence of IT innovations on organisational performance.

Chapter Three provided an extensive review of related literature by further probing the importance of SMEs in relation to IT. In the chapter, the IT productivity paradox was seen to be the recognised discrepancy between IT investment and IT performance. The chapter outlined some empirical studies that are connected to the current topic. The benefits and types of IT innovations generated from the conceptual framework were discussed in detail. The extent of adoption of IT innovations by SMEs was reviewed followed by explaining organisational performance which was identified as a dependent variable in this study.

In Chapter Four, the research methodology was presented followed by highlighting the research questions and objectives. The research philosophies, design and delimitation of the study were portrayed. Data collection instruments and interview guides were presented in different sections so that the reader can understand how the data was analysed quantitatively and qualitatively. The pilot study was discussed to justify the questions generated for the main interview followed by presenting the ethical conducts.

Chapter Five provided a detailed analysis of the research results and findings. The respondents' demographics were presented followed by a thorough profile of the SMEs understudy. The chapter further investigated the SME employees' level of awareness of useful IT innovations, the current factors influencing IT usage, the influence of the adoption and usage on organisational performance and the insights that can be drawn to increasing the adoption of IT by the SMEs understudy. The findings in Chapter Five were interpreted in connection with IT innovations literature so that the reader can understand.

In Chapter Six, the results obtained in the previous chapter were linked to the primary and secondary objectives of the study so that they can complement each other to determine if the research objectives were met and if the research questions were answered. The chapter and the research are wrapped up with conclusions and future recommendations by suggesting areas of further research.

### **6.3 Research Question and Objectives Re-stated**

The research questions were:

1. What is SME employees' level of awareness of useful IT innovations?

2. What is the extent of use of IT by SMEs?
3. What factors are currently influencing the use of IT innovations by SMEs?
4. What is the influence of the use of IT innovations on organisational performance?
5. What insights can be drawn to increase the adoption of IT innovations by SMEs?

The study was based on the following objectives:

1. To investigate SME employees' level of awareness of useful IT innovations.
2. To establish the extent of use of IT innovations by SMEs.
3. To establish the factors that are currently influencing the use of IT innovations by SMEs.
4. To evaluate the influence of the use of IT innovations on organisational performance.
5. To draw insights to increase the adoption of IT innovations by SMEs.

Having restated the research questions and research objectives, the results will be discussed in the next section.

## **6.4 Results**

This section is a summary of the results and their linkages to the primary objectives of the study. The secondary objectives support the primary objectives and have been used to support or complement the findings of the primary objectives and the study topic in general. The objectives of the study were met, and the research questions was answered.

### **6.4.1 Research Objective 1**

The first objective was to investigate SME employees' level of awareness of IT innovations in some selected SME establishments in the Western Cape of South Africa. Based on the findings in section 5.5 SME owner-managers and employees understudy were aware of basic IT and the current technological innovations but utilises mostly the basic IT. This is because majority of the respondents indicated that they make use of basic IT innovations more than the modern trends in IT. On the other hand, minority of the respondents make use of modern IT innovations due to the nature of their business operations and costs of acquisition.

#### **6.4.2 Research Objective 2**

The second objective was to establish the extent to which IT innovations are currently being used by the SMEs under study. It can be seen in Chapter 3 that IT innovations when fully utilised can transform an organisation's performance and competitiveness. The findings in Chapter 5.6 to 5.6.12 indicated that majority of the respondents make use of basic IT such as email, word processing, spreadsheets, and WhatsApp; while few employees representing 6 SMEs make use of current IT innovations such as inventory management systems, social media marketing platforms, CRM and HRM systems, search engine optimisation; mobile money and task management systems. It was discovered that 6 SMEs have a well-established IT department with an onsite IT manager while 6 SMEs do not have a well-established IT department but depend on outsourcing some of their IT-related operations to another firm. Therefore, one can state that the adoption level is high for basic IT and low for current IT innovation amongst the SMEs in this study.

#### **6.4.3 Research Objective 3**

The third objective was to assess the current factors influencing the use of IT innovations by the SMEs under study. From Chapter 3, some factors considered to be influencing the adoption and use of IT innovations were internal and external factors, personal and institutional factors. The findings in Chapter 5.7 to section 5.7.12 indicated that majority of the SMEs in this study were having challenges concerning the adoption and use of IT innovations. Some of the challenges mentioned were high cost of IT acquisition and training, retraining and maintenance, knowledge-gap and initial resistance, constant modification and upgrade of IT innovative packages, lack of infrastructure leading to system breakdown, lack of funding and relevant information on government support. One of the respondents indicated that some owner-managers lack awareness of the efficacy and benefits of IT innovations toward organisation performance. It can be concluded that personal factors, internal and organisational factors can have the greatest influence on the adoption and use of IT innovations which can be subjected under control by the employees and the organisation. There was a notable response from one of the employees who indicated that the broadness of IT had been a challenge on employees to effectively adopt and use it.



#### **6.4.4 Research Objective 4**

The fourth objective was to evaluate the effect of the use of IT innovations on organisational performance for SMEs. As seen on Chapter 3, the benefits of IT innovations on SMEs performance cannot be quantified because it reduces cost, saves time, and brings about positive effect on inventory management by synchronising the business in its entirety. Results found in Chapter 5.8 to section 5.8.12 indicated that the SMEs who had fully adopted current IT innovation have had huge success in terms of financial growth, synchronised internal business processes thereby ensuring their customers and employees are satisfied; they train employees on the use of these technological tools in relation to their business operations. It can be concluded that majority of the SMEs under study had majorly adopted basic IT due to cost, general awareness, and the nature of business. Information retrieved from the respondents on the effect of IT to their job specification revealed that IT innovation is a vital tool for the growth, development, and stability at the workplace while communication has been made easier from top level management to the customers. There exists the usage of some social networking platforms which has brought an increase in customer loyalty and retention thereby boosting employee morale to attain set targets. It was seen that the 47 respondents representing the 12 SMEs did not indicate that the services they render do not have any correlation with IT innovation.

#### **6.4.5 Research Objective 5**

The fifth research objective was to draw insights toward improving the adoption and use of IT innovation by SMEs. From Chapter 3, it is evident that cost of IT acquisition, lack of skills and relevant information, and low managerial experience which might be attributed to absence of training, education and non-governmental support can have a huge influence on IT adoption and use for SMEs. Several recommendations to improve the adoption and use of IT innovation were made by the respondents in this study in Chapter 5.9 to section 5.9.12. They were of the opinion that SME employees and stakeholders require training and retraining on the relevant IT innovative packages, price must be regulated by government and policymakers to make IT affordable and accessible to SMEs. Another notable suggestion was that SMEs should ensure they adopt and use IT innovations that are relevant to their business operations to mitigate cost of acquisition, training, and maintenance issues. From the discussion

in Chapter 5, in section 5.9.13, it can be seen that most of the respondents were particular about price reduction and regulation of IT packages should the adoption level be increased. SME owner-managers must be fully acquainted with the benefits of adopting IT to their business operations was another suggested strategy because some respondents pointed out that most business owners are oblivious about information concerning the influence of IT innovation on organisational performance. The next section will discuss other relevant findings which emanated from this study.

#### **6.4.6 Employees' IT Skills are Disregarded**

The researcher also found that majority of the respondents who indicated they had expert knowledge in the use of IT software and hardware packages were not allowed to make use of other innovative technologies at the workplace which their employers have not adopted. In other words, some of the SMEs being run by owner-managers depend mostly on their technological and managerial skills to navigate the business operations. Therefore, employees' opinion of IT adoption and use are not taken seriously or implemented compared to that of the owner-managers; this gave rise to high level adoption of basic IT and low adoption of current IT innovation.

#### **6.4.7 Recruitment of Inexperienced Family Members in SMEs**

The researcher also found that majority of the SMEs are family owned. In family-run businesses, there is a common practice of appointing family members to assume a role in which they lack the necessary technological skills or training. Such appointments can have a harmful effect on the success of the business because they lack merit; this was the case of some of the SMEs under study where IT managers and employees who were family members do not have sufficient IT skills. The correlation between IT innovation and organisational performance cannot be undermined so therefore SMEs looking to compete in this digital economy must ensure that skilled labour, proper management structure and training are put in place without fear or favouritism.

### **6.5 CONCLUSIONS**

Based on the research findings in Chapter 5, research objectives were met, and the research questions were answered. Therefore, the following can be concluded on this study. SME owner-managers and employees are aware of basic IT. The adoption rate

for basic IT is high and low for current IT innovations. Factors such as internal, organisational, and personal have had a negative influence on the adoption and use of IT innovations due to lack of skills training and the changing environment in which IT operates in. The bond between IT and organisational performance cannot be over-emphasised, SMEs have had huge success especially in financial growth where employees and customers gained satisfaction, and the internal business processes has been synchronised; these were credited to the adoption and usage of IT innovations.

## **6.6 LIMITATIONS AND RECOMMENDATIONS**

The study targeted only 60 participants at 12 SMEs in the Western Cape of South Africa because of time and cost constraints, but only 47 respondents were interviewed. 13 respondents could not be interviewed due to their unavailability, so the researcher had to interview 24 men and 23 women. The SMEs under study emanated from the following sectors: manufacturing; health and fitness; financial services provider, hospitality, audio-visual communication, business consultancy, retail services, automotive sales, agriculture, education, auto-technical services, and pharmaceutical services. The study is both qualitative and quantitative so the generalisation is limited to the immediate environment of study but can be useful in conducting further research when given time. The availability of the owner-managers and SME employees for interviews was a great challenge considering the fact that larger sample of respondents would have been more ideal compared to the 47 respondents whose results are limited by size. The researcher recommends that IT innovation should be made a priority at the workplace given its influence on organisational performance. SMEs should adopt and use IT innovations relevant to their business operation with huge emphasis on skills training. Organisations should design and implement an IT strategic plan due to the changing environment in which IT operates. Governmental agencies, policymakers, and stakeholders should ensure that adequate support, price regulation and funding are granted to SMEs to improve the adoption and use of IT. Family-run SMEs should ensure that they practice good governance by recruiting IT professionals in management positions. Lastly, SME owner-managers must understand that the absence of IT leads to poor organisational growth.

## **6.7 AREAS OF FURTHER RESEARCH**

The researcher highly recommends that further research should be conducted based on the data collected, analysis, interpretation, and findings of this study. The study was only conducted at 12 SMEs in the Western Cape province of South Africa to examine and evaluate the influence of IT innovations on the performance of organisations. Conclusions were based on the findings from 47 respondents representing the 12 SMEs. A comparative study in different sectors, different provinces and a different country is recommended to determine the technological state of SMEs. Further areas of research should be done to quantify financial losses within an organisation, as well as how an organisation can be at a disadvantage to their competitors when IT is not adopted.

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# APPENDICES

## APPENDIX A

### ETHICAL CLEARANCE



P.O. Box 1906 • Bellville 7535 South Africa • Tel: +27 21 4603291 • Email: fbmsethics@cput.ac.za  
Symphony Road Bellville 7535

Office of the Chairperson Research Ethics Committee	FACULTY: <b>BUSINESS AND MANAGEMENT SCIENCES</b>
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The Faculty's Research Ethics Committee (FREC) on **25 August 2020**, ethics **Approval** was granted to **Kingsley Ogwu (217020720)** for a research activity for **Master of Business and Information Administration** at Cape Peninsula University of Technology.

Title of dissertation/thesis/project:	<b>The Impact of Information Technology Innovations on The Performance of Organisations: A Case Study of Selected SMEs in The Western Cape.</b>  Lead Supervisor (s): Prof V. Naicker
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**Comments:**

**Decision: APPROVED**

	<b>10 September 2020</b>
Signed: Chairperson: Research Ethics Committee	Date

Clearance Certificate No | 2020FOBREC797

**APPENDIX B**  
**INFORMED CONSENT FORM**



**Faculty of Business and Management Sciences**  
**Ethics informed consent form**

**CONSENT TO PARTICIPATE IN A RESEARCH STUDY**

**Category of Participants (tick as appropriate):**

<i>Staff/Workers</i>	<b>X</b>	<i>Teachers</i>		<i>Parents</i>		<i>Lecturers</i>		<i>Students</i>	
<i>Other (specify)</i>									

You are kindly invited to participate in a research study being conducted by **Kingsley Ogwu** from the Cape Peninsula University of Technology. The findings of this study will contribute towards (tick as appropriate):

<i>An undergraduate project</i>		<i>A conference paper</i>	
<i>An Honours project</i>		<i>A published journal article</i>	
<i>A Masters</i>	<b>X</b>	<i>A published report</i>	

**Selection criteria**

You were selected as a possible participant in this study because you are:

1. 18 years and/ or above.
2. An employer and/ or an employee in an SME.
3. Using information technology (IT) at the workplace.

The information below gives details about the study to help you decide whether you would want to participate.

**Title of the research:**

The Influence of Information Technology Innovations on The Performance of Organisations: A Case Study of Selected SMEs in The Western Cape.

**A brief explanation of what the research involves:**



The main aim of this study is to determine the effect of IT innovations on the performance of small to medium sized enterprises in Western Cape by investigating SME employees' level of awareness of useful IT innovations, and to establish the extent of use of IT innovations by small to medium sized enterprise.

This study will be of both theoretical and practical significance. Theoretically, it will add to the body of knowledge evidence-based relationship between IT innovations and the performance of small to medium sized enterprises in a competitive environment. Practically, it will shed light on the extent of use of IT innovations by the organisations under study, the challenges they are facing in the adoption of IT innovations, the impact of IT innovations on performance for those organisations using them and possible strategies to enhance the adoption and use of IT innovations.

**Procedures**

If you volunteer to participate in this study the following will be done:

1. Describe the main research procedures to you in advance, so that you are informed about what to expect;
2. Treat all interviewees with respect by arriving on time for all the interview schedules and well prepared;
3. Conduct an introduction with the interviewee in order to break ice;
4. All the interviewees will be asked for permission to record the interviews and also take some note where applicable;
5. In a case where there is no clarity, the interviewees will be allowed to ask for confirmation or clarity of words/sentences/phrases to ensure accuracy of the data collected;
6. Participants will be told that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs;
7. Participants will be given the option of omitting questions they do not want to answer or feel uncomfortable with;
8. Participants will be told that questions do not pose any realistic risk of distress or discomfort, either physically or psychologically, to them;
9. At the end of each interview all the interviewees will be thanked for their time and information provided for this study;
10. Participants will be debriefed at the end of their participation (i.e., give them a brief explanation of the study).

You are invited to contact the researcher should you have any questions about the research before or during the study. You will be free to withdraw your participation at any time without having to give a reason.

Kindly complete the table below before participating in the research.

<b>Tick the appropriate column</b>		
<b>Statement</b>	Yes	No

1.	I understand the purpose of the research.		
2.	I understand what the research requires of me.		
3.	I volunteer to take part in the research.		
4.	I know that I can withdraw at any time.		
5.	I understand that there will not be any form of discrimination against me as a result of my participation or non-participation.		
6.	Comment:		

Please sign the consent form. You will be given a copy of this form on request.

Signature of participant	Date

### Researchers

	Name:	Surname:	Contact details:
1	Kingsley	Ogwu	0658705423 Kingsley.ogwu@yahoo.com
2	Prof. Visvanathan (supervisor)	Naicker	0214603113, naickervi@cput.ac.za

Contact person: Kingsley Ogwu	
Contact number: 0658705423	Email: Kingsley.ogwu@yahoo.com

**APPENDIX C**  
**INTERVIEW GUIDE**

**INTERVIEW GUIDE FOR SMES' MANAGERS AND ORDINARY EMPLOYEES**



**PROPOSED INTERVIEW GUIDE**

My name is Kingsley Ogwu, a student studying for a Masters degree in Business and Information Administration at the Cape Peninsula University of Technology. I am conducting research on “the impact of Information Technology innovations on the performance of organisations. All the information collected from this interview will be used for academic purposes only and will be kept confidential and anonymous. Your honest responses would be greatly appreciated.

**IT is considered to be a subset of ICT (Information Communications Technology). An information technology system is generally a communication system or, more specifically speaking, a computer system which includes all hardware, software and peripheral equipment operated by users. IT involves sending an email and using various computer applications for business or personal purpose, making a video call, and searching the internet by using a tablet, mobile phone, computer gadgets and more.**

**SECTION A: PERSONAL INFORMATION AND COMPUTER KNOWLEDGE AND SKILLS**

**Please specify your job title in the organisation:**

			Please Tick ✓
<b>A1</b>	<b>What is your Gender</b>	Male	
		Female	
<b>A2</b>	<b>In which age range are you?</b>	18-30	
		31-40	
		41-50	
		51-60	
		Above 60	
<b>A3</b>	<b>What is the highest level of education you attained?</b>	Primary level	
		Secondary level	
		Tertiary level	
		Did not attend school	
<b>A4</b>	<b>How long have you worked continuously for this organisation?</b>	Less than 1 year	
		1 - 5 years	
		6 – 10 years	
		Above 10 years	

### **RESPONDENT'S COMPUTER HARDWARE AND SOFTWARE KNOWLEDGE AND SKILLS**

			Please tick ✓
<b>A5</b>	<b>How often do you use computer hardware and</b>	Not at all	

	<b>software at this organisation?</b>		
		Rarely	
		Most of the time	
<b>A6</b>	<b>How would you describe your level of computer hardware and software knowledge and skills?</b>	I have no knowledge of computer hardware and software applications	
		I have little knowledge of computer hardware and software applications	
		I have a lot of knowledge of computer hardware and software applications	

### RESPONDENT'S COMPETENCY IN THE BASIC USE OF COMPUTERS

1= Not at all    2= Yes but with some difficulties    3= Yes with no difficulties    4= Expertly

		1	2	3	4
<b>A7</b>	<b>I can use a computer for word processing</b>				
<b>A8</b>	<b>I can start and shut down a computer</b>				
<b>A9</b>	<b>I can use spread sheets for processing data</b>				
<b>A10</b>	<b>I can save and retrieve documents</b>				
<b>A11</b>	<b>I can send and read emails</b>				
<b>A12</b>	<b>I can use search engines such as Google</b>				
<b>A13</b>	<b>I can log on to social networking sites (e.g. Facebook)</b>				

**A14.** Are you aware of any of the following IT innovations?

Please indicate by ticking

- **Inventory Management System** (    )

- WhatsApp or Instant Messaging (    )
- Search Engine Optimisation (    )
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (    )
- Customer Relationship Management Systems CRM (    )
- Mobile Money Systems (    )
- Human Resources Management Systems HRM (    )
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (    )
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (    )
- Email (    )

**SECTION B: EXTENT OF ADOPTION AND USE OF IT INNOVATIONS BY THE ORGANISATION**

**B1. Does your organisation have a well-established IT department? Yes.....**  
No.....

**B2. Do employees receive IT training? Yes..... No..... Yes! but not all the time.....**

**B3. Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate by ticking ✓**

- Word Processing (    )
- Email (    )
- Inventory Management System (    )
- WhatsApp or Instant Messaging (    )
- Search Engine Optimisation (    )
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (    )
- Customer Relationship Management Systems CRM (    )
- Mobile Money Systems (    )
- Human Resources Management Systems HRM (    )
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (    )
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (    )

**B4. Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain**

.....

.....

.....

.....

**SECTION C: CHALLENGES FACED IN THE ADOPTION OF IT INNOVATIONS**

**C1.** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

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.....  
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.....  
.....

**SECTION D: INFLUENCE OF IT INNOVATIONS ON ORGANISATIONAL PERFORMANCE**

Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas:

**D1.** Financial performance (profitability, reduced costs, increased cash flows, return on investment)

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.....  
.....  
.....  
.....

**D2.** Internal business processes (efficiency, operational effectiveness, productivity)

.....  
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**D3.** Internal customers (employees' satisfaction)

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**D4.** External Customers satisfaction

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**D5. Learning and growth (Employee skills and knowledge)**

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**D6. Are there other areas IT innovations are influencing your organisation? Please explain**

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**SECTION E: RECOMMENDATIONS**

**E1. In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?**

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**THANK YOU FOR YOUR ASSISTANCE!!!**



**APPENDIX D**  
**SPSS OUTPUT**

**Frequency Tables**

What is your gender?						
ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Male	2	40.0	40.0	40.0
		Female	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Male	4	80.0	80.0	80.0
		Female	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Male	1	33.3	33.3	33.3
		Female	2	66.7	66.7	100.0
		Total	3	100.0	100.0	
SME 4	Valid	Male	3	75.0	75.0	75.0
		Female	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Male	1	50.0	50.0	50.0
		Female	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	Male	2	50.0	50.0	50.0
		Female	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 7	Valid	Male	1	25.0	25.0	25.0
		Female	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Male	3	100.0	100.0	100.0

SME 9	Valid	Female	2	50.0	50.0	100.0
		Male	2	50.0		
		Total	4	100.0	100.0	
SME10	Valid	Male	2	50.0	50.0	50.0
		Female	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	Male	2	40.0	40.0	40.0
		Female	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Male	1	25.0	25.0	25.0
		Female	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**What is your age?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	18-30	2	40.0	40.0	40.0
		31-40	2	40.0	40.0	80.0
		41-50	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	31-40	1	20.0	20.0	20.0
		41-50	1	20.0	20.0	40.0
		51-60	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	31-40	1	33.3	33.3	33.3
		41-50	2	66.7	66.7	100.0
		Total	3	100.0	100.0	

SME 4	Valid	18-30	1	25.0	25.0	25.0
		31-40	2	50.0	50.0	75.0
		51-60	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	31-40	1	50.0	50.0	50.0
		41-50	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	18-30	1	25.0	25.0	25.0
SME6	Valid	31-40	1	25.0	25.0	50.0
		41-50	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 7	Valid	31-40	1	25.0	25.0	25.0
		41-50	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	41-50	1	33.3	33.3	33.3
		51-60	2	66.7	66.7	100.0
		Total	3	100.0	100.0	
SME 9	Valid	18-30	2	50.0	50.0	50.0
		31-40	1	25.0	25.0	75.0
		41-50	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	18-30	1	25.0	25.0	25.0
		31-40	2	50.0	50.0	75.0
		41-50	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	18-30	2	40.0	40.0	40.0
		31-40	1	20.0	20.0	60.0
		41-50	1	20.0	20.0	80.0
		51-60	1	20.0	20.0	100.0
		Total	5	100.0	100.0	

SME12	Valid	31-40	1	25.0	25.0	25.0
		41-50	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**What is the highest level of education you attained?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Tertiary	5	100.0	100.0	100.0
SME 2	Valid	Secondary	1	20.0	20.0	20.0
		Tertiary	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Tertiary	3	100.0	100.0	100.0
SME 4	Valid	Tertiary	4	100.0	100.0	100.0
SME 5	Valid	Tertiary	2	100.0	100.0	100.0
SME 6	Valid	Tertiary	4	100.0	100.0	100.0
SME 7	Valid	Secondary	2	50.0	50.0	50.0
		Tertiary	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Tertiary	3	100.0	100.0	100.0
SME 9	Valid	Tertiary	4	100.0	100.0	100.0
SME10	Valid	Tertiary	4	100.0	100.00	100.0
SME11	Valid	Secondary	2	40.0	40.0	40.0
		Tertiary	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Tertiary	4	100.0	100.0	100.0

**How long have you worked continuously for this organisation?**

	Frequency	Percent	Valid Percent	Cumulative Percent
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SME 1	Valid	Below 1 year	2	40.0	40.0	40.0
		1-5 years	2	40.0	40.0	80.0
		6-10 years	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
		Total	4	100.0	100.0	
SME 2	Valid	6-10 years	3	60.0	60.0	60.0
		Above 10 years	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	1-5 years	1	33.3	33.3	33.3
		6-10 years	2	66.7	66.7	100.0
		Total	3	100.0	100.0	
SME 4	Valid	1-5 years	2	50.0	50.0	50.0
		6-10 years	1	25.0	25.0	75.0
		Above 10 years	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	1-5 years	1	50.0	50.0	50.0
		Above 10 years	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	Below 1 year	1	25.0	25.0	25.0
		1-5 years	1	25.0	25.0	50.0
		6-10 years	1	25.0	25.0	75.0
		Above 10 years	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 7	Valid	Below 1 year	1	25.0	25.0	25.0
		1-5 years	1	25.0	25.0	50.0
		6-10 years	1	25.0	25.0	75.0
		Above 10 years	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	6-10 years	2	66.7	66.7	66.7
		Above 10 years	1	33.3	33.3	100.0

		Total	3	100.0	100.0	
SME 9	Valid	Below 1 year	2	50.0	50.0	50.0
		1-5 years	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	1-5 years	2	50.0	50.0	50.0
		6-10 years	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	1-5 years	3	60.0	60.0	60.0
		6-10 years	1	20.0	20.0	80.0
		Above 10 years	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	1-5 years	1	25.0	25.0	25.0
		6-10 years	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**How often do you use computer hardware and software at this organisation?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Often	5	100.0	100.0	100.0
SME 2	Valid	Rarely	1	20.0	20.0	20.0
		Often	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Often	3	100.0	100.0	100.0
SME 4	Valid	Often	4	100.0	100.0	100.0
SME 5	Valid	Often	2	100.0	100.0	100.0
SME 6	Valid	Often	4	100.0	100.0	100.0
SME 7	Valid	Rarely	1	25.0	25.0	25.0
		Often	3	75.0	75.0	100.0

		Total	4	100.0	100.0	
SME 8	Valid	Often	3	100.0	100.0	100.0
SME 9	Valid	Not at all	1	25.0	25.0	25.0
		Often	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Often	4	100.0	100.0	100.0
SME11	Valid	Often	5	100.0	100.0	100.0
SME12	Valid	Often	4	100.0	100.0	100.0

**How would you describe your level of computer hardware and software knowledge and skills?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Basic	1	20.0	20.0	20.0
		Expert	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	None	1	20.0	20.0	20.0
		Expert	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Expert	3	100.0	100.0	100.0
SME 4	Valid	Basic	2	50.0	50.0	50.0
		Expert	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Expert	2	100.0	100.0	100.0
SME 6	Valid	Expert	4	100.0	100.0	100.0
SME 7	Valid	Basic	1	25.0	25.0	25.0
		Expert	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Expert	3	100.0	100.0	100.0

SME 9	Valid	Basic	1	25.0	25.0	25.0
		Expert	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Basic	1	25.0	25.0	25.0
		Expert	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	Basic	2	40.0	40.0	40.0
		Expert	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Expert	4	100.0	100.0	100.0

**I can use a computer for word processing**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Expertly	5	100.0	100.0	100.0
SME 2	Valid	Not at all	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Expertly	3	100.0	100.0	100.0
SME 4	Valid	Expertly	4	100.0	100.0	100.0
SME 5	Valid	Expertly	2	100.0	100.0	100.0
SME 6	Valid	Expertly	4	100.0	100.0	100.0
SME 7	Valid	Yes! With no difficulty	2	50.0	50.0	50.0
		Expertly	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Expertly	3	100.0	100.0	100.0
SME 9	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	



SME 10	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 11	Valid	Yes! With no difficulty	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 12	Valid	Expertly	4	100.0	100.0	100.0

**I can start and shut down a computer**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Expertly	5	100.0	100.0	100.0
SME 2	Valid	Not at all	1	20.0	20.0	20.0
		Yes! With no difficulty	1	20.0	20.0	40.0
		Expertly	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Expertly	3	100.0	100.0	100.0
SME 4	Valid	Expertly	4	100.0	100.0	100.0
SME 5	Valid	Expertly	2	100.0	100.0	100.0
SME 6	Valid	Expertly	4	100.0	100.0	100.0
SME 7	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Expertly	3	100.0	100.0	100.0
SME 9	Valid	Expertly	4	100.0	100.0	100.0
SME10	Valid	Expertly	4	100.0	100.0	100.0
SME11	Valid	Yes! With no difficulty	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	

SME12	Valid	Expertly	4	100.0	100.0	100.0
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**I can use Spreadsheets for processing data**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Expertly	5	100.0	100.0	100.0
SME 2	Valid	Not at all	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Expertly	3	100.0	100.0	100.0
SME 4	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes! With some difficulty	1	50.0	50.0	50.0
		Expertly	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	Expertly	4	100.0	100.0	100.0
SME 7	Valid	Yes! With some difficulty	1	25.0	25.0	25.0
		Yes! With no difficulty	1	25.0	25.0	50.0
		Expertly	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes! With some difficulty	1	33.3	33.3	33.3
		Yes! With no difficulty	1	33.3	33.3	66.7
		Expertly	1	33.3	33.3	100.0
		Total	3	100.0	100.0	
SME 9	Valid	Yes! With some difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 10	Valid	Yes! With no difficulty	3	75.0	75.0	75.0
		Expertly	1	25.0	25.0	100.0

		Total	4	100.0	100.0	
SME 11	Valid	Yes! With some difficulty	1	20.0	20.0	20.0
		Yes! With no difficulty	2	40.0	40.0	60.0
		Expertly	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 12	Valid	Expertly	4	100.0	100.0	100.0

**I can save and retrieve documents**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Expertly	5	100.0	100.0	100.0
SME 2	Valid	Not at all	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Expertly	3	100.0	100.0	100.0
SME 4	Valid	Expertly	4	100.0	100.0	100.0
SME 5	Valid	Expertly	2	100.0	100.0	100.0
SME 6	Valid	Expertly	4	100.0	100.0	100.0
SME 7	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Expertly	3	100.0	100.0	100.0
SME 9	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Expertly	4	100.0	100.0	100.0
SME11	Valid	Yes! With no difficulty	2	40.0	40.0	40.0
		Expertly	3	60.0	60.0	100.0
		Total	5	100.0	100.0	

SME12	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**I can send and read emails**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Expertly	5	100.0	100.0	100.0
SME 2	Valid	Expertly	5	100.0	100.0	100.0
SME 3	Valid	Expertly	3	100.0	100.0	100.0
SME 4	Valid	Expertly	4	100.0	100.0	100.0
SME 5	Valid	Expertly	2	100.0	100.0	100.0
SME 6	Valid	Expertly	4	100.0	100.0	100.0
SME 7	Valid	Expertly	4	100.0	100.0	100.0
SME 8	Valid	Expertly	3	100.0	100.0	100.0
SME 9	Valid	Expertly	4	100.0	100.0	100.0
SME10	Valid	Expertly	4	100.0	100.0	100.0
SME11	Valid	Yes! With no difficulty	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Expertly	4	100.0	100.0	100.0

**I can use search engines such as Google**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Expertly	5	100.0	100.0	100.0
SME 2	Valid	Not at all	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	

SME 3	Valid	Expertly	3	100.0	100.0	100.0
SME 4	Valid	Expertly	4	100.0	100.0	100.0
SME 5	Valid	Expertly	2	100.0	100.0	100.0
SME 6	Valid	Expertly	4	100.0	100.0	100.0
SME 7	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Expertly	3	100.0	100.0	100.0
SME 9	Valid	Expertly	4	100.0	100.0	100.0
SME10	Valid	Yes! With no difficulty	2	50.0	50.0	50.0
		Expertly	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	Yes! With no difficulty	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**I can log on to social network sites (e.g., Facebook)**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Expertly	5	100.0	100.0	100.0
SME 2	Valid	Not at all	1	20.0	20.0	20.0
		Expertly	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Expertly	3	100.0	100.0	100.0
SME 4	Valid	Expertly	4	100.0	100.0	100.0
SME 5	Valid	Expertly	2	100.0	100.0	100.0

SME 6	Valid	Expertly	4	100.0	100.0	100.0
SME 7	Valid	Yes! With some difficulty	1	25.0	25.0	25.0
		Yes! With no difficulty	2	50.0	50.0	75.0
		Expertly	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Expertly	3	100.0	100.0	100.0
SME 9	Valid	Expertly	4	100.0	100.0	100.0
SME10	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	Yes! With no difficulty	2	40.0	40.0	40.0
		Expertly	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Yes! With no difficulty	1	25.0	25.0	25.0
		Expertly	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**Are you aware of inventory management systems?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	No	5	100.0	100.0	100.0
SME 2	Valid	Yes	3	60.0	60.0	60.0
		No	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	1	33.3	33.3	33.3
		No	2	66.7	66.7	100.0
		Total	3	100.0	100.0	
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0

SME 7	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Yes	4	100.0	100.0	100.0

**Are you aware of WhatsApp or Instant messaging?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0

SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	4	100.0	100.0	100.0
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**Are you aware of search engine optimisation?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	No	5	100.0	100.0	100.0
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0



SME 7	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Are you aware of social media marketing?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	

SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	4	100.0	100.0	100.0
SME10	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Are you aware of customer relationship management systems?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	3	60.0	60.0	60.0
		No	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0

		Total	4	100.0	100.0	
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Are you aware of mobile money systems?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	No	5	100.0	100.0	100.0
SME 2	Valid	Yes	3	60.0	60.0	60.0
		No	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	1	50.0	50.0	50.0
		No	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	No	4	100.0	100.0	100.0
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0

		Total	4	100.0	100.0	
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Are you aware of human resources management systems?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	2	40.0	40.0	40.0
		No	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	2	66.7	66.7	66.7
		No	1	33.3	33.3	100.0
		Total	3	100.0	100.0	
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	1	50.0	50.0	50.0
		No	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	No	4	100.0	100.0	100.0
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	No	4	100.0	100.0	100.0
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Are you aware of web conferencing systems?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	5	100.0	100.0	100.0
SME 2	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Are you aware of collaboration tools and task management systems?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0

		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	No	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Are you aware of E-mail for business communication?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	5	100.0	100.0	100.0
SME 2	Valid	Yes	5	100.0	100.0	100.0
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	4	100.0	100.0	100.0
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	4	100.0	100.0	100.0

SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Does your organisation have a well-established IT department?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	5	100.0	100.0	100.0
SME 2	Valid	No	5	100.0	100.0	100.0
SME 3	Valid	No	3	100.0	100.0	100.0
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	No	4	100.0	100.0	100.0
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	4	100.0	100.0	100.0
SME10	Valid	No	4	100.0	100.0	100.0
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Do employees receive IT training?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes! Not often	5	100.0	100.0	100.0
SME 2	Valid	No	5	100.0	100.0	100.0
SME 3	Valid	Yes	3	100.0	100.0	100.0

SME 4	Valid	Yes	2	50.0	50.0	50.0
		Yes! Not often	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	3	75.0	75.0	75.0
		Yes! Not often	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 7	Valid	No	3	75.0	75.0	75.0
		Yes! Not often	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	1	25.0	25.0	50.0
		Yes! Not often	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes! Not often	4	100.0	100.0	100.0
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Do you make use of Word Processing for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	5	100.0	100.0	100.0
SME 2	Valid	Yes	5	100.0	100.0	100.0
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	4	100.0	100.0	100.0



SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Do you make use of E-mail for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	5	100.0	100.0	100.0
SME 2	Valid	Yes	5	100.0	100.0	100.0
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	4	100.0	100.0	100.0
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	4	100.0	100.0	100.0
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Do you make use of inventory management systems for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	No	5	100.0	100.0	100.0
SME 2	Valid	Yes	3	60.0	60.0	60.0

		No	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	1	33.3	33.3	33.3
		No	2	66.7	66.7	100.0
		Total	3	100.0	100.0	
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME12	Valid	Yes	4	100.0	100.0	100.0

**Do you make use of WhatsApp for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	

SME 2	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	4	100.0	100.0	100.0
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	

**Do you make use of search engine optimisation for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	No	5	100.0	100.0	100.0
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	3	75.0	75.0	75.0

		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Do you make use of social media marketing for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0

SME 7	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	4	100.0	100.0	100.0
SME10	Valid	Yes	3	75.0	75.0	75.0
		No	1	25.0	25.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Do you make use of customer relationship management systems for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	3	60.0	60.0	60.0
		No	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0

		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Do you make use of mobile money systems for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	No	5	100.0	100.0	100.0
SME 2	Valid	Yes	3	60.0	60.0	60.0
		No	2	40.0	40.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME 5	Valid	Yes	1	50.0	50.0	50.0
		No	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	

SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	No	4	100.0	100.0	100.0
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	Yes	5	100.0	100.0	100.0
SME12	Valid	Yes	4	100.0	100.0	100.0

**Do you make use of human resources management systems for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	2	40.0	40.0	40.0
		No	3	60.0	60.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	2	66.7	66.7	66.7
		No	1	33.3	33.3	100.0
		Total	3	100.0	100.0	
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	1	50.0	50.0	50.0
		No	1	50.0	50.0	100.0
		Total	2	100.0	100.0	
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	No	4	100.0	100.0	100.0
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	No	4	100.0	100.0	100.0
SME10	Valid	Yes	1	25.0	25.0	25.0

		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

**Do you make use of web conferencing systems for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	5	100.0	100.0	100.0
SME 2	Valid	Yes	4	80.0	80.0	80.0
		No	1	20.0	20.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	Yes	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	2	50.0	50.0	50.0
		No	2	50.0	50.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	4	100.0	100.0	100.0
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0



**Do you make use of collaboration tools and task management systems for day-to-day operations?**

ID			Frequency	Percent	Valid Percent	Cumulative Percent
SME 1	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 2	Valid	Yes	1	20.0	20.0	20.0
		No	4	80.0	80.0	100.0
		Total	5	100.0	100.0	
SME 3	Valid	Yes	3	100.0	100.0	100.0
SME 4	Valid	No	4	100.0	100.0	100.0
SME 5	Valid	Yes	2	100.0	100.0	100.0
SME 6	Valid	Yes	4	100.0	100.0	100.0
SME 7	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME 8	Valid	Yes	3	100.0	100.0	100.0
SME 9	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME10	Valid	Yes	1	25.0	25.0	25.0
		No	3	75.0	75.0	100.0
		Total	4	100.0	100.0	
SME11	Valid	No	5	100.0	100.0	100.0
SME12	Valid	No	4	100.0	100.0	100.0

## APPENDIX E

### INTERVIEW TRANSCRIPT

Transcription of Interviews:

Interview Blueprint

#### Participant 1

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: okay.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I believe SMEs consider IT innovations costly to set up and it does not reach the masses as it should. Technology is changing so fast; I think it is the speed of adoption that is challenging here.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: By automation, reporting and most of the mundane tasks, the organisation is able to reduce cost.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: By allowing employees across the continent to collaborate more and thus being more productive.

- c. Internal customers (employees' satisfaction).

Participant: I have no idea.

- d. External Customers satisfaction

Participant: Using self-service tools for our customers, allowing them to conduct business with us from wherever they are.

- e. Learning and growth (Employee skills and knowledge)

Participant: Making training resources available.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: IT innovations helps us in self-service password reset whenever we are not in the office and there is a password issue while logging in virtually.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Making setup costs more affordable for SMEs.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

## **Participant 2**

**Researcher:** Good day! How are you today?

Participant: I am fine, thank you. In what way may I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems

- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes! Software for textile designs

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: okay, thank you.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: My major challenge is the broadness of IT applications because we first have to experiment before adopting which I think is cost constraints.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes, please.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: IT usage has helped us in eliminating the use of a middleman in our business operations.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: We have been able to develop a good workflow.

- c. Internal customers (employees' satisfaction).

Participant: Employees are satisfied with their job because IT has helped them to improve their work.

- d. External Customers satisfaction

Participant: Our clients are very happy with our services.

- e. Learning and growth (Employee skills and knowledge)

Participant: The employees develop skills that helps them carry out their job innovatively due to the usage of IT.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: I cannot think of anything at the moment.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Regular training needs to be implemented in order to keep up with software update.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you.

Transcription of Interviews:

Interview Blueprint

### **Participant 3**

**Researcher:** Good day Ma'am, how are you today?

Participant: I am well, thank you. How may I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, you may.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems

- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: We experience technical difficulties every now and then while using IT.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Increase in profitability

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Improving efficiency

- c. Internal customers (employees' satisfaction).

Participant: Improved employees' satisfaction

- d. External Customers satisfaction

Participant: IT usage has greatly influenced customer satisfaction on a positive note.

- e. Learning and growth (Employee skills and knowledge)

Participant: IT adoption in this organisation helps in employees' learning process by granting access to training resources.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: This question should be specifically answered by our dedicated IT team.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Every organisation should adopt IT innovations relevant to its business operations.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

#### **Participant 4**

**Researcher:** Good day Sir, how are you today?

Participant: I am good, thank you, and how are you doing today?

**Researcher:** I am doing great, thanks. My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)



- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes! Software design applications and for router unlocking systems.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: None at the moment, but there are some newly acquired software we are utilising to improve ourselves so that we can guarantee customer satisfaction. I believe an incoming challenge is being able to use different IT systems relating to our operations seeing that IT applications is very complex.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The usage of these IT innovations has empowered our organisation financially thereby assisting in eliminating the need for outsourcing.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: We have been able to synchronise our work by achieving an efficient workflow system.

- c. Internal customers (employees' satisfaction).

Participant: Our employees are motivated due to IT as it empowers them in their tasks.

- d. External Customers satisfaction

Participant: Our customers derive a maximum level of satisfaction as a result of the efficacy of IT usage.

- e. Learning and growth (Employee skills and knowledge)

Participant: Learning and growth is encouraged in this organisation by constant usage of IT which helps in skills development even as we rely greatly on IT.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: I will recommend that organisations should carryout constant training and retraining of employees to maintain the flow and knowledge of software updates.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 5**

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you, how can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)

- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: We have IT innovations that specialises in Software design and routers

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I cannot say exactly but I can imagine a challenge to arise whereby these IT systems become so numerous thereby giving rise to complications on what IT exactly to adopt at the workplace.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The application of IT innovations has been vital to our organisation in the sense that we are relieved from financial burden of outsourcing, and of course these IT software takes care of some duties that would have been outsourced.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: The cloud computing technology has been vital to our organisation as it encourages systematic workflow.

- c. Internal customers (employees' satisfaction).

Participant: Work morale and motivation is satisfactory due to the effectiveness of IT usage in this organisation. Employees rely greatly on IT gadgets of which has granted us tremendous results.

- d. External Customers satisfaction

Participant: Quality and satisfactory services make a happy customer. The retention level on customers is high.

- e. Learning and growth (Employee skills and knowledge)

Participant: The frequency at which we use IT innovations has been helpful on skills acquisition and development. The more these tools are being used, the more mastery we command.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Not at the moment.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Every employee requires training and constant routine training on IT. I say so because when these IT innovations are modified, it will pave way for discarding any outdated IT systems that it is not useful to the organisation. When employees are trained, they will be able to acquire the latest skill on an IT system. We must remember that this era is for IT innovations and the advantages has been enormous despite the high costs of acquisition and maintenance but the positive effective of IT on business cannot be denied.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 6**

**Researcher:** Good day Sir, how are you today?

Participant: I am fine thank you, how can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: We make use of Google Docs which is an online word processor and web application.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Not too many except costs.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Payment systems have had the greatest positive effect on our business with the usage of IT.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Only the basis like Excel which I term "invaluable". We also run VOIP and a network server to maintain the internal business process of this organisation.

- c. Internal customers (employees' satisfaction).

Participant: I think sharing documents on a network encourages employees' interactions.

- d. External Customers satisfaction

Participant: We engage in multiple online channels to reach out to our customers', and I can tell that they are satisfied.

- e. Learning and growth (Employee skills and knowledge)

Participant: None that I can think of.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None besides already mentioned.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Two things only: Add value, make them cost-effective.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 7**

**Researcher:** Good day, how are you today?

Participant: I am fine thank you, how can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I am not aware.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: I do not know.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: I am not sure.

- c. Internal customers (employees' satisfaction).

Participant: No idea.

- d. External Customers satisfaction

Participant: Our customers are satisfied.

- e. Learning and growth (Employee skills and knowledge)

Participant: We encourage growth and learning in this organisation.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: I am of the opinion that SMEs and stakeholders need to accept change.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 8**

**Researcher:** Good day, how are you today?

Participant: I am fine thank you, how can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.



- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Python and R for data processing.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Initial resistance due to the cost of having to upgrade and integrate systems and processes associated with IT innovations. And of which I think knowledge gap gave rise to initial resistance.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Reduced operational costs resulting from engaging e-banking channels.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Operational effectiveness is enhanced resulting from data analysis.

- c. Internal customers (employees' satisfaction).

Participant: Employees are satisfied with the advent of instant messaging (WhatsApp) as it aids quick dissemination of information.

- d. External Customers satisfaction

Participant: Customers are happy with the introduction of several banking channels as it affords them safety from health hazards and protection from always having to carry cash.

- e. Learning and growth (Employee skills and knowledge)

Participant: Personal development in computer programming and languages such as Mysql, Tableau, Powerbi, Python and R has been beneficial to the employees.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Skill acquisition in the form of staff training and development; long term planning so as to be able to split and recoup the cost of implementation over a period of time.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

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### **Participant 9**

**Researcher:** Good day Ma, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about? **Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The cost of setting up an IT department or usage of an IT innovation in a business is quite on the high side. The costs involved does not necessarily involve acquisitions only but training and maintenance as well.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Speaking about profitability, we have done well aggressively because of IT. I would not say that IT has reduced costs because the acquisition and set up of IT is quite expensive. Cashflows has been boosted on a positive note while ROI is definitely a thumbs up all due to IT application.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: The internal business processes have improved tremendously in terms of efficiency, productivity, and operational effectiveness in the sense that this organisation make use of a VOIP and a network server.

- c. Internal customers (employees' satisfaction).

Participant: The employees are satisfied with IT usage as it relates to their job because we encourage information sharing on the cloud computing technology which makes it possible to be accessed virtually.

- d. External Customers satisfaction

Participant: Our esteemed customers are satisfied with the services we render, and we get constant reviews from them.

- e. Learning and growth (Employee skills and knowledge)

Participant: We do not have an established IT department, but the employees are still learning and growing on-the-job training due to various skills acquired and shared amongst staff members.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: The ideal thing to do to smoothen the adoption of IT innovations by SMEs is to make the general costs of acquiring IT systems more affordable. Therefore, I am of the opinion that IT service providers come up with different software packages which can be affordable and are able to suit the desired need of SMEs in a bid to encourage a better use and adoption of these innovations.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

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### **Participant 10**

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about? **Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: To be honest, the costs of IT innovation is massive, I say so because one can never have all the IT applications in a business establishment. So, it is better to acquire IT systems suitable for the business operation.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The mobile money systems and other payment platforms have been more effective.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: The sales department make use of a software called "Salesforce" which has been contributing towards operational effectiveness due to its synchronisation tasks.

- c. Internal customers (employees' satisfaction).

Participant: The frequent usage of IT and its proficiency in handling tasks brings about employee satisfaction. To this end, the employees in the sales department are motivated as these applications makes tasks easier.

d. External Customers satisfaction

Participant: The customers are satisfied because of the excellent online tracking tools we apply in the course of our business transactions.

e. Learning and growth (Employee skills and knowledge)

Participant: In the sales department of this organisation, the employees are experiencing rapid growth due to knowledge-sharing culture of the department. It is a tradition of the sales department that we regularly conduct sharing of knowledge amongst departmental staff.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None at the moment.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: It is vital to make the total acquisition cost-effective. SMEs should only look to acquire the most important IT tools viable to their organisation while government should look into assisting SMEs in IT training, research and development considering the contribution to a country.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: Not at all, thank you Mr. Ogwu.

**Researcher:** Thank you

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**Participant 11**

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None that I can think of in my capacity as the owner, but other departments use many other software accounting packages that were not listed on the question.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Cost of buying, setting up and training various employees in various departments comes with a very high price. It is not enough to set up an established IT department, but there must be maintenance culture in place to ensure that the system is ongoing.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The usage of IT in this organisation has resulted in high profit margin, cash flows are handled judiciously, and the ROI is quite impressive.

b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: All the various departments of the organisation have been efficient, and the productivity level is encouraging enough.

c. Internal customers (employees' satisfaction).

Participant: The employees derive satisfaction because the IT innovations used in the business has ensured that motivation level becomes very high.

d. External Customers satisfaction

Participant: Our clients are very happy and satisfied with our dealings with them. They have attested to it severally by reviews on our google response form.

e. Learning and growth (Employee skills and knowledge)

Participant: The constant usage of IT leads to high depth of knowledge and understanding of financial procedures amongst others.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Workflow has increased by speeding up business processes significantly

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: SMEs should be afforded the opportunity to get some of these software/IT packages at a subsidised rate. I also think that the government has a role to play in ensuring that SMEs receive funding or technological training pertaining to what they specialise in. With this I mean, SMEs that solely deals on Financial Services like this organisation should receive trainings pertaining to our specialty.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: Not at all, thank you Mr. Ogwu.

**Researcher:** Thank you

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**Participant 12**

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you, how can I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the



need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes. As the head of internal audits department, the IT innovations that helps my task is called "Quantivate". This software helps so much in GRC- Governance, Risk Management and Compliance.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Technical hiccups sometimes and the cost of acquiring these IT innovations are quite expensive.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: From my experience in the internal auditing, I can attest that IT innovations has enabled this organisation to increase profitability while cash flow has been encouraging, and the return on investment is great.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: IT innovations has helped this organisation so much that the whole internal business process has been synchronised just by adopting a software called Salesforce.

- c. Internal customers (employees' satisfaction).

Participant: The internal audit department employees are very satisfied with their job due to the IT innovations we use to handle tasks.

- d. External Customers satisfaction

Participant: The organisation's customers are also satisfied because IT innovations creates room for minimal errors as everything regarding transactions are always recorded on the database management system of the organisation.

- e. Learning and growth (Employee skills and knowledge)

Participant: We do not have an established IT department, but the employees learn and grow from the knowledge derived whenever they get the opportunity to attend trainings. In turn, they spread the same acquired knowledge to their colleagues.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: IT innovations has influenced this organisation in terms of GRC- Governance, Risk Management and Compliance.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: If these IT innovations becomes cost-effective then SMEs would be motivated or encouraged to dive into the adoption and usage. So, IT innovation is the way forward if any organisation can become relevant in their sector.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

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### Participant 13

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you, how can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes, various accounting packages because of the nature of the business.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The greatest challenge is resistance by customers to accept new innovation.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Increase profit

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Increases efficiency.

- c. Internal customers (employees' satisfaction).

Participant: Improves performance.

- d. External Customers satisfaction

Participant: Improves customers' responsiveness.

- e. Learning and growth (Employee skills and knowledge)

Participant: Increases knowledge.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: It is vital to continually train employees because IT is the only way an establishment can grow, become relevant and have a voice in the industry.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: Not at all, thank you Mr. Ogwu.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

**Participant 14**

**Researcher:** Good day Ma'am, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, of course.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: At the moment, we are lacking intensive training and retraining for our staff members.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes please.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: It is not in my capacity to reveal such.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: I honestly think that the advent of IT systems has changed the way tasks and information are being accessed at the workplace.

- c. Internal customers (employees' satisfaction).

Participant: We are all happy with usage of IT because of how it simplifies our tasks.

- d. External Customers satisfaction

Participant: We derive joy in ensuring that the body language from our customers is good.

- e. Learning and growth (Employee skills and knowledge)

Participant: We have learnt so much by using some of these sophisticated technologies.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, please.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: If government can support individuals on free trainings by establishing training centres so that companies would not have to invest much on trainings during employment.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: Not at all, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

**Participant 15**

**Researcher:** Good day, how are you today?

Participant: I am fine good, thanks. How can I be of assistance and what is your study about?  
Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, we can.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes, Microsoft Teams which is a group collaboration software that is capable of helping teams to work remotely together.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: In the case of load shedding, some departments do not operate. So as much as it makes life easier, it is also human replacing tool in terms of employment because nowadays people can access everything on their own without the help of the other.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Reduced costs: instead of printing pamphlets and writing everything on the MS Word document, they can just send everything on WhatsApp and people will read and even send voice notes to ask questions.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: No need to spend lots of time in meetings, everything gets to be emailed and people can read on their own and provide feedback through emails still.

- c. Internal customers (employees' satisfaction).

Participant: Less paperwork (hard copy), easy communication makes customers happy.

- d. External Customers satisfaction

Participant: Some IT systems are cost effective (our customers can access us through our social media platforms and do not have to spend money or airtime calling landlines).

- e. Learning and growth (Employee skills and knowledge)

Participant: We have found learning and growth a bit easy as we keep up to date on new developments and products introduced by the business.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: No.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: I will recommend more training and research to be done by SME stakeholders.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: No question Mr. Ogwu.

**Researcher:** Thank you

Transcription of Interviews:



## Interview Blueprint

### Participant 16

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you. How may I be of help to you and what is your study about?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The challenges in this organisation that I can speak of is that “inadequate funds are provided for technological training”. It is important for all business irrespective of size to adopt ICT.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes please.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Information retrieval using computer database is fast and enhances quick decision making while leading to financial profitability in an organisation.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Using IT systems enhances efficiency and effectiveness of the internal business processes.

- c. Internal customers (employees' satisfaction).

Participant: IT systems has greatly improved our satisfaction as employees in this organisation.

- d. External Customers satisfaction

Participant: The positive vibe from IT toward our customers cannot be overlooked and it is something we keep improving upon so as to keep delivering an unwavering service.

- e. Learning and growth (Employee skills and knowledge)

Participant: IT has greatly improved the learning and growth for employees because of how fast it can be.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None that I can speak of at the time being.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Organisations should provide ICT training budgets and managers should look for latest software that will help them run their SMEs.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### Participant 17

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you, how can I be of assistance and what is your study about? **Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you can proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The major challenges has been to switch most of our operations from manual to digital system of communication and operations while the cost of training some of our employees has been a constraint.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, please proceed.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Information Technology has been of immense benefit and assistance in the financial status of this organisation, and it has made work easier.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Information Technology no doubt has increased productivity and workflow.

- c. Internal customers (employees' satisfaction).

Participant: Our employees' level of satisfaction has increased for good because application of Information Technology which has made things easier for us all.

- d. External Customers satisfaction

Participant: Customer satisfaction has been enhanced.

- e. Learning and growth (Employee skills and knowledge)

Participant: Employees' knowledge and skills has increased as well.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: No.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: SMEs should invest more into technology awareness for every staff.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### Participant 18

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about? **Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: In my office as the Operations Manager, I can confirm that I make use of various Adobe programs with a focus on digital designs.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: One of our major challenges is cost because as an organisation we engage in constant training and retraining of employees; where necessary we modify the task or job to suit their skill.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The usage of these innovations brings about financial performance and high profitability mostly when we do not have to outsource.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our internal business process is encouraging in a way that the tasks are synchronised to achieve high efficiency and productivity. Also, we are able to monitor and track every activity or tasks assigned to individual employees.

- c. Internal customers (employees' satisfaction).

Participant: The employees in the operations unit of this organisation are satisfied because all the necessary materials are provided to get the job done.

- d. External Customers satisfaction

Participant: Our services are impressive. IT innovations has ensured that we achieve speed, meet up with deadlines so that we can establish a good business rapport with our clients.

- e. Learning and growth (Employee skills and knowledge)

Participant: The learning process is difficult because there are too many things to do or learn in IT. What we encourage in the unit is to have a focus on a particular skill that is needed for our operations. We cannot afford to be tagged "Jack of all trade and master of none".

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Yes! IT innovations has influenced our animation work. The development of latest IT trends for animation purposes has taken a new toll. Previously, animation characters were drawn by hand before they were sent to the studio for the finished product. With the development of IT, animation software has been made accessible for all computer types in cost and availability. In essence, this saves cost and time for animation studios.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: As initially stated, to improve the adoption and use of IT innovations SMES must find a way to embrace the trend by adopting the IT innovations that concerns their business operations. My belief and attitude are that IT has made life and tasks easier because of the availability. I personally would

recommend that every SME should look out for a particular IT innovation that relates to their kind of business and adopt it.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question Mr. Ogwu.

**Researcher:** Thank you

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### Participant 19

**Researcher:** Good day Sir, how are you today?

Participant: I am okay, how can I be of assistance and what is your study about?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)

- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes. AutoCAD for 3D printing, Adobe Audition and Apple Logic Pro X for a quality sound in our audio communication tasks.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Constant changing or modification of IT innovative tools, platforms and costs.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay Mr. Ogwu.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The advent of IT innovations has reduced costs of outsourcing our tasks mostly on Audio Communication because we do everything in our studio with the appropriate software. The ROI is indeed appreciating.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: The speed of task accomplishment has been massive all the necessary tools required for various task are all up to date. So, in turn it has yielded massive productivity.

- c. Internal customers (employees' satisfaction).

Participant: With IT our employees are enormously satisfied. The saying goes thus, Happy staff equal good service and equal to happy clients.

- d. External Customers satisfaction

Participant: Response time to access accurate information contributes to customer satisfaction. Our customers are extremely satisfied without any form of reservations because we are prompt in response which is the key to service delivery and safeguarding their trust.

- e. Learning and growth (Employee skills and knowledge)

Participant: I would say that the employees have tremendously experienced growth in their various departments, and they also help each other to effectively distribute the training or acquired skills across to one another.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Not applicable.



**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: IT-business users or SMEs should address real business needs to increasing service delivery, profits, and productivity. The benefits of IT innovations should justify costs and training. Therefore, it is advisable for SMEs to embrace and adopt the use of IT innovations with specifics to their industry or services.

**Researcher:** Thank you so much for your time. We have come to the end of this interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 20**

**Researcher:** Good day, how are you today?

Participant: I am good, thank you. How can I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you can proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: We need an upgrade in our IT equipment to function maximally.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Reduced costs and return on investment has been a major influence of IT in our business.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Increased efficiency and productivity.

- c. Internal customers (employees' satisfaction).

Participant: employees are satisfied.

- d. External Customers satisfaction

Participant: The customers are satisfied with the level of influence of IT usage.

- e. Learning and growth (Employee skills and knowledge)

Participant: Skills have been acquired by usage of IT.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Yes, IT innovation provides user friendly interface and information per time as well.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: IT policy makers, government and other stakeholders should empower and motivate people in using IT.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question Mr. Ogwu.

**Researcher:** Thank you.

Transcription of Interviews:

Interview Blueprint

### **Participant 21**

**Researcher:** Good day Ma, how are you today?

Participant: I am good thank you, how can I be of assistance and what is your study about? **Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: We have been unable to properly equip all employees to effectively use IT.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Better IT equipment leads to more profit for the company and that is what we have been experiencing here.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Better technology equipment leads to lesser time spent on tasks which equals overall productivity

- c. Internal customers (employees' satisfaction).

Participant: Better Technology makes work to be done more accurately which equals more satisfied clients

- d. External Customers satisfaction

Participant: Better service can be provided with better technology and that is what we have been rendering to our customers to make them satisfied with our services.

- e. Learning and growth (Employee skills and knowledge)

Participant: Better technology makes employees to be more equipped.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: More technology-based training should be provided by employers rather than focusing on only the profitability aspect of the business.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question Sir.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

## **Participant 22**

**Researcher:** Good day Ma, how are you today?

Participant: I am fine thank you, how can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Huge cost of acquisition, maintenance and training costs for employees are the major challenges for this organisation.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Information technology innovations has no doubt transformed our consultancy operations with huge financial profitability even though it's somewhat expensive to maintain.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our internal business processes has been smoothed and productivity has increased tremendously. We have achieved operational effectiveness and attained a decent level of productivity by the usage of IT.

- c. Internal customers (employees' satisfaction).

Participant: The employees are quite satisfied when every IT tool being used are functional and well-understood.

- d. External Customers satisfaction

Participant: Our clients' satisfaction is our utmost priority and IT has enabled us to affirm this in a way that we even use some of these IT tools during our business consultancy forums so that they can see what impact IT usage can have in their businesses.

e. Learning and growth (Employee skills and knowledge)

Participant: Continuous usage of IT innovations certifies growth because we keep using them in our daily operations.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: We use IT for mainly business forums, and consultancy services (teaching and learning).

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: I would suggest that more IT innovations be invented to pave way for more competition so that costs can be reduced; I also think that more awareness needs to be done concerning the functionalities of these IT innovations so that SMEs can get the message in a concise manner.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 23**

**Researcher:** Good day Sir, how are you today?

Participant: I am doing great, thank you. How may I assist you? What is your study about?

**Researcher:** My name is Kingsley Ogwu. Thank you for your time for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Please proceed.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The issue of high costs to purchase, staff empowerment with IT tools and maintenance is a major challenge for our organisation because our reliance on IT usage cannot be over emphasised.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The financial performance index for this organisation is great, all due to the usage of IT. Profitability is encouraging and so is the ROI. I wouldn't completely agree that IT has reduced costs because it's quite expensive to keep up to date with IT innovations.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our productivity level is rapid of which IT has contributed to this. The total internal business processes are efficient as well.



c. Internal customers (employees' satisfaction).

Participant: Our employees are doing great with team cohesion strategies in place. IT innovations encourages team morale and team dynamics mostly when these employees have to communicate constantly with each other as required by their job descriptions. So, I will say they are satisfied from my observation.

d. External Customers satisfaction

Participant: The customers are happy with our distinguished services. We have mastered the arts and crafts of IT innovations in our consultancy services. For our clients to really grasp our message then IT usage cannot be undermined.

e. Learning and growth (Employee skills and knowledge)

Participant: In both ways I mean both our employees and customers have acquired numerous skills which has led to their growth. Employee skills and knowledge have been on the rise because of frequent usage of IT at the workplace.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None that I can recall.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: SME board should liaise with SMEs to educate them about the impact of IT innovations, and also reach out to IT providers to subsidise the costs of IT innovations to better suit the SMEs by reducing costs.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question Mr. Ogwu.

**Researcher:** Thank you.

Transcription of Interviews:

Interview Blueprint

**Participant 24**

**Researcher:** Good day Ma'am, how are you today?

Participant: I am doing well, thank you. How can I be of assistance and what is your study about?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc. (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: We had a low sales turnover in the course of this pandemic because printing wasn't encouraged anymore as things were mainly digitized. IT innovations couldn't come to our business rescue at this point, it became a demerit toward our operations.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: We have been hit hard recently by COVID-19, but we were doing very well previously in terms of profitability. We specialize mostly on printing cartridges and toners. I will still maintain that there has been an increased cash flow due to the usage of IT in our retail business.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Not Applicable.

- c. Internal customers (employees' satisfaction).

Participant: Employees are happy with their job.

- d. External Customers satisfaction

Participant: Our clients are well-served and we retained a huge number of them due to the exceptional services we have been rendering over the years.

- e. Learning and growth (Employee skills and knowledge)

Participant: Skills and knowledge for the employees have skyrocketed because we have engaged in product differentiation over the years. By solely dealing in inks, toners, and cartridges it has empowered the employees to gain mastery.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Not Applicable.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Trainings of SMEs on IT innovations should be done mainly according to their business specifications. The training should be geared towards enlightening SMEs on the impact of IT innovations in their business or day to day operations.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

**Participant 25**

**Researcher:** Good day Ma, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you can proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please do proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: My organisation doesn't have a well-established IT department and it's a challenge for new workers like me who do not have sufficient IT expertise.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: I have no idea.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our internal business processes has been on a positive light.

- c. Internal customers (employees' satisfaction).

Participant: We are all satisfied in retails.

- d. External Customers satisfaction

Participant: The clients we attend to do speak of the wonderful services they receive from every one of us.

- e. Learning and growth (Employee skills and knowledge)

Participant: I have learnt a lot in this company despite the fact I'm a bit new here.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Different IT innovations and packages should be advertised both on print media and visuals so that SMEs employees and owners will know how important it will contribute to their business or tasks.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you Mr. Ogwu.

**Researcher:** Thank you.

Transcription of Interviews:

Interview Blueprint

**Participant 26**

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you. How may I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you can go ahead with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc.
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The Covid-19 regulations has affected our business in a way that as a retail store we have been experiencing low sales. As a result, customers no longer want to print out any form of documents,

they rather prefer to digitise it so as to minimise the avenue of spreading the virus. Disadvantage of IT here on us is that we do not make any sales if customers opt for digital display.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The impact of Covid has affected our profitability ratio because the lockdown ensured that most people do things electronically thereby reducing the rate at which cartridges or papers are bought. Covid-19 regulations ensured that paper works were reduced.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Information technology have been good towards our internal business process because it allows us to monitor the activities of the staff and make amends where necessary.

- c. Internal customers (employees' satisfaction).

Participant: Employees are satisfied with their job. Whenever customers are looking for a particular thing which may not be at the place where it should be then the inventory management system is always in place to ascertain if the item is finished at the store or at the warehouse.

- d. External Customers satisfaction

Participant: There's no doubt that we provide excellent services to our wonderful customers. In my capacity as the owner, I ensured that customers are happy with the quality of services rendered to them as that can only make them to keep coming back.

- e. Learning and growth (Employee skills and knowledge)

Participant: The employees are growing in retail skills though we do not offer any form of IT training, but we employ staff that are already familiar with the basic use of IT skills.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: With the search engine optimisation (SEO), we are able to know the current trend in IT like what to buy and what our customers would like to inculcate into their business or for personal use.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: For SMEs to fully adopt IT innovations, they would need to be sensitised on what their business stand to benefit in the usage, and also how they can gain competitive advantage over their rivals who do not intend to adopt IT. Lastly, the cost of acquiring the various innovations must be reduced to accommodate small businesses because one of the major aims of going into business is to make profits

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 27**

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you, how can I be of assistance?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc.
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)



**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Salesforce.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: In terms of sales, IT innovations has not really boosted our sales in recent times. It has reduced it in a way that people do not want to do print outs due to the scare of COVID-19 infections.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Financial performance has been massive and encouraging until the COVID outbreak. We have been managing to navigate through it. IT usage in sales department has reduced costs and brought increased cash flows.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Not Applicable.

- c. Internal customers (employees' satisfaction).

Participant: Sales department staff are satisfied with their retail tasks because we also encourage and reward them incentives based on their internal sales index/performance.

- d. External Customers satisfaction

Participant: Our customers are satisfied with our services. We made it a mandate to focus on inks, toners, and cartridges; not to be a jack of all trade. We do receive lots of positive reviews from our customers mostly being attended to by the retail staff.

- e. Learning and growth (Employee skills and knowledge)

Participant: Our business process has allowed our employees to be knowledgeable as a result of our modus operandi. They all interact and teach other on how to relate with some difficult customers.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Not Applicable.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Price reduction or regulation in acquiring IT innovations should be done to encourage or improve the adoption rate by SMEs.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question.

**Researcher:** Thank you

Transcription of Interviews:

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### **Participant 28**

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you. Please how may I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)

- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Not at all.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The challenges we have at the moment is the time allocated to train employees on the introduction of any new technology, and resistance to change by our customers. It's time consuming to actually pass the message across and the costs incurred in those trainings are quite alarming.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, please do.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: With the usage of IT in our automotive business we are able to do reach a peak of financial performance, increased cash flows and ROI. Consistency is the rule of the game, and we have always made use of IT in our general business processes.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: IT innovations has made communications easy in our organisation. Our internal business processes have been synchronised to meet the demands of productivity and this is powered by IT.

- c. Internal customers (employees' satisfaction).

Participant: The employees are satisfied with the high level of IT innovations in place to ease them with their tasks. We provide a sophisticated level of training to our employees on IT.

- d. External Customers satisfaction

Participant: For decades, we have been dedicated to providing excellent and unmatched services to our customers. We believe that our customers are the reason for the business existence.

- e. Learning and growth (Employee skills and knowledge)

Participant: Our employees have acquired massive knowledge and skills that will make them a force to be reckoned with at any organisation or industry they find themselves. Uplifting our employees and customers has always been a part of our journey.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: IT innovations is shaping the automotive industry because cars are reliant on software and computers. Even the onboard computer control GPS, cruise control, parking assist and many others are the influence of IT innovations on cars.

**Researcher:** Shall we proceed to section E which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Government has a role to play in assisting SMEs to swiftly adopt IT innovations by making sure that regulations such as costs of acquisition and pricing are monitored for equitable awareness process.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: Not at all, thank you Mr. Ogwu.

**Researcher:** Thank you.

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Interview Blueprint

### **Participant 29**

**Researcher:** Good day! How are you today?

Participant: I am very well, thank you. How can I be of assistance and what is your study about?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: In my department we do not currently have any challenges.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: IT innovations has enabled our organisation to communicate with our counterparts in Europe and across the nations of the world, and this has brought about reduced costs for traveling. With IT innovations we can place orders online while we expect delivery in few working days, and the payment system is also very fast and convenient.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our internal business process is suited and customer for high operational efficiency and effectiveness because the task management tools is in place for progress monitoring, etc.

- c. Internal customers (employees' satisfaction).

Participant: As an international sales executive, I strongly believe that the employees are happy with their job. Our motivation level is quite high.

- d. External Customers satisfaction

Participant: This organisation is committed to customer satisfaction and that's what we have stood for in many decades. To receive applause and strong reviews from our inestimable customers has been a source of motivation to keep serving them.

e. Learning and growth (Employee skills and knowledge)

Participant: This organisation engages in training and retraining of the employees, and it has brought a maximum degree of skills and know-how amongst the staff members.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: IT innovations must be made cheap, accessible to SMEs. In fact, it should be customised for their business processes with a decent level of media awareness.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you.

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### **Participant 30**

**Researcher:** Good day Sir, how are you today?

Participant: I am very well, and you? How can I assist you and what is your study about?

**Researcher:** I am good, thank you. My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Salesforce.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: The need for training and retraining is a daunting task as well as the costs involved in acquiring sophisticated equipment for business growth and stability.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: You may please do so.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: There's no doubt the positive impact of IT innovations has been having on our sales. I cannot completely confirm or agree if IT has reduced costs but for profitability yes.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our internal operations have been effective all due to IT innovations and the productivity derived from the usage of IT is massive and impressive.

c. Internal customers (employees' satisfaction).

Participant: The employees in this department are satisfied because IT innovations makes work generally easy and fast.

d. External Customers satisfaction

Participant: We have had the habit of putting our customers first and I can authoritatively say that we have been able to satisfy our customers over the years of our operations in this department.

Learning and growth (Employee skills and knowledge)

Participant: Growth is another thing that has evolved in the career of every employee of this department. We indulge in seasonal IT trainings as new inventions are introduced because we don't want to be left behind.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Public awareness should be done to bring to light what SMEs stands to achieve by the usage and adoption of IT innovations. It also needs to be cost-effective so that SMEs can even consider adopting it in all facets of their daily business activities.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you Mr. Ogwu.

**Researcher:** Thank you.

Transcription of Interviews:

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**Participant 31**

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you. How can I be of assistance on your study?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, you may proceed with the interview.



**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: There is constant system breakdown in my department because some of the IT systems are old.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: I have no idea.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: I have no idea please.

- c. Internal customers (employees' satisfaction).

Participant: Next question please.

- d. External Customers satisfaction

Participant: No idea.

- e. Learning and growth (Employee skills and knowledge)

Participant: Next question please.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: IT has influenced the teaching and learning process for the employees in this organisation.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: The IT systems must be timely serviced to avert frequent breakdowns.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: No question for you Mr. Ogwu.

**Researcher:** Thank you

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### **Participant 32**

**Researcher:** Good day Sir, how are you today?

Participant: I am doing great, thank you. Please how may I be of assistance to you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, we can.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I cannot point exactly the challenges in my department.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes please.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: It give great speed of delivery and reduce costs.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Communication through IT made it easy by eliminating the need to meet up with clients by travelling long distance.

c. Internal customers (employees' satisfaction).

Participant: One tend to cover a lot of tasks with ease and good speed. I would say great.

d. External Customers satisfaction

Participant: Great as well.

e. Learning and growth (Employee skills and knowledge)

Participant: Various trainings are given frequently for developing employee's skills.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, please.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Frequent and repetition of trainings.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: No question Sir.

**Researcher:** Thank you.

Transcription of Interviews:

Interview Blueprint

### **Participant 33**

**Researcher:** Good day Ma'am, how are you today?

Participant: I am fine, thank you, how may I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: None.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Lots of challenges ranging from employees' lack of skills and knowledge to poor IT facility.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Reduced costs.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Productivity has been enhanced because of IT.

- c. Internal customers (employees' satisfaction).

Participant: Some of us in this department still lack knowledge and skills, so I can't really say if we are satisfied with IT usage.

- d. External Customers satisfaction

Participant: Our customers are very well satisfied to an extent.

- e. Learning and growth (Employee skills and knowledge)

Participant: I have no idea.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Extensive practical must be provided by employers.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: No questions for you Sir.

**Researcher:** Thank you.

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### **Participant 34**

**Researcher:** Good day Ma, how are you today?

Participant: I am well, thank you. How can I be of assistance?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: Yes.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Please kindly move to the next question.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: We have had increased cashflow in the utilisation of IT.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Please move on to the next question.

c. Internal customers (employees' satisfaction).

Participant: Next question please.

d. External Customers satisfaction

Participant: No comment.

e. Learning and growth (Employee skills and knowledge)

Participant: The employees in this department have good acquired some relevant skills in IT.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: No.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: SMEs should endeavour to have the apps that are relevant to business and popular to customers.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

**Participant 35**

**Researcher:** Good day. How are you today?

Participant: I am okay, thank you. How may I be of assistance to you concerning your study?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes sir, please proceed.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.



Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes. We make use of Kahoot. Kahoot is a teaching App which promotes game-based learning to increase student engagement.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I did stipulate that the students feel distant from the classroom. Obviously being physically present isn't the same as learning online so the challenge is that the students are more proactive and productive when they're live in the classroom compared to when learning online.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: The usage of IT in our education platform has increased profitability. This pandemic has made it possible for us to switch completely to online classes and it has reduced costs.

b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: The internal business process is great because we have been productive in reaching our audience (students), just as long as there are no hiccups with the internet. We rarely experience internet disruptions.

c. Internal customers (employees' satisfaction).

Participant: The employees are satisfied to some extent. Every tutor would like to have the physical presence of their students and establish a good communication and eye contact as those are part of the elements of being in the classroom.

d. External Customers satisfaction

Participant: The students are not entirely satisfied with the online attendance because they feel distant to some extent.

e. Learning and growth (Employee skills and knowledge)

Participant: The employees have been able to improve on IT skills and knowledge because the only option that we have at the moment is to engage in online teaching.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Yes. IT innovations has brought about a huge intake of students into our academy because the students are at ease to learn from the comfort of their homes rather than travel a distant.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Awareness campaign relating to the particular needs of an SME must be done by IT providers. Costs of acquiring such IT innovations should also be reviewed to encourage full participation by SMEs.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: Not at all.

**Researcher:** Thank you.

Transcription of Interviews:

Interview Blueprint

**Participant 36**

**Researcher:** Good day sir, how are you today?

Participant: I am fine, thank you. How can I assist you Sir?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, you can proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, we may.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM (X)
- Mobile Money Systems (X)
- Human Resources Management Systems HRM (X)
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc. (X)

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Our students prefer onsite learning; some of them cannot afford the costs incurred in setting up an IT working system for their classes. Also, they find it cheaper to transport themselves to class

rather than connect online; they find online learning distracting without motivation. In my opinion, I think every service being rendered by SMEs should have a relation to IT innovations in one way or another.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: There has been increased cash flows and ROI due to the usage of IT innovations in this academy.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our productivity level has decreased because we switched to online tutoring since the pandemic.

- c. Internal customers (employees' satisfaction).

Participant: The employees are so far satisfied with their job and input.

- d. External Customers satisfaction.

Participant: The students are not completely satisfied in the sense that they now engage in online learning.

- e. Learning and growth (Employee skills and knowledge)

Participant: Employees' skills and growth have improved because online tutoring entails usage of IT innovations to reach out to the students.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Yes. We have been able to monitor and assess the input of our tutors via the tracking system tools for online learning. We do have real-time monitoring app while they're teaching.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Easy accessibility to SMEs in terms of costs, maintenance, and public awareness.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: No question Mr. Ogwu.

**Researcher:** Thank you

Transcription of Interviews:

## Interview Blueprint

### Participant 37

**Researcher:** Good day sir, how are you today?

Participant: I am doing great, thank you. How may I assist you and what is your study about?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, you may proceed.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes please.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: My students have their opinions that they do better when physically present at the classrooms than being online so it's a challenge for us at the moment.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: No comment.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: No comment.

- c. Internal customers (employees' satisfaction).

Participant: No idea.

- d. External Customers satisfaction

Participant: Next question please.

- e. Learning and growth (Employee skills and knowledge)

Participant: No comment.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: No.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: It's expensive to have a full working IT innovations system at the workplace so costs of acquiring them should be reduced or subsidised according to the financial prowess of an SME.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: None Sir.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### Participant 38

**Researcher:** Good day Ma'am, how are you doing today?

Participant: I am fine, thank you. Please how can I be of assistance?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: Yes, but not all the time.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc (X)
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: My students do complain that they tend to enjoy the classes more onsite compared to them learning online.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Please move to the next question.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: No comment.

- c. Internal customers (employees' satisfaction).

Participant: I am an employee so I can speak for myself that I'm satisfied with what I do here.

- d. External Customers satisfaction

Participant: The customers derive satisfaction from services we render to them.

- e. Learning and growth (Employee skills and knowledge)

Participant: I have learnt a lot in this organisation, and I've improved as well on the usage of IT since I have been here.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: No.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes please.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: There need to be a form of interaction between friends and family on the usage of IT; people need to realise that it's not a hectic or daunting task to learn how to actually use IT.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: No question for you Mr. Ogwu.

**Researcher:** Thank you.

Transcription of Interviews:



## Interview Blueprint

### Participant 39

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you, how may I assist you on your study?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes sir, please go ahead.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes. I make use of Pico Scope which is an electrical mechanical pressure NVH CAN and Flex ray testing.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes of course.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: My organisation is faced with the challenges of sending the employees to IT training specifically on the operations of the company.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes please.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: We have had positive outcome in our financial performance as a result of IT usage.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: I can admit that the internal business process is highly encouraging.

- c. Internal customers (employees' satisfaction).

Participant: Employees derive satisfaction when our customers are happy.

- d. External Customers satisfaction.

Participant: Customers are satisfied.

- e. Learning and growth (Employee skills and knowledge)

Participant: We encourage personal skills development amongst the employees.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: No.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Social awareness campaign with emphasis on the importance or gains of IT innovations to a particular SME.

**Researcher:** Thank you so much for your time. This is the end of the interview. Before I go, do you have any question for me?

Participant: None.

**Researcher:** Thank you

Transcription of Interviews:

## Interview Blueprint

### Participant 40

**Researcher:** Good day Ma'am, how are you today?

Participant: I am good, thank you, and how do you do?

**Researcher:** I am doing great, thanks. My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes please.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: This organisation cannot afford to send her employees for IT training. We asked and was told that due to the business operations, the cost involved for training is huge.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Next question please.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: We have been experiencing massive productivity.

- c. Internal customers (employees' satisfaction).

Participant: We love what we do, and we are satisfied.

- d. External Customers satisfaction.

Participant: Our customers testify of the peak services we render to them.

- e. Learning and growth (Employee skills and knowledge)

Participant: The learning and growth amongst us has increased rapidly.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Yes. Speed, accuracy, and minimal margins for mechanical errors.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: My suggestion or recommendation would be reduction or regulation of costs involved in IT procurement and maintenance.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

## Interview Blueprint

### Participant 41

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you, how can I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: Our manager did tell us that it costs an arm and a leg to send us to trainings so for now we are not able to get the maximum training required which makes us to rely on a particular staff to finish our tasks.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: No idea at this time.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our productivity is thus far good.

- c. Internal customers (employees' satisfaction).

Participant: Next question please.

- d. External Customers satisfaction

Participant: No comment.

- e. Learning and growth (Employee skills and knowledge)

Participant: IT innovations has been able to sharpen our skills while learning on the job.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: No.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Reduction of IT costs and maintenance costs.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

## Interview Blueprint

### Participant 42

**Researcher:** Good day sir, how are you today?

Participant: I am fine, thank you, how may I be of assistance on your study?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, sir you may proceed.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please do proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we can.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: We do not have a well-established IT department and therefore we are unable to send staff for IT trainings due to the cost of acquiring and also to maintain them.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Information Technology is a major driver for us in terms of financial performance, etc.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our internal business processes is configured to match our level of productivity.

- c. Internal customers (employees' satisfaction).

Participant: Excellent services attracts happy customers, and Information Technology has given us a platform to achieve that.

- d. External Customers satisfaction

Participant: Customers are satisfied with our services, but we do give rooms for improvement if they are not satisfied.

- e. Learning and growth (Employee skills and knowledge)

Participant: Our employees learn on the job because we indulge in a specialised services of auto power steering.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Yes! IT has been helping us in this organisation. In my capacity as the CEO, I am proactive, and I engage vigorously in the latest IT trends to apply it to what we offer in this organisation. Without IT, my proactiveness would not yield any good result.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Every given SME should take note of what works for their business operations and adopt them. It is costly to want to acquire every type of IT innovation. So therefore, business owners ought to know what works for their type of business.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question Mr. Ogwu.



**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 43**

**Researcher:** Good day, how are you today?

Participant: I am fine, thank you, how can I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: We do not get to be trained in this organisation due to cost and time constraints.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: This question will likely be answered by the manager, but I can say we do have lots of clients.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Our productivity level is superb.

- c. Internal customers (employees' satisfaction).

Participant: We really do love our job.

- d. External Customers satisfaction

Participant: Customers are pretty cool with the kind of services we render.

- e. Learning and growth (Employee skills and knowledge)

Participant: We teach ourselves if there are new skills that anyone of us has learnt.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: IT innovations has brought oneness, synergy and synchronisation to this organisation.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Decent amount of sensitisation on IT innovations should be carried out. Advantages of IT innovations for SMEs should also be highlighted and cost to be evaluated or reviewed.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

**Participant 44**

**Researcher:** Good day Ma'am, how are you today?

Participant: I am good, thank you, and how do you do?

**Researcher:** I am doing great, thanks. My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please proceed.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes please.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: We do not have all the necessary pharmaceutical equipment due to costs of purchasing, training employees and setting them up.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay, thank you.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: No idea.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: May you please move to the next question.

- c. Internal customers (employees' satisfaction).

Participant: We love our job as pharmacists.

- d. External Customers satisfaction.

Participant: Customers speak highly of our services.

- e. Learning and growth (Employee skills and knowledge)

Participant: Great and impressive.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: Yes. Team dynamics, we interact amongst ourselves if we learnt or discovered something new in IT.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Prices should be regulated to accommodate SMEs.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: None.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 45**

**Researcher:** Good day Sir, how are you today?

Participant: I am fine, thank you. How can I be of assistance and what is your study about? Researcher: My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Okay, please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: okay, thank you.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I cannot comment on this.

**Researcher:** Shall we proceed to **section C** which is the influence of IT innovations on the performance of your organisation?

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: No comment.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Bring up the next question please.

- c. Internal customers (employees' satisfaction).

Participant: I have no idea.

- d. External Customers satisfaction

Participant: I can only say satisfactory on the aspect of our customers.

- e. Learning and growth (Employee skills and knowledge)

Participant: I have no idea.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we may.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Public awareness of IT innovations should be done to draw the attention of SMEs on the benefits involved by mere adoption of the technological advancement.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### Participant 46

**Researcher:** Good day, how are you doing?

Participant: I am doing great, thanks.

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, please proceed.

**Researcher:** I will begin with **section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Please go ahead.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging (X)
- Search Engine Optimisation (X)
- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: Yes, we do make use of electronic prescribing of controlled substances (EPCS) and prescription drug monitoring programs (PDMPs).

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes please.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I cannot mention anything for now.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: Yes please.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: Our financial performance and increased cash flows is stable.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: Operational effectiveness in this pharmacy has brought about increased productivity, all due to IT innovations.

- c. Internal customers (employees' satisfaction).

Participant: Our employees are pharmaceutical personnel so that entails they are happy or satisfied with their job.

- d. External Customers satisfaction

Participant: We ensure maximum satisfaction of every customer because they're the reason our business remains alive.

- e. Learning and growth (Employee skills and knowledge)

Participant: We encourage growth and idea sharing amongst the employees. Knowledge withheld cannot advance an organisation, but knowledge shared is power.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: IT innovations has ensured that the process of electronic prescribing of controlled substances (EPCS) and prescription drug monitoring programs (PDMPs) are properly implemented.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?



Participant: Training, retraining of employees or IT users should be constantly done while also reviewing the cost of acquisition and servicing of IT equipment.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: None sir.

**Researcher:** Thank you

Transcription of Interviews:

Interview Blueprint

### **Participant 47**

**Researcher:** Good day ma'am, how are you today?

Participant: I am fine, thank you, how can I assist you?

**Researcher:** My name is Kingsley Ogwu and thank you for your time, for participating in this research, and for this interview. This study is about the influence of Information Technology innovations on the performance of organisations. This study will not only be beneficial to me, but to SME employees and organisations in South Africa by adding to knowledge on what has been studied before. If you are not comfortable in answering a particular question, please do not answer and if at any point you feel the need to withdraw from this conversation, you are free to do so as well. Should I proceed with the interview?

Participant: Yes, Mr Ogwu you may proceed with the interview.

**Researcher:** I will begin with **Section A** which requires your personal information, computer knowledge skills which you may tick on an answer of your choice as you go through the questionnaire.

Participant: Please continue.

**Researcher:** Shall we proceed to **section B** which is the extent of adoption and use of IT innovations by your organisation?

Participant: Yes, please.

**Researcher:** Does your organisation have a well-established IT department? Please note that you can respond with yes or no.

Participant: No.

**Researcher:** Do employees receive IT training? Please respond with either yes, no, or yes, but not all the time.

Participant: No.

**Researcher:** Do you make use of any of the following IT innovations for day-to-day business in your organisation? Please indicate which one to tick.

- Word Processing (X)
- Email (X)
- Inventory Management System (X)
- WhatsApp or Instant Messaging
- Search Engine Optimisation (X)

- Social Media e.g., Facebook, Twitter, Instagram, YouTube (X)
- Customer Relationship Management Systems CRM
- Mobile Money Systems (X)
- Human Resources Management Systems HRM
- Web Conferencing Systems e.g., Skype, Zoom, Google Hangouts etc
- Collaboration tools/Task Management Systems e.g., Monday.com, Flowdock, Slack, etc.

**Researcher:** Are you using any other IT innovations not mentioned above in your day-to-day business? If yes! Please indicate and explain.

Participant: No.

**Researcher:** Shall we proceed to **section C** on the challenges your organisation is facing in the adoption of IT innovations?

Participant: Yes, we may.

**Researcher:** What challenges if any is your organisation experiencing in the adoption of IT innovations for use in day-to-day business?

Participant: I would say that sophisticated pharmaceutical equipment is our challenge. Hence, variables such as staff training costs, maintenance, and software licencing can be addressed to curb the barriers of IT adoption at the workplace.

**Researcher:** Shall we proceed to **section D** which is the influence of IT innovations on the performance of your organisation?

Participant: okay.

**Researcher:** Please explain how and to what extent IT innovations are influencing your organisation if any in each of the following areas.

- a. Financial performance (profitability, reduced costs, increased cash flows, return on investment)

Participant: No comment.

- b. Internal business processes (efficiency, operational effectiveness, productivity).

Participant: IT has made our internal operations impressive.

- c. Internal customers (employees' satisfaction).

Participant: Next question please.

- d. External Customers satisfaction

Participant: I have nothing to contribute here.

- e. Learning and growth (Employee skills and knowledge)

Participant: It has been encouraging despite the challenges of ICT in this organisation.

**Researcher:** Are there other areas IT innovations are influencing your organisation? Please explain.

Participant: None.

**Researcher:** Shall we proceed to **section E** which is your recommendations for improving the adoption and use of IT innovations?

Participant: Yes, we can.

**Researcher:** In your opinion what should be done to improve the adoption and use of IT innovations by SMEs?

Participant: Global price regulation of IT innovations should be done to encourage SMEs to fully adopt.

**Researcher:** Thank you so much for your time as this is the end of the interview. Before I go, do you have any question for me?

Participant: No question, thank you Mr. Ogwu.

**Researcher:** Thank you

**APPENDIX F**  
**TURNITIN REPORT**

The Influence of Information Technology Innovations on the Performance of Organisations: A Case Study of Selected SMEs in the Western Cape

ORIGINALITY REPORT

<b>12%</b>	<b>9%</b>	<b>4%</b>	<b>6%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

<b>1</b>	<a href="http://hdl.handle.net">hdl.handle.net</a> Internet Source	<b>2%</b>
<b>2</b>	<a href="http://uir.unisa.ac.za">uir.unisa.ac.za</a> Internet Source	<b>1%</b>
<b>3</b>	Submitted to Mancosa Student Paper	<b>&lt;1%</b>
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<b>5</b>	Submitted to Cape Peninsula University of Technology Student Paper	<b>&lt;1%</b>
<b>6</b>	Edzai Kademeteme, Hossana Twinomurinzi. "The ineffectiveness of technology adoption models in the 4IR era: A case of SMEs in South Africa", 2019 Open Innovations (OI), 2019 Publication	<b>&lt;1%</b>