Understanding factors influencing consumer adoption of digital banking Financial Technology (Fintech) services payment solutions in South African Urban and Township Consumers

By

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ABSTRACT

In the 4th industrial revolution with advancements in technology, many developing countries struggle with the adoption of technology in everyday life. This struggle can be attributed to the lack of universal access to technology, mobile penetration, including data and digital literacy. This project explored the factors that influence urban and township consumers to adopt digital banking Financial Technology (Fintech) services in Gauteng, South Africa.

In this research study, the literature review unpacks arguments with the conceptualisation of Fintech, as well as some factors that influence adoption in certain countries. To address the research question and sub research questions, a qualitative research method was used. Semi-structured interviews were conducted, and further probing allowed participants to elaborate when needed. With their permission, the participants' responses were recorded.

The major findings have been on how much culture and context influenced participants to either embrace or reject Fintech services. This study revealed that factors such as performance expectancy, social influence, perceived usefulness, trust in security, and convenience significantly influence urban and township consumers' adoption of Fintech digital banking services. An interesting finding is the contradiction that some participants had about the level of trust in security that Fintech services provide for consumers, with many singling out being hacked or spammed. Additionally, some participants perceived no difference between urban and township consumers based on their location and context.

The recommendation is to increase awareness and education about Fintech and its benefits, accessibility solutions should be enhanced, trust and security should be fostered, and the local context should be understood.

Key words: Financial Technology (Fintech), Adoption, Digital banking services, UTAUT-TAM, Urban and Township

ABBREVIATIONS

Fintech	Financial Technology
IOT	Internet of Things
IT	Information Technology
M-Pesa	Mobile Pesa (money)
NFC	Near Field Communication
OMI	Old Mutual Insure
RDP	Reconstruction and Development Programme
SMS	Short Messaging system
SSA	Sub-Saharan Africa
TAM	Technology Adoption
TAM2	Technology Adoption extension
TPB	Theory of planned behaviour
TRA	Theory of reasoned Action
UTAUT	The Unified Theory of Acceptance and Use of Technology
UTAUT-TAM	Unified Theory of Acceptance and Use of Technology Adoption Model

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DEDICATION

DEDICATED TO ALL WORKING STUDENTS, ESPECIALLY WORKING LIKE MYSELF, WHO STILL MANAGE TO REMAIN DILIGENT AND SUCCESSFULLY PURSUE FORMAL STUDIES.

TABLE OF CONTENTS

TABLE OF FIGURES

LIST OF TABLES

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 Introduction

This research evaluated factors influencing consumer adoption of digital banking Financial Technology (Fintech) services by urban and township consumers. The research project starts with a brief introduction and background. Concepts used to conceptualise this research can be found in section 1.1 and section 1.2 and a specific and detailed discussion of these two sections can be found in Chapter Two: Literature review. Fintech has become a pertinent topic of discussion for many academics; however, little is known on what its adoption has been like in South Africa, especially for township consumers.

Given the importance of banks in the financial system, it is vital to understand the risks and opportunities that Fintech creates for banks. It is also important to factor in the impact of Fintech on the core offerings of financial intermediaries together and its role in the everyday ecosystems of financial services (Murinde, et al, 2022). With Fintech threatening to change the role of traditional banks, it is seen as both a threat and an opportunity (Coetzee, 2019). As such, digital technology offers South African banks a way they can deal with the economic socio-economic inequalities. The banks in South Africa have adopted a calculated outlook to Fintech services adoption as a result of being essentially risk-averse (Coetzee, 2019).

With the growth of Fintech start-ups, BigTech and neobanks or challenger banks have managed to enter the financial services sector as new competitors; operating and providing end to end financial offerings similar to established brick and mortar banks. This encompasses but not limited to segments such as payments, lending, enterprise financial management, crowdfunding, enterprise technologies for financial institutions, trading and capital markets, insurance, personal financial management, wealth management and digital banking (Murinde, et al, 2022). The disruption that comes with digital technology is redefining how the banks do their business. It is for this reason that Fintech companies or start-ups have and continue to penetrate the banking market, providing cheaper transactions as well as innovative products that are convenient for consumers (Coetzee, 2019). However, there are still gaps in consumer adoption of digital banking when it comes to urban and township consumers in South Africa.

The discussion addresses factors influencing consumer adoption of digital banking Fintech services by urban and township Consumers. Notwithstanding the value of digital banking Fintech services, I acknowledge their differences, the complex and intricate system between urban and township consumers, ultimately affecting consumer adoption of digital banking Fintech services by urban and township consumers.

One such variable is the contextual aspect of consumer adoption of digital banking Fintech services by urban and township consumers. According to Vogels (2021), consumers residing in urban areas tend to have a higher digital adoption than those living in township/rural areas which tend to be lower. In the post-Covid-19 pandemic world, consumers were seen moving towards using mobile wallets and contactless digital payment and, as such, Fintech services have been expanding in urban areas and adapting in township/rural areas, which will show growth for Fintech in these markets (Gadde, 2022). Fintech is an upcoming leading competitor to the brick-and-mortar banking. Fintech is expected to end the impediment of the urban and township financial divide and enable financial inclusion by offering easy and accessible payments, and other digital services. Countries such India have seen a tremendous growth with over a billion-dollar investments in start-ups in the first half of 2020 (KPMG 2020). Interestingly, township populations are slowly catching on to using digital financial services.

A number of Fintech companies have taken advantage of new technologies to deliver a range of banking services that suit consumers. They provide easy online access, sending and receiving money globally, investment, mobile payment solutions and crowdfunding. Fintech disruption is now widely documented in academic literature. Of particular concern is that little research that focuses on consumer adoption of digital banking Fintech services, particularly in urban and township consumers, has been explored. Thus, this research contributes to knowledge in this area and presents an informed understanding of factors influencing consumer adoption of digital banking Fintech services by urban and township consumers (Kavuri & Milne, 2019). According to Kavuri and Milne (2019), more research is required to help understand customer attitude. There is not much research studies globally and across all demographics. Unfortunately there is a dearth of studies in the comparison of the adoption Fintech digital banking services.

1.2 **Background of the Study**

Academics and researchers have been working on closing the number of gaps that exist and the changing payments mechanism between consumer adoption of digital banking Fintech services and ease of accessing financial solutions to the unbanked. Fintech remains under researched, and more discussion is needed for it to be established as a research and academic area (Kavuri & Milne, 2019). There is room to do further research on adoption of Fintech banking services particularly within the context of emerging South African market as compared to other countries (Slazus & Bick, 2022). However, predictions show that in a few years South Africa’s Fintech adoption rate is bound to increase (Ernst & Young [EY], 2016).

1.3 **Problem statement**

The purpose of this research was to understand factors that influence consumer adoption of digital banking Financial Technology (Fintech) services by urban and township consumers.

Fintech (financial services providers based on digital technology) is revolutionising the way in which financial services are conducted, with increased convenience and lower operational cost being its key differentiator (as cited in Zalan & Toufaily, 2017). According to Lee and Low (2018), Fintech gained prominence around 2014, taking advantage of the failure and the slow innovation in traditional banking despite growth and advancements of technology and capital. According to Lee and Low (2018), Fintech services have been popular in countries like China because of the need to service individuals excluded by the mainstream banking systems. Regardless of the adoption of Fintech, the poor within the traditional financial banking system continue to be marginalisation in the rendering of services (Lee & Low, 2018). In addition, the growth in the penetration of mobile phones and the internet has brought opportunities across financial services. Unlike traditional banking which limits customers to physical branch visits or costly telephonic account services, Fintech and mobile banking (m-banking) empower customers to use digitised platforms to access financial services at any time, from any place (Slazus & Bick, 2022).

The experts within the industry are more anticipating Fintech digital banking services will include a strong building of an important customer relationships in the future according to Basel Committee on Banking Supervision (2018, as cited in Slazus & Bick, 2022). Wang et al. (2006, as cited in Slazus & Bick, 2022) argue that although digitally active consumers adoption of Fintech is higher in markets that are developing and developed. If this is the case in developed and developing markets, I wondered what is taking place in underdeveloped markets such as townships. According to EY (2016, cited in (Slazus & Bick,2022) the reason for the high adoption rate is because of two reasons. One, Fintech companies are targeting digitally and technologically savvy consumers instant of targeting uninterested consumers. Two, Fintech companies are targeting the financially underserved consumers in emerging countries which are equally higher (EY, 2016, as cited by Slazus & Bick, 2022). The research gaps outlined above, especially the disparities cited in Slazus and Bick (2022) raise important questions about understanding factors that influence consumer adoption of digital banking Fintech services by urban and township consumers.

1.4 The purpose of the study

The purpose of the study was twofold. Firstly, to critically explore factors that influence consumer adoption of digital banking Fintech services by urban and township consumers. Secondly, to gain insight into whether urban and township consumers are amenable to adopting digital banking services.

1.5 The objectives of the study

The aligned objectives of the study can be summarised as follows:

a) To explore possible factors that shape urban and township consumers' adoption of Fintech digital banking services;
b) To understand the nature of Fintech digital banking services in South Africa's urban and township settings;
c) To explore whether the consumers' context influences adoption of Fintech digital banking services;
d) To examine whether urban and township consumers have a high level of efficacy to adopting digital banking services.

1.6 The research questions

What factors influence Fintech digital banking services' adoption by urban and township consumers?

Sub-questions

a) What possible factors shape urban and township consumers' adoption of Fintech digital banking services?
b) What is the nature of Fintech digital banking services in South Africa's urban and township settings?
c) How does the consumers' context influence the adoption of Fintech digital banking services?
d) Do urban and township consumers have a high level of efficacy for adopting digital banking services?

1.7 The rationale of the study

The rationale of the study is based on professional and personal experience within the banking sector. With an increase in digital adoption within the banking industry curiosity arose in attempting to understand how urban and township consumers are using Fintech digital banking services. The reason for conducting this study was based on the assumption that urban consumers are more likely to adopt Fintech digital banking services as opposed to the township and rural consumers.

Through conducting this study, the assumption is that if there is a better understanding of the factors influencing urban and township consumers, Fintech digital banking services can be tailored and personalised to meet consumer needs. In addition, this study attempted to provide insight into the development of Fintech digital banking services suitable for a greater South African market seeing that there is a growth in the usage and accessibility of mobile devices such as smartphones and tablets.

1.8 **Delimitations of the study**

The study was limited to understanding money transfer and payment Fintech services used in South Africa. For township consumers, the focus was on participants residing in Diepsloot and for urban consumers the focus was on participants within the Old Mutual Insure 2022-2023 graduate intake. The study utilised a qualitative research approach and semi-structured individual interviews to collect the data as well as pre-screening questionnaires. Data were analysed using the systematic data analysis approach. Data on stokvels and loan sharks were not included in this study.

1.9 **Definition of terms**

Consumer: Is defined as an individual or business that consumes or uses goods and services.

Consumer Context: The primary location and space the consumer resides in and conducts their transactions.

Digital Banking: Is a process that includes turnkey marketing, customer service, onboarding, savings, loans, deposits, investments and payments using a digital process.

Digital Adoption: Is the process of adapting, using and learning new technology so that you can take advantage of its full potential for sustained periods.

Digital Payments: Payment which is executed digitally. Includes payment using a mobile phone or operated online. This does not include card Payment Money Transfer (Sahay et al., 2020).

Fintech: The technology-enabled innovation in financial services that could result in new business models, application, process or products with an associated material effect on the provision of financial services.

Graduate Programmes: Graduate programmes are specifically designed for those who have completed their undergraduate degree and are below the age of 35. These programmes are structured to help provide valuable support and skills needed to build graduates' confidence in the workplace.

Mobile Money: Financial services offered to its clients by a mobile network operator which allows clients to transact and store value on a mobile phone.

Old Mutual Insure: Provides insurance services to personal, commercial and corporate clients in South Africa. Old Mutual Insure also has operations in Namibia, Botswana, Zimbabwe and Nigeria under the Old Mutual brand (Old Mutual Insure, 2022).

Township: Refers to a town within the outskirts of the city centre, often recognised by its uniform houses and lack of services and infrastructure (Mahajan, 2014).

Traditional banking: Refers to institutions within the financial industry that are licensed to make loans, receive deposits from and to individuals and businesses. The financial services offering by certain banks extend to currency exchange , safe deposit boxes and wealth management among others (Damen, 2021).

Urban: Is usually defined as a centre of a metropolitan and business hub where an economically active population resides. It is often well developed with better service delivery, such as water and electricity.

1.10 Assumptions

One of the assumptions made was that urban consumers are more likely to adopt Fintech digital banking services as opposed to township and rural consumers. As will be explored further in the discussion chapter, some township consumers had knowledge of Fintech services and used them, irrespective of the data and internet challenges. The other assumption was that consumers are less likely to adopt digital banking Fintech services due to a lack of digital literacy and digital accessibility. The is a perceived view that Fintech digital banking services make money transfer and payments cheaper and simpler than traditional banking. Another assumption was that participants will answer truthfully and honestly which, as a researcher, I cannot control.

1.11 Chapter Outline

Chapter One: This chapter provides the introduction, background of the study, purpose of the study, problem statement, research questions and research objectives. It highlights the general issues and background with regard to adoption of Fintech digital banking.

Chapter Two: In this chapter the conceptualisation of key concepts of the study is discussed as well as the literature regarding Fintech services internationally and locally. In addition, the chapter discusses the factors influencing the adoption of digital banking Fintech services locally and internationally.

Chapter Three: This chapter outlines the theoretical and conceptual framework, the theoretical and conceptual frameworks are discussed with regard to how they relate to the study and how the study is framed within various technological adoption models.

Chapter Four: This chapter outlines the research methodology that was used to theorise, collect, and analyse the research findings. This chapter also addresses ethical consideration issues and population selection and sampling.

Chapter Five: In the chapter the findings and data are presented and the findings and themes that emerged from the participants’ responses are discussed.

Chapter Six: This chapter provides a deeper discussion of the findings outlined in chapter five and provides links with literature and the theories discussed in chapter 3

Chapter Seven: This chapter is the conclusion and recommendations of what can be done to address issues of Fintech services. The study shares some key highlights and lessons from the research.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

This chapter attempts to present a detailed literature review on consumer discussion of a theoretical framework that this study was grounded on. This part of the section of this chapter outlines a brief background on digital banking Fintech services. Secondly, there is a review of literature on the consumer context influencing consumer adoption of Fintech digital banking services in relation to South Africa's urban and township consumers. Thirdly, there is a review of literature on the findings of previous studies, identification of gaps in previous studies and how effective these practices are in adoption of digital banking of Fintech services. This chapter concludes with a review of literature relating to factors influencing consumer adoption of digital banking Fintech services in urban and township consumers.

2.2. Definition of topic and background discussion

Fintech is a mixture of two words "financial" and "technology". It describes new technology that intend to automate and improve the use and delivery of financial products and services (Damen, 2021). According to Arner et al. (2015), Fintech refers to financial solutions delivered through the use of technology solutions. For Dwivedi et al., (2019), Fintech is a combination of innovation and technology to deliver financial products and services to stakeholders. Buckley and Webster's (2016) view are the same with the above definitions that Fintech delivers financial products and services via the marriage of technological platforms and innovative business models. In contrast to the definitions discussed, EY (2019) defines Fintech companies as organisations that combine innovative business models and technology to enable, enhance and disrupt financial services.

Freedman (2006) describes Fintech as a building system that models, values and processes financial products such as bonds, stocks, contracts, and money. In 2016, Schueffel described Fintech as a new financial industry that applies technology to improve financial activities. The above definition resonates well with the study as the term can be associated with start-ups and companies that are providing highly innovative and pioneering financial services or products. These financial services often use information technology (IT) and newly developing technologies such as near field communication (NFC) (Wibowo & Sumiyat, 2021).

2.2.1. Conceptualisation of Fintech

Fintech refers to the use of software and digital platforms to deliver financial services to the consumer (Badruddin, 2018). Ryu (2018) states that researchers such as Sweeney (2015) and Kuo Chuen and Teo (2015) have defined Fintech as products or services in financial service companies that were created on highly innovative and disruptive service technologies. As cited in Slazus & Bick, 2022:44), Fintech is broadly defined as "technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services".

2.2.2. Traditional banking systems

Fintech differs from traditional banking because of the risks associated with the lack of regulation. Traditional banking involves financial institutions that are licensed to be the official transactors in the financial services sector (Damen, 2021). Fintech companies are considered the banks' biggest competitors because they can cater for the unbanked as well as the lower income household that ordinarily would not qualify to be served by the traditional banks. Consumers are increasingly demanding faster, better, and more easily and accessible financial solution that meets their instant needs and on the go without waiting at bank branches (Damen, 2021). When it comes to technological advancement and innovation, Fintech companies are rising to the occasion and the brick-and-mortar banks are increasingly falling behind. At the moment, even though Fintech digital banking services may have a small share of wallet in the world banking system, we have seen consumers increased preference in using these services as a substitute to traditional banks (Damen, 2021).

2.2.3. Contextualisation of Urban and Township settings in South Africa

According to Mahajan (2014), countries are made up of two distinct spatial realms: one rural, one urban. However, in South Africa the landscape is different; the country has townships and informal settlements. Under apartheid, a township as defined as a town within the outskirts of the city centre often recognised by their uniform houses and lack of services and infrastructure (Mahajan, 2014). However, even after 29 years of democracy in South Africa, little progress has been made to develop townships. Despite some townships having been improved they often consist of government houses such as RDP houses and have limited service delivery (Mahajan, 2014). Access to financial services for township residents remains a challenge; people in townships are more likely to be amongst the unbanked population as opposed to their urban counterparts.

Diepsloot is an example of a township in the Johannesburg metropolitan area and vividly demonstrates the realities of the beautiful country of ours when it comes to our economy and options available to township residents. Diepsloot is a perfect example of a township in South African economy characterised by overwhelming levels of crime and violence, high rate of unemployment, inequality, and lack of access to basic public services (Mahajan, 2014). According to Mahajan (2014), in Diepsloot the average age group is 25 years. This was a reason Diepsloot was considered a useful place to study, as it provided insight into understanding how townships adopt digital banking Fintech services.

According to the World Bank (2013), in as much as South Africa represents a fairly inclusive financial sector relative to other African and developing countries, the overall number masks the increased inequality in the adoption of Fintech digital services that mirror the country’s dual economy. It is reported that 60% of adults residing in urban areas have a formal bank account, 66% of the adults in non-township urban areas do so, compared to 54% of adults in townships. Furthermore, adult population in townships are more likely to be underbanked as compared to adults in non-township urban areas (Mahajan, 2014). In order to situate the discussion above, a theoretical framework and conceptual framework that explored various technology adoption models from the Theory of Reasoned Action (TRA) to the Unified Theory of Acceptance and Use of Technology (UTAUT) (commonly known as UTAUT-TAM) models were used to provide the framework and structure to the study.

2.3. Summary of the Theoretical Framework

This study was informed by the Technology Adoption Model (TAM) and The Unified Theory of Acceptance and Use of Technology (UTAUT), commonly known as the UTAUT-TAM model. However, for purposes of this discussion, a brief outline of the history of how the theory emerged is discussed in detail in Chapter Three. These models are listed below but will be discussed further in the next chapter.

a) Theory of Reasoned Action (TRA)
b) Technology Adoption Model 2 (TAM2)
c) The Unified Theory of Acceptance and Use of Technology (UTAUT)
d) Theory of Planned Behaviour (TPB)

The above are the various technological adoption models that have been used to understand consumer adoption of various technologies since Bagozzi (1982) and the combined UTAUT-TAM model by Khalilzadeh et al. (2017). In the following section I discuss the factors that influence consumers to adopt Fintech digital banking services.

2.3.1 Propositions

Based on the theoretical framework above these are the three propositions that emerge from the study:

a) Exploring how the culture and social influences affect the adoption of Fintech digital banking services.
b) Exploring the consumers’ context influencing adoption of Fintech digital banking.
c) Understanding the perceptions, beliefs and resultant needs, of consumers that impact the adoption of Fintech digital banking services.

2.4. What are the factors influencing Fintech digital banking services' adoption by urban and township consumers?

There are several factors that can influence Fintech digital banking services' adoption by urban and township consumers that can be explored, such as perceived usefulness, trust from the security perspective, digital literacy, convenience, and social influence. These have positive and significant impacts on the consumers' attitude towards adopting Fintech digital banking services. These factors are explored further in the analytical framework.

2.4.1 Factors influencing Fintech Digital Banking Services

In terms of perceived usefulness, a good African example can be found in Kenya. Here the Fintech digital banking services use an SMS-based application to transfer money within Kenya and other African countries; this is known as M-Pesa (Chigada & Hirschfelder, 2017). The name M-Pesa is comes from two words: M denotes *Mobile* and *Pesa* means money in Swahilli (Chigada & Hirschfelder, 2017). According to Chigada and Hirschfelder (2017), the target market is the unbanked; M-Pesa enables digital transaction without physically having to visit a banking institution.

Considering that most of Kenya's population are farmers who live in the rural/township community and are subjected to long distances to the nearest banking institution, the options to move cash are uncertain and risky. M-Pesa helps with the transfer and safe storage of money. The major economic benefit of M-Pesa is attributed to the perceived increased security of subscribers, more especially amongst the poor community members. M-Pesa is reported as one of the most tremendous mobile money projects to have originated in sub-Saharan Africa particularly in Kenya's (Bengelstorff, 2015); Jack & Suri, 2011, as cited in Chigada & Hirschfelder, 2017).

Zimbabwe launched an SSA EcoCash, a mobile money transfer system in 2011, which made it possible for its users to receive money from more than 50 international countries and territories (Dann, 2014, as cited in Chigada & Hirschfelder, 2017). Zimbabwe's EcoCash has been reported that EcoCash is the main source mobile money transaction system in Zimbabwe and is marked as a second success story after

Kenya's M-Pesa (Econet, 2016; Leach, 2014, as cited in Chigada & Hirschfelder, 2017).

Although the version of M-Pesa mobile money transfer system was successful in Kenya and Zimbabwe, the project was a huge failure in South Africa (Tshabalala, 2015). This could have been because the service was structured around Kenya's untapped and unbanked market customer requirements which made it easy to send money between consumers via cellular phone. The cost to transact was significantly cheaper than the traditional banks. In South Africa it could have failed because the banks already cater for low income and unbanked customer offerings.

According to Kandpal and Mehrotra (2019), although India has a large population, literature suggests that it is still behind when it comes to Fintech digital. Some of the factors influencing Fintech adoption are social class inequalities, access to the internet, poor connectivity and the cost of data, and poor penetration due to the large number of rural communities (Kandpal & Mehrotra, 2019).

2.4.2 Adoption of Fintech digital banking services

According to EY (2016), cited in (Slazus & Bick, 2022), it is expected that the adoption of Fintech digital banking services will increase to a global average of 52%, with the highest expected use in developing markets such as Singapore, and South Africa and Mexico. Fintech digital banking services adoption has increase, from 16% in 2015, this was the year in which the first Fintech Adoption Index was published, 33% in 2017, and increased to 64% in 2019. More people are now familiar with Fintech digital banking services, including the nonadopters. Across the globe, it is reported that 96% of consumers know of at least one alternative Fintech digital banking service available to assist them make payments and transfer money (EY, 2019). The global adoption rate of Fintech services has surpassed 64%, with China and India leading the growth at 87% (EY, 2019). There is a rise in the number of Fintech consumers, with a selective adoption of Fintech services. Despite this growth in Fintech services, success is limited with 50% global adoption with money transfer and payment services driving the increase (EY, 2019). This study investigated the key drivers for consumer perception of adoption financial technology. Rogers (1983, as cited in EY, 2019) argues that the biggest accomplishment in adoption of any technology is generally dependent on the eagerness by consumers to adopt and use the technological innovation.

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The differentiator for digitally savvy consumers was attitude and perception whilst those that are less digitally savvy was social influence, attitude, and perception, age and gender are considered as important in Fintech (Boonsiritomachai & Pitchayadejanant, 2017, as cited in EY, 2019; Venkatesh & Morris, 2000). There is an increased number of Fintech service providers in the world offering better Fintech solutions to consumers, however the adoption of Fintech digital banking services remains low. Therefore, it is crucial to conduct research to understand the factors affecting Fintech digital banking adoption by consumers (EY, 2019).

2.4.3 Proposition 1

Given the above discussion, in this study, I investigated how culture and social factors impact the uptake of Fintech digital banking services. Today's consumers seek quick, convenient, and secure services, leading to a growing interest in Fintech options over traditional banking. This shift is causing disruption in the financial sector, making it crucial for Fintech providers to consider social influence in promoting their services. Community figures like pastors, families, and friends hold significant sway in encouraging Fintech adoption.

2.5. How does the consumers' context influence adoption of Fintech digital banking services?

Gomber et al., 2017; Xiao & Tao, 2020, Sangwan et al., 2019; Vives, 2017; as cited in Elsaid, 2021 argue that the welfare of consumers may be improved through the Fintech digital banking solutions by providing fast, convenience, easy access, and cheap financial services solutions. Elsaid, 2021 further highlight that Fintech companies have introduced a breakthrough in new technology that can possibly improve productivity, lower cost banking services within the financial digital banking services industry. Fintech digital banking services companies provides product and services that the brick and mortar banking used to offer less efficiently by expanding the reach in support of financial inclusion (Anagnostopoulos, 2018, as cited in Elsaid, 2021). Fintech companies offer efficient cost structure, innovative digital financial services, payments, and investment solutions to clients (Gomber et al., 2017, Navaretti et al., 2017 as cited in Elsaid, 2021). Teixeira and Piechota (2019) reiterate that shifting consumer behaviour and demand is the real disruptor with only technology by itself it cannot be disruptive.

2.5.1. Consumer Contexts

According to Kandpal and Mehrotra (2019), Fintech services companies are currently disrupting business and consumers are moving on a daily basis. This is why we have seen a growth in the past few years in terms of worldwide global Fintech investments. For Fintech to capture market they have a duty to explore and address the factors that contribute and hamper Fintech digital banking services consumer adoption. Their competitive edge will mainly lie in the understanding of what drives the consumer adoption. Dapp (2014) and Wentzel et al. (2013), (cited in Slazus & Bick, 2022), highlights that the security of transactions remain key components when it comes to consumer confidence and trust when it comes to their finances. According to the research conducted by Dapp (2014) and Zhou (2011, as cited in Slazus & Bick, 2022), argue that Fintech companies that clients that offers lasting and credible data security assurance are more likely to obtain an improved growth and returns. Taking into account the inequalities that exist in South Africa and the dearth of technology literacy, its government acknowledges the role of financial services in closing the inequality gap and the foundation of policy development in this area (Wentzel, 2013). Potential benefits include cost reduction, increased access, and growth in financial inclusion. It is key to understand how financial services enable the participation of the poor and underserved in the economy (Wentzel, 2013).

2.5.2. Proposition 2

The study aimed to examine how consumers' circumstances impact the adoption of Fintech digital banking. Fintech's growth can be enhanced by prioritizing a customer-centric approach, understanding the needs of customers in urban and township settings. Involving customers in decision-making is crucial for future success. As highlighted earlier, security is a primary concern for consumers; therefore, maintaining high safety standards in financial institutions is imperative and shouldn't be overlooked.

2.6. What is the nature of Fintech digital banking services in South Africa's urban and township settings?

Fintech companies have disrupted the traditional banking space, as they offer technology-driven solutions that are more appealing to all consumers. This includes innovative and more cost-effective channels, in the delivery of products and services. (He et al., 2017, cited in Coetzee, 2019). The consumer adoption of Fintech digital services in South Africa is heavily influenced by the socio-economic challenges often marked by unemployment, inequality and poverty. According to Coetzee (2019), Fintech has the potential to remedy the situation with traditional banks having the biggest advantage. Unfortunately banks in the country have not taken the lead as compared their counterparts in other countries. Traditional banks have the biggest advantage in that they sit with a wealth of consumer data. This has opened the market to new entrants who are taking advantage of the untapped market (Camarate & Brinckmann, 2017, as cited in Coetzee, 2019).

Fintech is going nowhere; it present both opportunities and threats to the brick-and-mortar banking. The economy of South Africa, technology can play a role in addressing the challenges because large parts of the population lack technological literacy and are not able to access the internet due to their remote rural location. The challenge is that trust in the mass market tends to be characterised by personal interaction with the bank (Coetzee, 2019). According to Coetzee (2019), the lack of face-to-face interaction is one of the reasons many consumers are hesitant use these financial services in townships in South Africa as there is a lack of trust for digital services. However, there is evidence as argued by Coetzee (2019) that the millennials are more likely to use digital financial services as opposed to the older generations. The success of this adoption will depend on the availability of the internet and smart devices becoming both cheaper and more accessible to the majority of the population. Technological literacy remains the biggest challenge for township consumers.

2.6.1 Nature of Fintech digital banking services in South Africa

The technological landscape has revolutionised the way we know banking. It is changing exponentially; disruption does not discriminate against industry or country is unprecedented (Schwab, 2015). For this reason, technological disruptors in the Fintech digital banking services have reconstructed the way the banks operate resulting in some change on its offerings (Weichert, 2017, as cited in Coetzee, 2019).

Given the pervasive freely available information on the Internet, consumers are better informed product and services offering resulting in exclusive demands of customised or personalised digital banking solutions. This is prevalent among younger consumers who are more digitally savvy. The gen Z and millennials more especially display a distinctive consumption expectation and buying patterns as oppose to older generations such as the baby boomers (KPMG, 2017, as cited in Coetzee, 2019).

According to Deloitte (2017), the financial services industry is currently undergoing a massive overhaul of change and unpredictability. Despite these changes, Fintech has become a key disrupter for banked and unbanked industries (Deloitte, 2017). One of the ways traditional banking can advance and gain more consumers is to enter into partnerships or ventures with Fintech companies. However, one of the issues with the Fintech market is that it is still highly unregulated; thus, this is a barrier for traditional bankers to adopt (McWaters & Galaski 2017; Weichert, 2017, as cited in Coetzee, 2019).

2.6.2 Proposition 3

The study focused on investigating how perceptions, beliefs, and resulting consumer needs can impact the adoption of Fintech digital banking services in urban and township settings. It's clear that the growth potential for Fintech in South Africa is closely tied to its township consumers.

2.7. Conclusion

From the above literature review it can be concluded that there are big disparities in terms of Fintech digital banking services' adoption globally, but more so in developing countries like South Africa. Surprisingly, Kenya and Zimbabwe have some of the best-known Fintech digital banking services in Africa. As can be seen from the propositions above, some of the biggest gaps that were explored were in Fintech digital banking services' adoption, and the influence of culture and social aspects in South Africa.

Table 1: Summary of Literature Review on Fintech and UTAUT-TAM Model

1. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340.
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3. Khalilzadeh, J., Ozturk, A. B., & Bilgihan, A. (2017). Security-related factors in extended UTAUT model for NFC based mobile payment in the restaurant industry. Computers in Human Behavior, 70, 460-474.
4. Liu, Z., Ben, S., & Zhang, R. (2019). Factors affecting consumers' mobile payment behavior: A meta-analysis. Electronic Commerce Research, 19, 575-601.
5. Tomić, N., Kalinić, Z., & Todorović, V. (2022). Using the UTAUT model to analyze user intention to accept electronic payment systems in Serbia. Portuguese Economic Journal, 22(2), 251-270.
6. Urus, S. T., Othman, I. W., Syed, S. N. F., Nazri, M., & Kurniasari, F. (2022). Fintech Payment Services among Fresh Graduates: The UTAUT Model Perspective.
7. Yang, T., & Zhang, X. (2022). FinTech adoption and financial inclusion: Evidence from household consumption in China. Journal of Banking & Finance, 145, 106668.
8. Young, D.; Young, J. Technology adoption: Impact of FinTech on financial inclusion of low-income households
9. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425-478.

CHAPTER THREE

THEORETICAL AND CONCEPTUAL FRAMEWORK

3.1. Theoretical Framework

In this section I discuss the theoretical framework and the conceptual framework that was used in the study, starting with the history of where the technology adoption models began and where they are currently.

a) Theory of Reasoned Action (TRA)

Fishbein and Ajzen's theoretical framework was initially developed in 1975. According to Bagozzi (1982), this theoretical framework was developed with the assumption that consumers are always rational when it comes to implications of their actions (Asongu et al., 2018). Unfortunately, this was the shortfall of this theory, and led to the theorisation of the Technology Adoption Model (TAM) in 1986.

b) Technology Adoption Model (TAM)

The Technology Adoption Model (TAM) and extension of TRA was developed by Davis in 1986 (Davis et al., 1989) and derived from two theories: the Theory of Reasoned Action by Fishbein and Ajzen, as well as the Theory of Planned Behaviour by Ajzen in 1977 and 1991 respectively. According to Asongu et al. (2018), this theory assumes that the adoption process of a given technology by a customer can be explained by the customer's voluntary intention to accept and use the technology. Some of the concerns of TAM in adopting technology in consumer context are as follows:

- The model is not suitable to an organisational context
- It does not fully support adoption of technology in a consumer context
- It does not consider the cost implication of technology
- It does not consider the impact of social influence / context
- The model ignores trust on the user's acceptance of technology

c) Technology Adoption Model (TAM2)

Due to the shortcomings of TAM, TAM extension (TAM2) was proposed by Venkatesh and Davis (2000). They incorporated the two processes: the social influence and cognitive instrumental processes. There are, however, limitations to this theory; it fails to consider the cost of technology and only addresses technology acceptance within the organisational context, not the broader context. This then led to the development of the Unified Theory of Acceptance and Use of Technology (UTAUT).

d) The Unified Theory of Acceptance and Use of Technology (UTAUT)

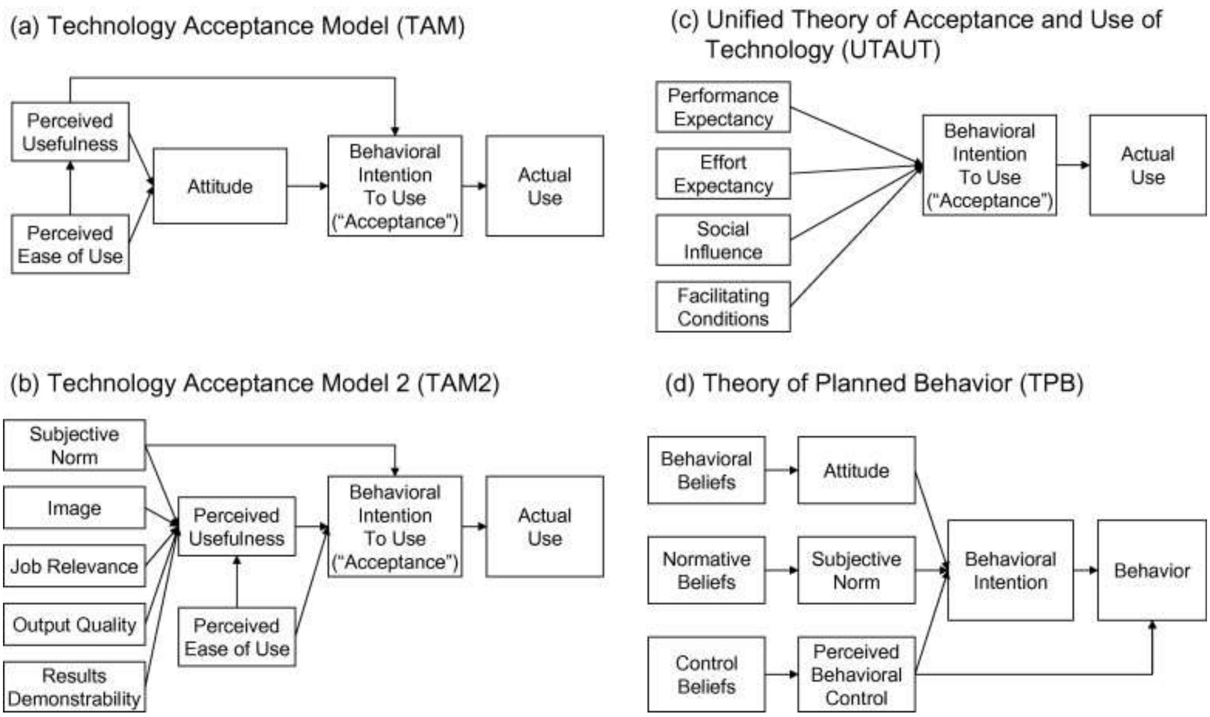
This theory was developed by Venkatesh in 2003 (cited in Venkatesh et al., 2012) as a comprehensive synthesis of prior technology acceptance research, to predict behavioural intention to adopt technology and technology use. According to Venkatesh et al. (2012), UTAUT has four key constructs, namely, performance expectancy, effort expectancy, social influence and facilitation condition that influence behavioural intention to adopt a technology and/or actually use a technology. However, the following are indirect determinants not included in UTAUT— attitude towards usage, self-efficacy and anxiety.

Performance expectancy is defined as the degree to which using a technology will provide benefits to the customer; effort expectancy is the degree of ease associated with consumers' use of technology; and social influence is the extent to which consumers perceive that important others believe that they should use a particular technology. Lastly, facilitation condition refers to consumer perception of the resources and support available to perform a behaviour (Venkatesh et al., 2012). The fundamental difference between the UTAUT model and the other models is that the UTAUT model integrates four constructs, namely, experience, age, gender and voluntariness of use. In addition, the model expands on the different attitudes expressed by consumers related to the four constructs above. However, this model has received a lot of criticism in that it is complex for research (Bagozzi, 2007, cited in Tomić et al., 2022).

e) Theory of Planned Behaviour (TPB)

The Theory of planned behaviour (TPB) was pioneered by Ajzen in 1991 and has extended the TRA by articulating the absence of differences between customers who have a conscious control over their actions from those that do not (Asongu et al., 2018). This theory is similar to TRA and is useful in modelling and in providing valuable insights into behavioural intention; however, it lacks user intention concerning the acceptance of technology (Cruz et al., 2010). Figure 1 is an overview outlining various theories of technology adoption and the constructs within each model.

Figure 1: *Overview outlining various theories of technology adoption.*



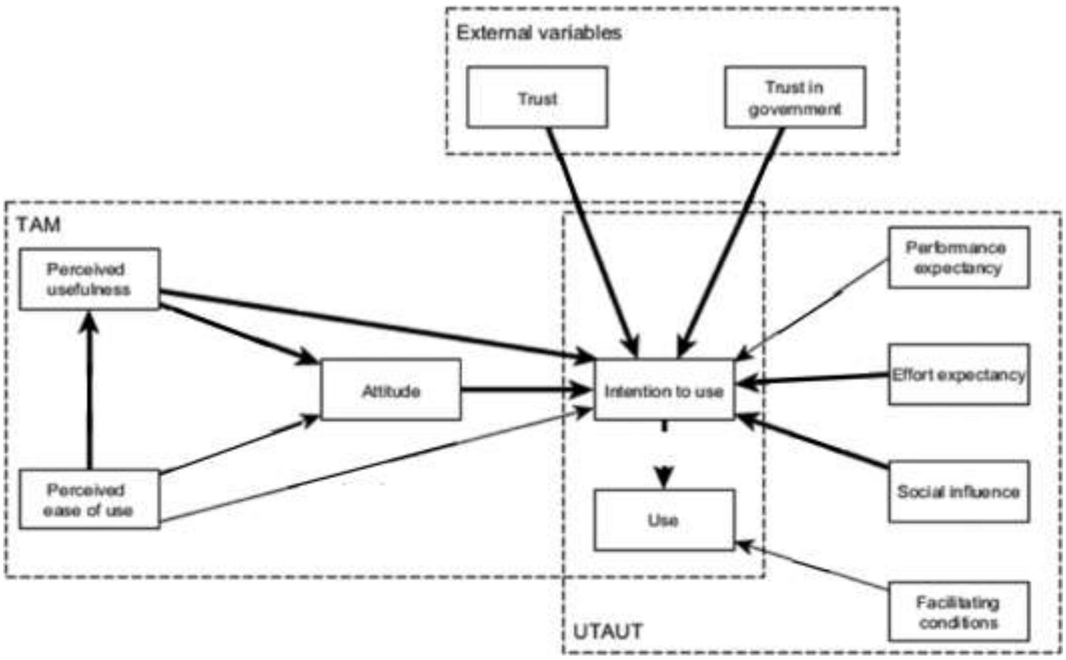
Given the different theories outlined above on the theory of accepting and adopting technology, this study utilised a combination of TAM and UTAUT.

UTAUT has been widely used, several studies support the validity of the framework, revealing that it accounts for approximately 70% variance in behavioural intention to adopt technology and approximately 50% variance in technology use, since the original UTAUT publication (Venkatesh & Zhang, 2010). However, as technology development has been rapidly growing, there has been a need for users to have a high degree of protection when using technology. Thus a framework that can understand the determinants of near field communication (NFC) which include mobile-based payments, technology that allows two devices to talk to each other when they are close together such as cell phones, and payment terminals (using your phone at a pay point) bring me to the Conceptual Framework below.

3.2. Conceptual Framework

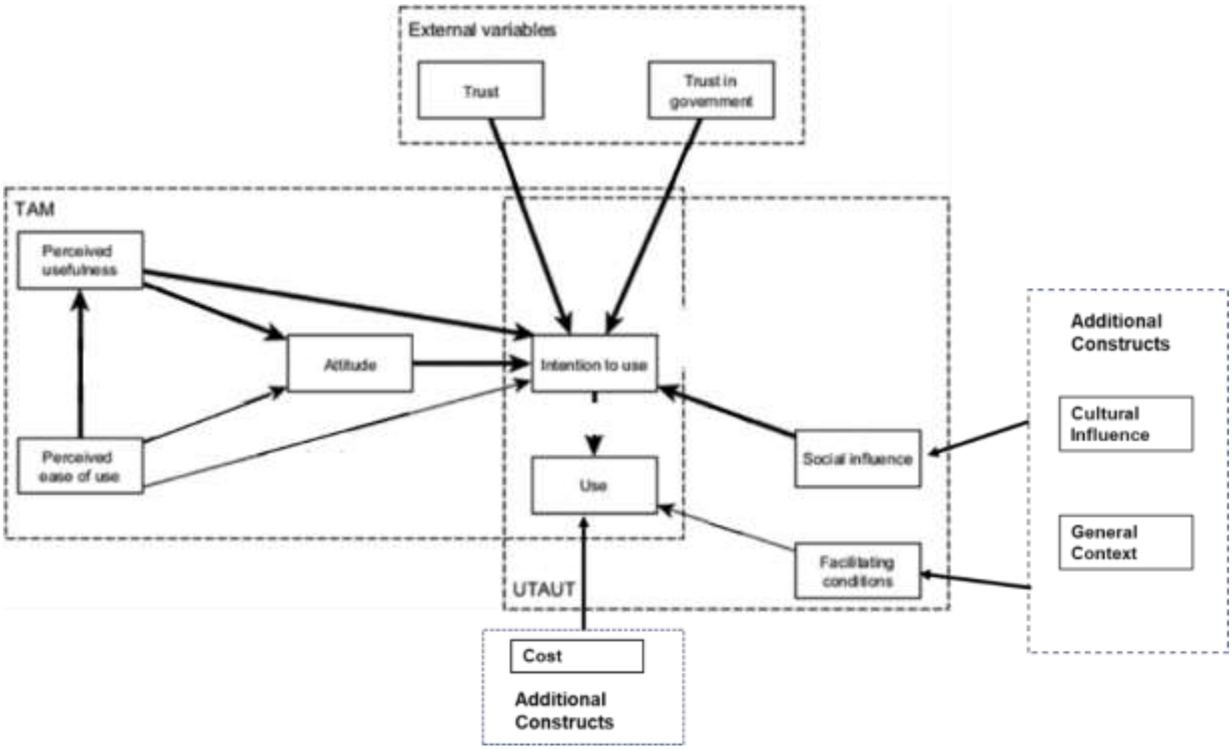
Khalilzadeh et al. (2017) proposed that UTAUT and TAM be integrated and incorporate security-related constructs such as perceived risk and security and trust. The UTAUT-TAM model expands on the three constructs above. Perceived risk focuses on uncertainty, and the expectation of losses associated with using mobile payments. This construct attempts to understand the perceived risk consumers might have about using Fintech digital services. Perceived security can be defined as the degree to which the consumer believes that the mobile payment services they are using are secure. Finally, the trust construct has to do with the fact that vendors meet consumer expectations, which in turn shows a high degree of trust for the service. According to Khalilzadeh et al. (2017), this model has 20% greater predictability than the original UTAUT model and also understands the behavioural intention to adopt the technology.

Figure 2: *UTAUT-TAM model*



For purposes of this study from the UTAUT-TAM figure 2 above only the Social influence, Facilitating condition, perceived usefulness, perceived ease of use, attitude, intention to use were used. In this study context, culture and cost played a crucial role in understanding the adoption of technology within Fintech digital services. The hope was that the study will elaborate and extend the two theories on how organisational context and general context where consumers are situated play a significant role in the adoption of technology. Also, the cultural influence impacted consumers' adoption of technology. Finally, I cannot talk about adoption and use of technology without factoring in the costs to consumers on this uptake, so for this study issues of cost were also explored. Below is the model which was used for this study.

Figure 3: *Reconstruction of the UTAUT-TAM Model*



3.4. Linking prepositions to the theory

Proposition 1:

The investigation into how culture and social factors affect the adoption of Fintech digital banking services aligns with the social influence component of the Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT posits that social factors, including social influence, significantly impact an individual's intention to use and adopt technology. The discussion regarding the influence of community figures such as pastors, families, and friends resonates with UTAUT's emphasis on the role of social influencers in shaping technology adoption behaviors.

Additionally, the Technology Adoption Model (TAM) could be connected to the study's findings. TAM suggests that perceived usefulness and perceived ease of use are pivotal in determining an individual's attitude towards using technology. The emphasis on consumers seeking quick, convenient, and secure services aligns with TAM's focus on the perceived benefits and ease of use that drive technology adoption.

Proposition 2:

The focus on examining how consumers' circumstances impact Fintech adoption reflects the contextual factors outlined in the UTAUT model. UTAUT emphasizes that external variables, such as individual circumstances, significantly influence the adoption of technology. Understanding the needs of customers in different settings, including urban and township areas, resonates with the importance of considering diverse contexts within the UTAUT framework.

Within the Technology Adoption Model (TAM), the study's emphasis on a customer-centric approach and the importance of involving customers in decision-making aligns with TAM's focus on the role of subjective norm and user involvement in shaping individuals' perceptions and attitudes towards technology adoption.

Proposition 3:

The investigation into perceptions, beliefs, and resulting consumer needs aligns with the UTAUT's emphasis on the role of performance expectancy and effort expectancy. UTAUT suggests that an individual's perception of the usefulness and ease of using technology significantly influences their behavioural intentions. The study's focus on understanding consumer needs and perceptions aligns with UTAUT's emphasis on these aspects in technology adoption.

The Technology Adoption Model (TAM) can also be connected to the study's findings. TAM suggests that an individual's perceptions and beliefs about a technology's usefulness and ease of use are critical factors influencing its adoption. The study's recognition of the importance of perceptions and beliefs in impacting Fintech adoption aligns with the TAM framework.

3.5 Context and Conclusion

The influence of contexts and investigation of consumer perceptions and beliefs and about the adoption of Fintech digital banking services were important in this study. Also, this study used the UTAUT-TAM model to explore and explicate how participants' adoption of Fintech digital banking services were influenced by factors such as culture, context, level of trust and feeling safe. The next chapter discusses the methodology and data collection methods that were used to collect the data for the study and the findings that emerged.

CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Contextual background of the Study

The context of the study was Diepsloot township and the Old Mutual Insure 2022-2023 graduate intake of 2022 in the suburbs in the Gauteng province.

4.2 Research Approach

There are different research approaches researchers can use to conduct their study. The broad categories of these approaches are the qualitative research approach, the quantitative research approach, and the mixed method approach. This study used the qualitative approach which is dependent on the research that occurs in the natural setting of the participants. The qualitative research approach is interested in understanding the meaning individuals or groups of people make in relation to a particular social problem (Creswell, 2014). The data are often collected at a participant's particular setting and often analysed using inductive approaches. Inductive data analysis focuses on extracting meaning from the participants' perspective to broader data themes. It is for the above reason this approach was appropriate for the study in order firstly to explore possible factors that shape urban and township consumers' adoption of Fintech digital banking services; secondly, to understand whether the consumers' context influences their adoption of Fintech digital banking services and, thirdly, to examine whether urban and township consumers have a high level of when adopting digital banking services.

4.3 Research design

In the qualitative research approach, there are various research designs that researchers can use to understand meaning derived from the data. For the purposes of this study, a phenomenological research design was used, which aims to describe the lived experiences of the individuals about the phenomenon (Creswell, 2014). This research design was interested in understanding several individuals who experience a similar phenomenon and interviews are an ideal data collection method. Hence, for the purposes of this study, a phenomenological research approach was utilised in order to unearth and describe factors influencing urban and township consumers' adoption of digital banking Fintech services.

4.4 Data collection methods

There are various data collection methods that can be used in the qualitative phenomenological research approach such as interviews, observations, document analysis, audio and visual material. For the purpose in this study, I primarily used semi-structured individual interviews. Semi-structured interviews were conducted using scheduled structured interviews and further probing questions during the interviews to allow participants to elaborate more when they wanted to. Furthermore, a recording of the participants' responses on a tape recorder helped to make the interviews comfortable and naturalistic allowing more time to listen and engage rather than spending time writing down participants' responses. Each participant was notified about the recording of the interview and a consent form and letter of participation was given to each participant detailing the importance of recording the interview session.

4.5 Population and sample

For the purpose of this study, purposeful sampling was found to be ideal. This is where participants are chosen because they have characteristics the researcher is looking for. According to Creswell (2014) qualitative methods are a collection of open-ended data, analysis of text and personal interpretation of the findings. In simple terms, this approach is used when a researcher is trying to gain an in-depth knowledge from the participants who have experiences about that particular topic. In this case it was important for the participants to have a basic understanding of digital banking Fintech services.

4.5.1 Population

The participants in this study were five consumers from an urban community and five from a township community within the Gauteng province. The consumers were selected based on the following criteria:

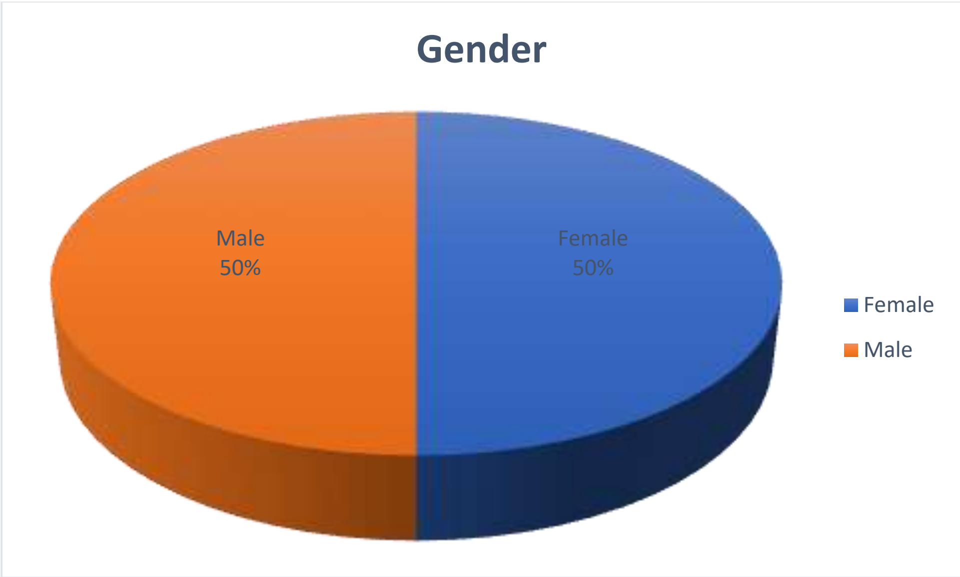
Table 2: A table representing the sample selection criteria.

Consumer	Urban and Township
Province	Gauteng
Area	Diepsloot and Old Mutual Insure 2022-2023 graduate intake
Additional Information	Basic understanding of digital banking Fintech services. (This was achieved by a pre-screening questionnaire.)

Table 3: Sample demographics

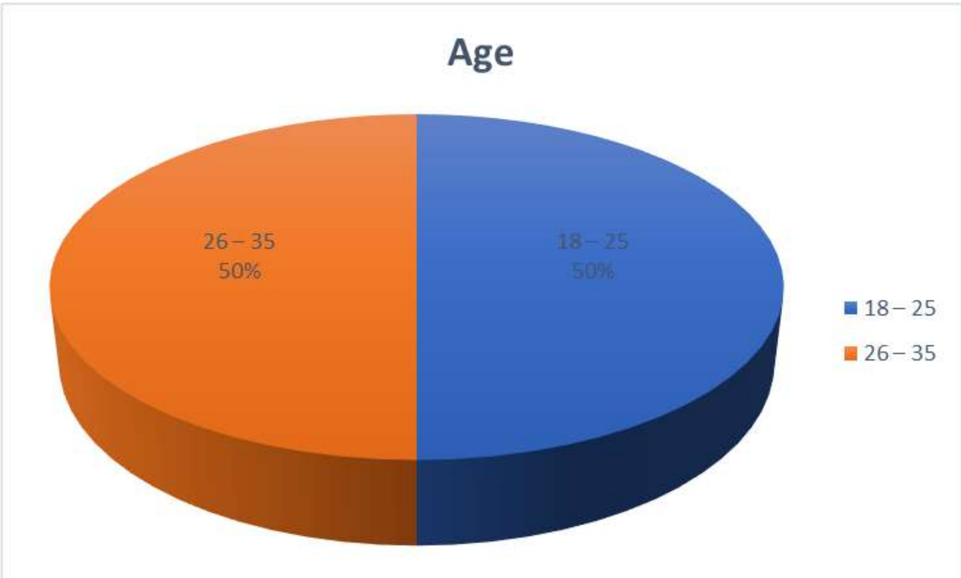
Gender	**Ethnicity**	**Age group**	**Employment status**	**Highest level of Education**	**Income**
Male	African	18 – 25	Employed	Degree	Greater than 10 001
Female	African	18 – 25	Employed	Postgraduate	Greater than 10 001
Female	African	18 – 25	Employed	Degree	Greater than 10 001
Male	African	26 – 35	Employed	Postgraduate	Greater than 10 001
Female	African	26 – 35	Employed	Degree	Greater than 10 001
Female	African	18 – 25	Employed	Degree	Greater than 10 001
Male	African	18 – 25	Employed	Degree	Greater than 10 001
Male	African	26 – 35	Employed	Postgraduate	Greater than 10 001
Male	African	26 – 35	Employed	Matric	Greater than 10 001
Female	African	26 – 35	Employed	Diploma	Greater than 10 001

Figure 4: Illustrating Gender Distribution



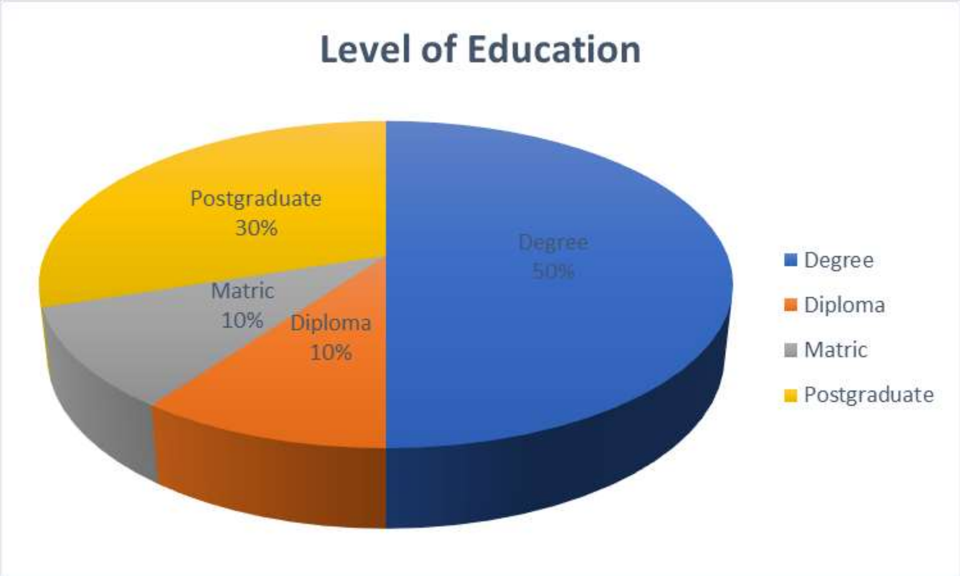
The gender distribution of participants, 50 percent of the participant classified themselves as males and the 50 percent as females, all African.

Figure 5: Illustrating age Distribution



50% of the respondents were in the 18 – 25 age group and 50 % within the 26 – 35 age group which was a nice balance.

Figure 6: Illustrating Level of Education Distribution



The figure above illustrated that 50% of the respondents had a bachelor's degree, 30% with post graduate qualification, 10% with Diploma and 10% with Grade 12/Matric.

4.5.2 Sample and sampling method

The rationale for choosing 10 consumers from urban and township settings was to have a balance during the data analysis process and the 10 consumers were chosen from within the urban and township settings and to understand how their experiences impact the adoption of digital banking Fintech services. The consumers were selected purposefully based on their understanding of digital banking Fintech services, hence the use of a selection questionnaire. The consumers were easily accessible as they were within familiar communities. Creswell (2014) argues that Sample adequacy in qualitative research relates to the suitableness of the sample composition and size. He further states that the samples in qualitative research tend to be small to support the depth of case-oriented analysis that is fundamental to this mode of inquiry Creswell (2014). Due to the limited time available to conduct the study, Diepsloot and Old Mutual Insure 2022-2023 graduate intake were the most convenient in that there were existing relationships in these community areas through churches and the current workplace environment.

4.6 The research instrument

The research instrument that was used to collect data was semi-structured individual face-to-face/virtual interviews. For the purpose of this research, in order to gain a better understanding of consumer perception, the interview questions were divided into two parts: part one was the introductory personal information and background in a questionnaire format to make the participants feel comfortable. Part two comprised the research questions geared to the understanding of consumer adoption of digital banking Fintech services in the urban and township context. (See Appendix 1 for the detailed interview schedule).

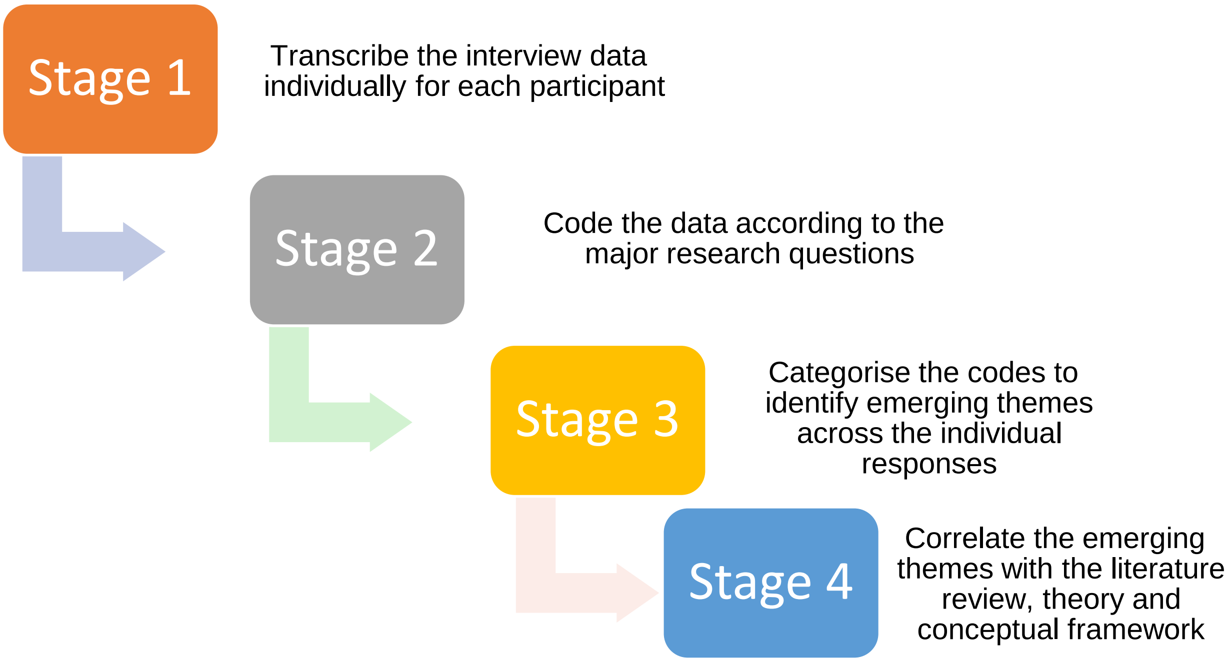
4.7 Procedure for data collection

The selection of participants was based on the preselection questionnaire. For urban consumers, the 2022-2023 graduate intake from the Old Mutual Insure (OMI), questionnaires were disseminated through the OMI learning coordinator. For township consumers, family and friends within Diepsloot targeted family and friends as well as community leaders in order to disseminate the questionnaire. Once the correct participants were identified through the questionnaire, they were then invited to participate in the semi-structured interviews. Prior to the interview session letters of consent, consenting to participate and information letter were shared and signed by the participants. (See Appendix 2 for an example letter).

4.8 Data Analysis and Findings

As a phenomenological research design was used, the data analysis focused on analysing significant statements from the participants and generated specific meaning gathered from the lived experience of the participants through themes and subthemes. Given that the study used a qualitative approach, the following process was used to analyse the data:

Figure 7: A figure showing the data analysis process.



The above data analysis process is known as a systematic analysis whereby the analysis begins with describing the data from the participants and building towards generalised themes. This is very important when analysing phenomenological research as the researcher is trying to understand the participant's meaning regarding a similar phenomenon. In this study, systematic analysis helped with describing and unpacking participant understanding of consumer adoption of digital banking Fintech services and the factors that influence this adoption.

4.9 Possible limitations and challenges of the study

The possible limitations and challenges for this study were participants having time to complete the semi-structured interview sessions. During the preselection questionnaires some participants had to be followed up to return the questionnaire on time. There were also some language barriers with participants as they struggled to express themselves in English.

4.10 Quality Assurance (Trustworthiness, Credibility and Confirmability)

According to Lincoln et al. (2011, cited in Creswell, 2014), for qualitative research to be deemed valid, the research study must be trustworthy, which means it must be credible, transferable, dependable and confirmable.

4.10.1 Credibility

When we discuss the credibility of a study, we look at how we can determine the accuracy of the qualitative findings. This process is sometimes known as member checking, whereby the final transcript is given to the participant to check if it is accurate. In this study credibility was maintained by using member checking—participants were encouraged to check and proofread their transcriptions (Creswell, 2014). In addition, the use of the audio tape during the interview was a good strategy to ensure the transcriptions were transcribed according to the audio recording to minimise errors and misrepresentation of the findings.

4.10.2 Transferability

To ensure transferability, rich and clear descriptions were used to describe the findings in order to provide a realistic and richer understanding of the setting and lived experiences of the participants. In so doing, it allows other researchers to transfer the findings and collected data, as it eliminates guessing and assumptions of the data findings (Lincoln et al., 2011, as cited in Creswell, 2014).

4.10.3 Dependability

Having data from urban and township participants allowed for the data to be dependable. Even though in this study mainly interviews were used, having 10 participants is considered a sufficiently large sample size, allowing for a greater response. Another way tried to show dependability was that the data collected were checked by my research supervisor to see that the data were consistent and correctly transcribed (Creswell, 2014). The interview questions remained the same and constant throughout the study for all participants, and similar conditions were applied to all the participants with regard to where the interviews were conducted when they were free and after work.

4.10.4 Confirmability

Confirmability was achieved by being open and honest as a researcher, acknowledging the biases we bring to the study and the research field. It is important the researcher build a relationship with the participants, assuring them that their knowledge is greatly valued and will contribute to the research field. Working closely with the research supervisor ensured that interviews were conducted efficiently, and constructive feedback and comments were provided.

4.11 Ethical considerations

Ethical considerations focus on four ethical principles when conducting interviews. DiCicco-Bloom and Crabtree (2006, p. 319) argue that the issues below are the main ethical issues all researchers must address.

a) reducing the risk of unanticipated harm;

b) protecting the interviewee's information;

c) effectively informing interviewees about the nature of the study, and

d) reducing the risk of exploitation.

In order to mitigate and address the four ethical issues above, ethical principles of informed consent, anonymity, confidentiality and the right to withdraw must be considered.

4.11.1 Informed consent

Before any research was conducted, participants were phoned and gave clear and explicit consent to be part of the study. This was to avoid issues pertaining to exploitation and ethical dilemmas. The participants were given informed consent forms, requesting them to partake in the study. One form was to consent to be in the study, while another form was to agree to be interviewed and for the interview to be audio-taped. In addition, participants were orientated and given research questions to read through before the interviews started.

4.11.2 Anonymity and Confidentiality

To ensure anonymity and to protect the identity of the participants, names of respondents can be replaced with pseudonyms to hide their original identities. According to Cohen et al. (2007) the essence of anonymity is that information provided by participants should in no way reveal their identity. Participants' privacy should be guaranteed, no matter how personal or sensitive the information is. In this study participants were given pseudonyms, "urban participant 1" for the first urban participant, in order to hide their original identities to ensure anonymity. In addition, all information shared in the interviews remains confidential and anonymous. One of the ways to ensure the data remains safe is that it is being kept in a password protected and USB flash drive. After three to five years the data will be deleted from the system. All participants were informed of all the information above.

4.11.3 Right to Withdraw

It was important for participants to know and be comfortable that they could withdraw from the study at any time they no longer wanted to participate. Participants were informed that they would not be held liable for withdrawing from the study. Finally, the study is not for personal gain or profit and can only be used for academic purposes such as journal articles. Individuals who partake in the study are anonymously acknowledged in this final report and this could lead to additional intervention or programmes being provided if necessary.

4.12 Conclusion

The use of the qualitative approach provides a framework for understanding factors influencing consumer adoption of digital banking Fintech services in urban and township consumers. The use of purposeful sampling provided the study with insights into consumer understanding of digital banking Fintech services. This insight can be used to develop and personalise digital banking Fintech services to a larger population in South Africa; however, it starts by unpacking consumers' lived experiences regarding digital banking Fintech services. Semi-structured interviews were used for data collection in the study, because these interviews provided me with an in-depth understanding through participants responding to specific research questions relating to digital banking Fintech services.

CHAPTER FIVE

REPRESENTATION OF FINDINGS

5.1 Introduction

This chapter presents the research findings and discussion of the main themes and sub-themes identified from the data. Systematic analysis was used to analyse the data that were collected using interviews. This analysis method involves systematically analysing and interpreting the textual data to identify patterns and meanings within the data set. The process of systematic analysis followed in this study included the following steps and is summarised below:

More specifically the entire analysis process can be summarised below:

1. **Defining the research questions:** I outlined the research questions based on the main aims and objectives of the study.
2. **Data collection:** Data were collected through the use of semi-structured interviews which were conducted using structured interview schedules.
3. **Coding:** I read through the data and coded it according to predetermined categories based on the research questions. Data were highlighted to indicate parts that related to different research questions.
4. **Reviewing and refining codes:** After coding the data, Ireviewed the codes for accuracy and to make sure that the codes reflected the data.
5. **Analysis:** I then analysed the data to identify patterns, themes and sub-themes that emerged. This also involved linking the data to the research questions.
6. **Interpretation:** After the patterns and themes had been identified, I then interpreted the data to develop deeper understanding of the phenomenon under investigation.

The results from qualitative data analysis are presented below. The main findings are categorised based on the main themes and sub-themes that emerged. Chapter Five focuses on data related to factors that influenced user adoption of Fintech services and themes and sub-themes that related to the resources to enable or constrain user adoption of Fintech services.

5.2. Research question a: What possible factors shape urban and township consumers' adoption of Fintech digital banking services?

Theme 1: User acceptance of technology

Qualitative data analysis revealed that factors such as performance expectancy, social influence, perceived usefulness, trust from the security perspective, and convenience significantly influence urban and township consumers' adoption of Fintech digital banking services. These factors are explored further in the sub-themes below.

5.2.1 Sub-themes

5.2.1.1 Performance expectancy

5.2.1.2 Social influence

5.2.1.3 Perceived usefulness

5.2.1.4 Trust

5.2.1.5 Convenience

5.2.1.1 Performance expectancy

Results from this study revealed that performance expectancy is one of the factors that shape urban and township consumers' adoption of Fintech digital banking services. Participants in this study highlighted the usefulness of Fintech digital banking services by expressing the following sentiments:

Township participant 1*:* *It's efficient rather than going to stand in the long queues of the banks. I can just do anything that is financially related, if I want to pay for my bills, I can just do it on my phone, sitting at the comfort of my own place and it's quick.*

Township participant 2: *Fintech digital banking services are faster; they are easy to use.*

Township participant 3: *They are delivering benefits to the consumers at an effective, competitive price as compared to traditional banks. They also increased access to digital and online payments for majority of consumers.*

Township participant 4: *I have always had an interest because of performance, they are faster; it makes the process easier.*

Urban participant 1: *They are very useful; people are now able to send money to other countries using Mukuru. You do not have to have a bank account for you to be able to receive or send money, you can withdraw your money from retail shops like Pick n Pay, Shoprite and Checkers etc*

Urban participant 2: *It makes the process of accessing financial services easy and quick.*

Urban participant 3: *They made it easier for me to receive and to send money, especially living at Res. Having to receive money from my mom's, it would be much easier than having to go and make withdrawals or having to go to Shoprite to take out money when I could literally just get into my bag and start using the services.*

Urban participant 4*:* *I would say it is cheaper and affordable, because if you go to town, you need transport money. If you have a smartphone, you just need to have Internet.*

These views show that the most common sentiments from both urban and township participants were that Fintech digital banking services are useful and make their lives easier, particularly when sending, and receiving money. The urban participants showed that even though they are in cities, it is their families based in the townships and rural areas that send them money as well. The sub-theme shows that irrespective of where one is located, they can appreciate the efficiency of Fintech digital banking services.

5.2.1.2 Social influence

Findings from this study also suggested that social influence is one of the factors that shape urban and township consumers' adoption of Fintech digital banking services.

Some of the participants mentioned how church leaders have influenced the adoption of Fintech digital banking services. They said:

Township participant 1: *Definitely it was the church that introduced me to SnapScan more than anyone….*

Township participant 2: *They have an influence in their community and people listen to what they have to say. I've seen more people moving from carrying their cash into doing EFTs or tapping or maybe swiping inside the church. So, I think they have a lot of influence in influencing their people or the people that they are leading because people respect them.*

Township participant 4: *Pastors play an important role; they have an influence over their people because they are trusted. Most people changed because of the level of crimes they were encouraged to migrate to using digital payment solutions such as YOCO or Ikhokha for tithes and offering from the churchgoers.*

Urban participant 2: *They play a huge role, in particular church leaders, they discourage cash and promotes the use of payment devices such as ikhokha, Yoco, Capitec Mobile card Machine, SnapScan etc. It makes it easier for us to pay for our tithes and offerings and it is safe. This promotes the adoption of digital banking Fintech services because we trust our church leaders*.

Urban participant 4: *Church leaders, that's actually an interesting one because at my church, when you give tithe, you can now even do it via EFT or Snap Scan. They are keeping up with times and all of these advancements you can now find out about in the church or religious place. They are informing and exposing people to all these different Fintech services that are available.*

One of the interesting findings about Fintech digital banking services is that they were prominent is a very untapped sector of our community which is churches. What was surprising about this sub-theme is that one would not consider churches as a place where Fintech digital banking services would be used, however, reflecting on the data it is inevitable that churches will start using Ikhokha, Yoco, and Snap Scan given the high risk of carrying cash from tithes and offering. It is through this sector that a number of our participants were introduced to the Fintech digital banking services. This sub-theme is one of the interesting findings of this study and possible future research could explore the extent that social influence such as churches could have on adoption of Fintech digital banking services. In addition to the social influence of the church community, below I explore the influence that friends and family can have on the adoption of Fintech digital banking services.

Highlighting the role of friends and family in influencing the adoption of Fintech digital banking services other participants stated:

Township participant 1*: Yes, I was influenced by friends to start using Fintech. I always feared that the bank might take my money, but friends shed some light on the benefits of using Fintech.*

Township participant 3: *Yes, I think they can, and they have influenced me. They have influenced me in the past; for example, online shopping. When I came this side through work from the township, I was not much of an online shopper, but because of the friends I was associated with, they were more into online shopping than I was. So, they've told me the benefit of doing things online rather than having to wait in long queues in a store. They have taught me how to be smart while doing shopping online and things like that. So yes, they influenced me.*

Township participant 4: *Yes, they do. I trust my family and friends, they will not mislead me. If they have used a certain service and they are happy with the experience, they always recommend and they are never wrong. Similarly, if they experience a bad service, they will not recommend,; they only recommend based on good experience.*

Urban participant 1: *The community usually hear about it from somebody they can relate to and somebody who is one of them, and then they'll be able to trust that person's recommendations, and suggestions. It will be easier for the people to trust that person and then they can be more encouraged to adopt it.*

Urban participant 2: *Family members and friends are also a contributing factor in exposing you to these services and that's often also where we learn a lot about things. When it's referred to by somebody we deem as credible or somebody who's quite reliable, then it's even easier to try Fintech services and then becoming a user*.

Urban participant 4: *They have had an influence, if there's a new Fintech innovation that a friend notifies me of, then I would appreciate them notifying me of it and then I will definitely look into it and do my own research on that. Definitely, yes.*

What is interesting is the power and trust the participants have in their family and friends in adopting the use of digital Fintech services. It is interesting that if a service is recommended by a friend or family member, participants seem to be receptive to adopting that particular service.

5.2.1.3 Perceived usefulness

Data analysis revealed that perceived usefulness is a significant factor that shapes urban and township consumers' adoption of Fintech digital banking services. These findings were informed by the following opinions expressed by the participants in this study:

Township participant 1: *They are faster, they are easy to use compared to like going to the branch and maybe just to update that limit or just need to close your card and stand in a queue for hours. It's easier to use the app instead of going straight to the bank. So, it makes that process easier and faster.*

Township participant 2: *Digital Fintech services are easier, faster. I like to use technology and prefer using technology rather than the manual process.*

Township participant 4: *I would say it is very useful, it's cheaper and affordable, because if you go to town, you need transport money. If you have a smartphone, you just need to have Internet.*

Urban participant 1: *It's faster, easier, safer and much cheaper. You do not have to deal with a rude employee at the bank*

Urban participant 2: *I think it provides convenience. It makes the process of accessing financial services easy and quick*.

Urban participant 3: *It's very easy for me, I don't have to stand in lines in order to get my bank statement, I don't have to go through a branch in order for me to opening a saving savings account. I can just do it over my phone, so that's what attracted me or made me use Fintech products.*

Urban participant 4: *It just making things a lot easier because I used to see how my parents would bank in a more traditional way and it does take quite a long time.*

Most of the participants used words such as "easier", "convenient", "cheaper", "faster" to symbolise how useful and effective Fintech digital services are to them.

5.2.1.4 Trust

Results from this study indicated that trust is another factor that influences behavioural intention to adopt Fintech services. Participants indicated that trust from a security perspective is very important and significantly determines the behavioural intention to adopt Fintech services. To that effect, participants expressed the following perspectives:

Township participant 1: *I do believe it's safe, reason being, at least from my experience, is that every time I close my banking application, it does automatically log me off.*

Township participant 2*:* *I trust the Fintech platforms; nowadays cyber security has improved to protect the users. I believe the traditional banks they use paperwork. Because you are dealing with a human there is a chance that your documents can be misplaced and your user information be exposed. If it's on these papers, if it's online, then it is safe. With proper cyber security the risk is there but minimal.*

Township participant 3: *I do believe it's safe, that one reason why so many people are using it.*

Township participant 4: *The digital platforms are safe; they have put some cyber security measures in place to protect the consumers from cyber-attacks. As long as you do not click on phishing email or sharing your credentials with anyone, for now, I would say it is safe.*

Urban participant 1: *I think these apps are protected and I think they use technology to protect user info. Otherwise, people will not use them.*

Urban participant 2: *Even though traditional banks seem to be safer because you are face to face with the consultant and you get to do things physically rather than doing them on the cloud or online. So, I feel that they are both safe, but traditional is* *safer and can be more trusted because obviously you with the consultant face to face. And yeah, it's there for you can be 100% sure that you are not being scammed by any poster or anything like that.*

Urban participant 3: *For me, it's trust, and convenience of having to transact at any given time. You are able to safely pay your monthly bills, send money, receive money at a blink of an eye.*

Urban participant 4: *I actually trust Fintech more. And the reason why I say that is that I can see what's happening and at any given time and I have access to all the information at any given time just to see what's happening; whereas in a traditional system, you'd have to physically go or call. Even after calling the even back then.*

What was interesting about the participants' responses was that trust was equalled to the sense of digital safety that Fintech digital banking services offer. There was a high level of trust that these services have good cyber security systems in place to ensure that your transactions are safe, and information is protected. This is despite possible scams and hacking that might occur.

5.2.1.5 Convenience

Results also revealed that convenience is a critical factor that influences behavioural intention. This study found that convenience is a key factor that determines urban and township consumers' adoption of Fintech digital banking services. Participants had the following to say:

Township participant 1: *What made me to be more interested in using digital fintech services is convenience; it's very easy for me, I don't have to stand in lines in order to get my bank statement. I don't have to go through a branch in order for me to opening a saving savings account. I can just do it over my phone. So that's what attracted me or made me use Fintech products, it's the convenience that they bring.*

Township participant 2: *I'm just going to go back to just convenience; they make banking easier for us.*

Township participant 3: *Digital banking services speaks to a new age; everything is digital, it's there for convenience.*

Township participant 4: *I had always had an interest in digital Fintech services because of the convenience; it's efficient rather than going to stand in the long queues of the banks.*

Urban participant 1: *It's so convenient and it's easily accessible to me. Having to cut out on going to the physical banks or doing things the traditional ways is what really gives it the value. Its value lies in convenience and saving time….*

Urban participant 2: *It makes things convenient for people; everything can be a tap of a button to transact.*

Urban participant 3: *It's convenient. Convenience right now is something that is quite valuable. If we can save you money and time, that's something that's quite convenient.*

Urban participant 4: *It's convenient; it's easier for everyone.*

These views emphasise the notion that convenience is one of the most important factors that determine the adoption of technologies such as Fintech digital banking services. The participants noted this convenience in the form of no queues; it requires only a touch of a button on your mobile phone and can be done anywhere and at any time.

5.3 Research question (b): What is the nature of Fintech digital banking services in South Africa's urban and township settings?

Theme 2: Technology-enabled financial inclusion

Based on the findings from this study, some of the key features of Fintech's digital banking services in South Africa's urban and township settings include a mobile-first approach, a focus on low-cost solutions, innovative payment solutions, and financial inclusion.

5.3.1 Sub-themes

5.3.1.1 Mobile-first approach

5.3.1.2 A focus on low-cost solutions

5.3.1.3 Innovative payment solutions

5.3.1.4 Financial inclusion

5.3.1.1 Mobile-first approach

Most of the Fintech companies in South Africa have adopted a mobile-first approach to digital banking services. This is mainly due to the fact that mobile phones are the most common way for South Africans to access the internet. Findings from this study revealed that one of the main characteristics of Fintech digital banking services in South Africa's urban and township settings is the focus on smartphones. Participants had the following to say:

Township participant 1: *Their main advantage is that they focused more on services that can be accessed on smartphones. Lots of people have smartphones.*

Township participant 2*:* *It's something that they can access on their phones without having to make that trip, without having to queue in those lines. It's cost and time effective.*

Township participant 3: *I'm part of FNB, I've got the FNB application on my cell phone so therefore that enables me to transact through there whether is to send money, whether is to pay the bills, whether it's to pay tithe at church.*

Township participant 4: *I would look around me. Everywhere I saw smartphone. I don't even know if those people make use of digital banking services, but the thing is that they do have that kind of access.*

Urban participant 2: *To make use of these Fintech services you are required to have data and a smartphone.*

Urban participant 3: *Cheapness definitely because it's free, but then also a lot of Fintech services are also user-friendly. SnapScan is very simple to use. All they do is just ask for your bank card number and they ask for your cell phone number and then there is verification with your bank, turn on your camera on your phone, the app scans it is a lot easier.*

Urban participant 4: *When you in trouble and you know you can at it encourage them, because I think it's just convenient and much easier to live your life when you can easily do things on your phone.*

5.3.1.2 Low-cost solutions

Another feature of Fintech digital banking services in South Africa’s urban and township settings that came out of this study is low cost or affordable banking solutions. Participants in this study supported these sentiments by stating the following:

Township participant 1: *It's quite affordable, depending on which type of platforms you use, you are charged based on the activity, based on the transaction, the costs are quite reasonable. And we also do have options, like one may have high cost, you do have the options of others that just perform the same services and, but at a lower fee or at a lower cost.*

Township participant 2: *With some of these Fintech services, you also get back like rewards, and for the fact that you are transacting at the end of the month, you actually see that the true cost even ends up being even less.*

Township participant 3: *The role that Fintech services play in society is providing access to affordable services to consumers. They are shaping the consumers’ preference by delivering the same solutions far cheaper compared to traditional brick and mortar bank.*

Township participant 4: *Fintech services are affordable and cheaper.*

Urban participant 2: *It's very affordable for me if you are transacting on the online platforms, there are no fees that are charged; unlike going to the actual branch you have to speak to someone, and that person have to be paid to assist you and then you end up being charge for the service on the regard it is very much affordable.*

Urban participant 4: *With Fintech at least you don't have to pay a subscription fee or anything of that nature; like SnapScan, for an example, is free. They make their money through commission. You're still paying the standard price. The commission is being taken away from the business owner who's selling the product through SnapScan. It* *is a lot easier for the consumer because the consumer doesn't have to worry about paying for the service.*

Despite the high cost of data, participants seemed to really value the low cost of using Fintech digital banking services. This has been a consist with responses in theme one, especially factors such as convenience and perceived usefulness.

5.3.1.3 Innovative payment solutions

Findings from this study suggested that Fintech companies in South Africa are characterised by innovation. The findings suggested that Fintech companies have developed innovative payment solutions that make it easier for people to send and receive money, pay bills, and make purchases online. The solutions include mobile money transfers, digital wallets and online payment platforms. Results from this study further revealed that Fintech services offer innovative payment solutions that make it easier for people to transact. Some of the participants said:

Township participant 3: *Instant, so in that I can instantly send you money and you will get it instantly or you'll get in some form of notification that hey someone has sent you money and you can instantly send me something or to understand that.*

Township participant 4*:* *It's efficient. Rather than going to stand in the long queues of the banks, I can just do anything that is financially related. If I want to pay for my bills, I can just do it on my phone, sitting at the comfort of my own place and it's quick*.

Urban participant 1: *I mean, we use it every day, it's part of our lives. Online banking will always transact online. You're always buying things online. It's so easy and there's payment gateways now online and we use this now to even get our groceries or just buy clothes on an online store or just to easily make any sort of transaction or even in investments. And you can literally just make it at the top of a button now.*

Urban participant 2*:* *It also became such a really big thing in my life when I started using it for online shopping. It's easy to connect your online banking service to your online shopping experience.*

Urban participant 3: *Fintech gives you the convenience of having to transact at any given time. You are able to pay your monthly bills, send money, receive money at a blink of an eye. You do not have to stand in those long queues in order to make a* *simple transaction. I am encouraged to not to stand in those long queues just to make a deposit or withdraw cash. These are the factors that influenced adoption of digital Fintech banking.*

Urban participant 4: *It made it easier for me to receive and to send money, especially living at Res. Having to receive money from my mom's, it would be much easier than having to go withdrawals or having to go to Shoprite to take out money when I could literally just get into my bag and start using my banking apps and online banking and so forth.*

Most of the participants highlighted the fact that Fintech digital services allow them to transact from the comfort of their home. They can make and receive payments without stepping outside or going into a physical branch.

5.3.1.4 Financial inclusion

According to results from the study, Fintech promote financial inclusion by providing greater access to financial services, lowering cost, and providing customised solutions. Participants highlighted the role of Fintech in improving financial inclusion by catering for unbanked people who were often shunned by mainstream banking. The statements below represent some of the sentiments.

Township participant 2: *They have massive influence; they target the unbanked and the low-income earners.*

Township participant 3: *They have disrupted the financial industry.*

Township participant 4: *People are now able to send money to other countries using Mukuru. You do not have to have a bank account for you to be able to receive or send money, you can withdraw your money from retail shops.*

Urban participant 2*:* *The fact that Fintech is targeting the low income and the unbanked consumers has improved the welfare of low-income earning consumers.*

Urban participant 4: *These types of consumers are the ones the normal traditional banks will not attract. Fintech saw the gap and they capitalised on it; hence, the disruption. This has made a difference in the lives of the poor and the previously excluded consumers.*

These sentiments underscore the key role of Fintech in catering for consumers who were often left behind by traditional banks. This shows that one of the most important features of Fintech digital banking services in South Africa urban and township setting is financial inclusion.

5.4 Research question c: How does consumers' context influence adoption of Fintech digital banking services?

Theme 3: Resource accessibility

Fintech institutions are challenging traditional banking and are expected to end the impediment of the urban and township financial divide and enable financial inclusion by offering easy and accessible payments, and other digital services. Below are some of the sub-themes that summed up the above findings.

5.4.1 Sub-themes

5.4.1.1 Socioeconomic status

5.4.1.2 Education and Digital literacy

5.4.1.3 Access to infrastructure

5.4.1.1 Socioeconomic status

The socioeconomic status of consumers can influence the adoption of technologies such as Fintech digital banking services. For example, lack of education, low disposable income, and poor infrastructure can significantly affect the adoption of Fintech digital banking services. In South Africa, the socio-economic inequality has an impact on consumer adoption of Fintech digital services. According to Coetzee (2019), Fintech provides the opportunity to address these disparities which traditional South African banks have no appetite to address. The South African traditional banks have a huge role to play in coming up with solutions to solve the socio-economic inequalities that impacts the economy. To an extent to which socioeconomic status influences the adoption of technologies such as Fintech digital banking services was highlighted in the sentiments below:

Township participant 1: Most importantly, the awareness in the township is not there; because of lack of resources, people cannot afford to buy smart phones.

Township participant 2: Sometimes it's the fear. When you are not well educated or when you have not been exposed to something, you become scared.

Township participant 3: In township areas we have people who can't afford smartphones and those that don't have access to the data.

Township participant 4: It's easier for the people living urban to adopt quickly, there is easier access to Internet; they've got a wealth of information that they have access to, and they can do the research. Access to Internet is a bit harder in the township areas when something new is being introduced, they need some time to at least understand what it is and how it works.

Township participant 2: *It's even bigger problems. It's just a fear of the unknown. When you are less educated you tend to look down on yourself and think. You might think, "I can never know this because I don't know English".*

Urban participant 1: *A lot of lower-income consumers are in the township, and they are not familiar with digital banking. I think being exposed to digital banking depends on which class you are in.*

Urban participant 2: *If you are uneducated, the exposure is very limited. In township, majority of the people do not have a post-matric qualification. As such, they lack the knowledge, and they tend not to adopt the digital Fintech services.*

Urban participant 3: *In township, besides the data prices, I think one other factor is maybe the education.*

Urban participant 4: *Many people in the township community are not informed about these Fintech services. I also think they are scared that someone is going to take their money; so, they are very resistant.*

These views highlight the influence of socioeconomic status on the adoption of Fintech digital banking services. They suggest that people in townships are often disadvantaged in terms of education, income, infrastructure and lack of exposure to technologies compared to the people in urban areas. These factors, according to the findings from this study, influence the adoption of Fintech digital banking services. What was interesting was that some of the participates alluded to the level of education as a factor that enables or constrains adoption of Fintech digital services, which is discussed below.

5.4.1.2 Education and Digital literacy

The opinions expressed by participants in this study suggested that consumer contexts such as education level and digital literacy can be instrumental in influencing Fintech adoption of digital banking services. Participants in this study said:

Township participant 1: *People who are living in the township, the education system in the townships is not good, they are also struggling. You need to have a basic understanding of English and most of them lack that part. It is also about education; you need to understand English and technology. If you don't, you will struggle to use these Fintech technologies.*

Township participant 2: *Education is important. If you are not educated, it will not be easy to navigate these apps. As mentioned, you need to have a good grasp of English.*

Township participant 3: *A lot of lower-income consumers are in the township, and they are not familiar with digital banking.*

Township participant 4: *South Africa has more poor communities and in poor communities' people are very reluctant to change because of lack of education on technologies.*

Urban participant 1: *Also, in some cases, because people are illiterate, they can't use the app, especially in townships*.

Urban participant 2: *In urban areas people are exposed to technology, they have Wi-Fi. This makes them more likely to understand Fintech services faster.*

Urban participant 3: *I think being exposed to digital banking depends on which class you are in; in the township digital literacy is lower compared to urban areas.*

Urban participant 4: *Most people are not well informed in the township about certain apps.*

The sentiments above reinforce the view that consumer contexts such as education level and digital literacy are key factors in influencing Fintech adoption in digital banking services.

5.4.1.3 Access to infrastructure

Access to infrastructure is an important factor that can significantly affect the adoption of Fintech digital banking services. Results suggest that access to financial services by township residents remain a challenge; people in townships are more likely to be amongst the unbanked population as opposed to their urban counterparts. The views below show that the consumer context can have serious implications on the adoption of Fintech digital banking services.

Township participant 1: *Connectivity is a challenge in the township. Sometimes when I want to transact there is no connection; I just wait for the network to be better before I can transact online.*

Township participant 2: *Even just your basic network coverage, just being in a rural area, that is already an issue, and they might not be able to get the stable connection to be able to get online and use the services. And that is also an issue that really would have to also involve not only the Internet service providers but the network service providers on improving the coverage in all of those areas because then they can be able to buy data or access or Wi-Fi at any Wi-Fi spot that there is.*

Township participant 3*: Improvement on the infrastructure and connectivity remains the biggest issue. You may have the right tools and willing to adopt, if connectivity is a problem, you cannot be able to use the services.*

Township participant 4: *The issue comes up when these, for example, our infrastructure and townships, especially our network infrastructure is not maintained. As often as we'd like, we have issues with network, especially when there's load shedding or when it's raining. sometimes you might need to pay for something or access your bank for some reason.*

Urban participant 1: *So, for people in townships mostly their challenges, it's connectivity and also like data access.*

Urban participant 2: For people living in townships, it is mostly connectivity. By connectivity I mean the network signal is not very good where they are staying. The connection is very bad in townships.

Urban participant 4: *People living in townships like they have network connectivity issues. Network is very bad in township compared to urban areas, so it's easier for a person who lives in urban areas to adopt digital Fintech services because they have WIFIs.*

Despite participants arguing in theme two that Fintech digital banking services are low cost, they raise the importance of having good connectivity and WIFI, which they suggest that township and rural communities are still lacking as compared to urban users.

5.5 Research question d: Do urban and township consumers have high level of efficacy to adopting digital banking services?

Theme 4: Digital divide and technology access

Participants in this study expressed sentiments that suggest that the level of efficacy in adopting digital banking services among urban and township consumers differs based several on several factors such as education, income, digital literacy and the availability of infrastructure.

Township dwellers said:
Township participant 1: *People living in townships have network connectivity issues, network is very bad in township compared to urban areas, so it's easier for a person who lives in urban areas to adopt digital Fintech services because they have WIFI.*

Township participant 2: *I do believe that there is a difference in adoption between those two areas because people who are living in urban areas are more open to change and their lifestyles as they're living in those places that inspires them to adopt digital banking services easily*.

Township participant 3: *People in urban areas have easy access to mobile devices or computers that you need to be able to access Fintech services. For people who are in township, access is problem. Libraries are mostly in urban areas; people cannot afford data in townships.*

Township participant 4: *Adoption is low in townships because many people in the township community are not informed about these Fintech services. I also think they are scared that someone is going to take their money; so, they are very resistant. I also think it's about the mentality. People in the townships view Fintech Services as "izinto zabulungu" (white people things), not theirs.*

Township participant 2: *Lifestyle and affordability also play a huge role. It is no use for me to have access to Fintech, whereas I'm not even using it as much. I'm not even requesting rides that much, I'm not ordering food online, I'm not purchasing, so I just have it for the sake of having it, In the township, what's the use if I know I won't to use it? Because it won't be of any benefit to me. So, I think that also affects the adoption of people from the townships.*

Township participant 1: *OK, so I live in a township area. It works as long as there's this proper infrastructure in place or you have network you can easily access the Fintech services. The issue comes up when our network infrastructure is not maintained as often as we'd like, especially when there's load shedding or when it's raining, sometimes you might need to pay for something or access your bank for some reason, but you can't. So, I'd say that its tricky in that sense, but other than that, on a normal day it works really well.*

Urban dwellers said:
Urban participant 1: *In the township areas, adoption is there, but not as much as in urban areas because, one, they have limited resources; they might not have access to a smartphone and laptop which are the things you need to be able to access Fintech services. And two, data issue; Wi-Fi or data is not as easily accessible in those areas. There's also network coverage issues. I don't even know if I've used it in a rural area.*

Urban participant 2: *I think there is a difference between the adoption of digital banking Fintech Services in township and in urban areas. In townships people are discouraged by lack knowledge, education and awareness.*

Urban participant 3: *In an urban area, I think that's really where adoption is at its peak, and it's probably used by maybe 90% of the population here. And that's just because it's accessible and people in urban areas have an advantage that they have access; they have better access to smartphones, computers, laptops. These gadgets allow them to adopt Fintech services that are available, especially in banking.*

Urban participant 4: *I think adoption is lower in township areas. The education system in the townships is not good, they are struggling; you need to have a basic understanding of English and most of them lack that part. You need to have an understanding of English and technology; if you don't you will struggle to use these Fintech technologies.*

The views from both township dwellers and urban dwellers seem to suggest that adoption of digital services may vary among urban and township consumers because of several factors such as access to technology, education level, awareness and digital infrastructure. Sentiments from both groups further suggest that urban consumers are generally more likely to adopt Fintech services relative to township consumers.

However, other participants were of the opinion that there are no differences between the adoption of digital banking Fintech services in township and in urban areas. They expressed the following sentiments:

Township participant 4: Urban and townships there is no difference, I believe that most people have smartphones, and most people have access to the Internet. So, the Internet and cell phones don't limit people because of their geographic location.

Urban participant 2: I don't see any big difference. In urban areas as well, we have people who can't afford those smartphones and those that don't have access to the data. Just that they are not that many.

These mixed sentiments can be explained by the fact that there is a growing trend of digital financial inclusion in townships, where more and more financial institutions and Fintech companies are expanding and offering affordable and innovative services.

5.6. Conclusion

The findings also revealed that consumers' contexts such as socioeconomic status, education/digital literacy, and access to infrastructure are some of the key factors that influence adoption of Fintech digital banking services. Furthermore, data analysis also revealed that the level of efficacy for adoption of Fintech digital banking services differ between urban and township consumers. The differences, according to the participants, can be influenced by factors such as education level, digital literacy, access to technology and cultural influences. In the next chapter, these findings are discussed in more detail and are linked to the literature review and theoretical framework.

CHAPTER SIX

DISCUSSION OF FINDINGS

6.1. Introduction

This chapter looks at the findings in detail and provides explanations on some of the key points and how the research questions were answered.

6.2. Research question a) What possible factors shape urban and township consumers’ adoption of Fintech digital banking services?

This study revealed that factors such as performance expectancy, social influence, perceived usefulness, trust from the security perspective, and convenience significantly influence urban and township consumers’ adoption of Fintech digital banking services. This is in line with findings from scholars including Venkatesh et al. (2012), Chigada and Hirschfelder (2017), Vives (2017), Sangwan et al. (2019), Gomber et al. (2017), Chigada and Hirschfelder (2017); Xiao and Tao (2020), Asongu et al. (2018), Elsaid (2021), and Slazus and Bick (2022) who have suggested that possible factors that shape urban and township consumers’ adoption to Fintech digital banking services include performance expectancy, social influence, perceived usefulness, trust from the security perspective, and convenience.

6.3. Research question b) What is the nature of Fintech digital banking services in South Africa’s urban and township settings?

Based on the findings from this study, some of the key features of Fintech digital banking services in South Africa's urban and township settings include mobile-first approach, a focus on low-cost solutions, innovative payment solutions, and financial inclusion. These findings are echoed by He et al. (2017), as cited in Coetzee, 2019). Fintech companies have disrupted the traditional banking space, they offer technology-driven solutions that are more appealing to all consumers. In line with findings from this study, Anagnostopoulos (2018, as cited Elsaid, 2021) has stated that Fintech digital banking services increased the number of users with Fintech digital banking services that support consumers financial inclusion. According to Lee and Low (2018), Fintech companies gain their prominence by taking advantage of the failure and the slow innovation in traditional banking despite growth and advancements of technology and capital. Dwivedi et al. (2019) add that Fintech services are characterised by a combination of innovation and technology to deliver ground-breaking financial products and services to consumers.

6.4. Research question c) How does consumers' context influence adoption of Fintech digital banking services?

Consumer context is significant in Fintech digital banking services adoption. Findings from this study indicated that consumer context characteristics such as socioeconomic status, education, digital literacy, and access to infrastructure influence adoption of Fintech digital banking services. According to Mahajan (2014) most countries are made up of two distinct spatial realms: one rural, one urban. Access to financial services in townships for residents remains a challenge, people in townships are more likely to be amongst the unbanked population as opposed to their urban counterparts. It is reported that 60% of adults residing in urban areas have a formal bank account, compared to 54% of adults in township. According to Coetzee (2019), Fintech organisations provide opportunity to address these disparities which traditional South African banks have no appetite to address. There is a potential threat with regards to Fintech forcing a change on the role the traditional banks plays in in society when it comes to Fintech in addressing the socio-economic inequalities that impacts the economy.

6.5. Research question d) Do urban and township consumers have a high level of efficacy for adopting digital banking services?

Interesting findings from this research disclosed that the opinions from the township participants as well as urban participants seem to suggest that adoption of digital services may vary among urban and township consumers because of several factors such as access to technology, education level, awareness, and digital infrastructure. Sentiments from both groups further suggest that urban consumers are generally more likely to adopt Fintech digital banking services as opposed to the township and rural consumers. These findings are in line with Vogels (2021) who found that consumers residing in urban areas tend to have a higher digital adoption rate than consumers in townships.

These findings are further endorsed by Mahajan (2014) who has suggested that South Africa's townships usually suffer from, unequal access to basic public services, overwhelming levels of crime and violence, poor infrastructure, unemployment which affect their adoption of technologies such as Fintech digital banking services.

6.6. Conclusion

The above discussion confirms some of the literature in that urban consumers seem to have a higher level of adoption of Fintech digital banking services, unlike township consumers who still battle with infrastructure, higher data costs and basic digital literacy skills. But interestingly, it is the township consumer who remains unbanked and is in need of Fintech digital banking services and tends to use services such as Mpesa and Mukuru to send money to families in other countries or rural areas.

CHAPTER SEVEN

CONCLUSION AND RECOMMENDATIONS

7.1. Introduction

The main research question for the study is listed below:

What factors influence the adoption of Fintech digital banking services' by urban and township consumers?

In answering this question, the study found that performance expectancy, social influence, perceived usefulness, trust from the security perspective, and convenience significantly influenced urban and township consumers' adoption of Fintech digital banking services. In addition, the study revealed that context plays a major role in consumer adoption. This chapter discusses some of the key findings from the study as well as some recommendations, limitations and, finally the conclusion of the study.

7.2. Summary of Findings

7.2.1. Themes 1 and 2

In themes 1 and 2 the main findings emerged from the sense of social influence and context in which one finds oneself. Factors such as churches, close friends and family were the top influencers for one to adopt Fintech digital services. In addition, participants showed that they have more trust if the services are recommended by someone they know. What was interesting was that the participants also had families residing in rural areas who would from time to time send them money and Fintech services were the convenient choice for the transaction.

7.2.2. Themes 3 and 4

Themes 3 and 4 focused on contextual influences and differences between urban and township consumers. The findings suggest that people in townships are often disadvantaged in terms of education, income, infrastructure and lack of exposure to technologies compared to the people in urban areas. In theme 2, some participants argued that Fintech digital banking services are low cost; they raised the importance of having good connectivity and WIFI, which they suggest that township and rural communities are still lacking as compared to urban users. However, some of the participants noted that some of townships are now starting to catch up to urban areas and that the biggest gap is for those in rural areas. Below are some of my recommendations, based on these findings.

7.3. Recommendations

The following are the recommendations I have for governments and Fintech companies:

1. ***Increase awareness and education:*** Many people are unaware of what Fintech is and how it can benefit them. Governments, Fintech companies, and financial institutions should work together to increase awareness and educate people about Fintech and its benefits.
2. ***Enhance accessibility***: Fintech solutions should be made easily accessible to everyone, regardless of their location or socioeconomic status. This could be achieved by developing user-friendly applications, improving internet connectivity, and building partnerships with local businesses to offer Fintech services.
3. ***Foster trust and security:*** Trust is essential when it comes to financial transactions, and Fintech companies should prioritise building trust with their customers. They can do this by implementing robust security measures, complying with regulatory requirements, and being transparent about their operations.
4. ***Understand the local context:*** Fintech companies should conduct research to understand the unique challenges and opportunities in townships. This will help them develop solutions that are relevant and effective.
5. ***Provide financial literacy education:*** Financial literacy is essential for people to make informed decisions about their finances. Fintech companies should

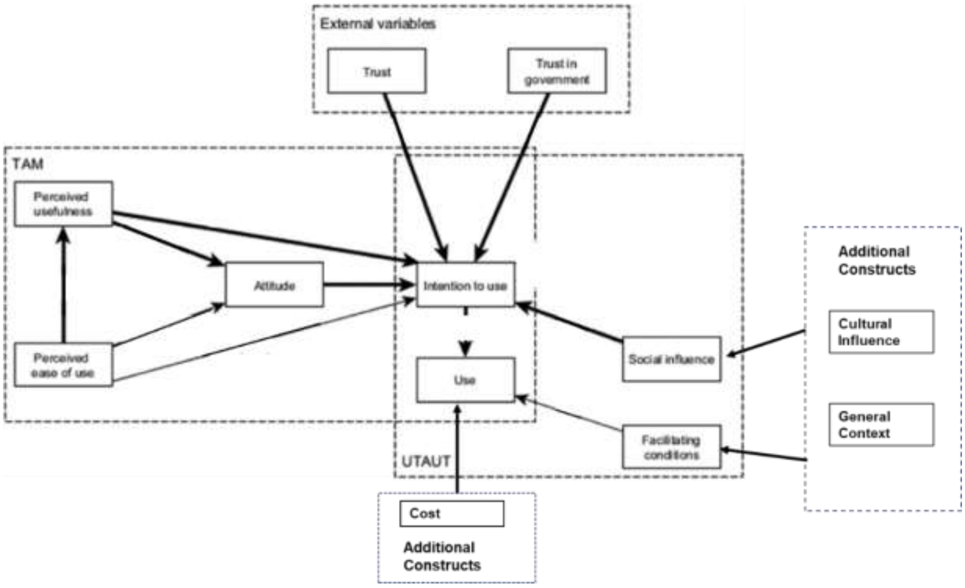
work with local organisations to provide financial literacy education to people in township communities. This will help them understand the benefits of Fintech solutions and how to use them effectively.

6. ***Build trust and credibility:*** Building trust and credibility is essential when it comes to financial transactions. Fintech companies should prioritise building trust with people in townships by implementing robust security measures, complying with regulatory requirements, and being transparent about their operations.
7. ***Use mobile technology:*** Mobile technology is widely available in poor communities, and Fintech companies can leverage this to offer mobile-based solutions. Mobile-based solutions can include mobile banking, mobile wallets, and mobile payment solutions.
8. ***Partner with local organisations:*** Fintech companies can partner with local organisations such as NGOs, churches, microfinance institutions, and community-based organisations to reach people in poor communities. These organisations have established trust with the local community, and they can help Fintech companies reach their target audience.

7.4. Theoretical and empirical implications

Based on the findings and the study, these were some of the theoretical and empirical implications. The original UTAUT-TAM model underplays the role the context, socio-economic, education level plays in the consumers' adoption of Fintech digital services. This was a big theme throughout the participants' responses, which showed where one lives in fact influences how they adopt Fintech services. Below is the proposed redesigned UTAUT-TAM model this study used to emphasise the importance of cultural and contextual influences. Some participants mentioned how churches were the place they encountered Fintech services due to Covid-19 as well as high criminal activities in townships. This new information is valuable in future studies to understand how spaza shops and churches have adopted Fintech services and why.

Figure 4: Reconstruction of the UTAUT-TAM Model



7.5. Limitations and future research

The main limitation of the study was to try to find the correct demographics of the participants as people have a wide range of experiences and interviewing people who have only lived in urban areas or townships was important. The study was focused only on those who use digital banking services, including ones used by traditional banks such as mobile banking apps. The study only focused on participants in Gauteng and the Diepsloot township. The study did not look at other uses of Fintech services such as loan sharks, stokvels and so forth. But it was interesting to find that some participants used Fintech services in church; that would be an interesting future study to explore and gain insight into which churches have influenced their members to adopt Fintech services.

7.6. Conclusion

In conclusion, the study has shown great insight into what factors influence consumers' adoption of Fintech digital banking services and this has also confirmed how the location, context, education one has influences their adoption or lack thereof.

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Appendix 1: INTERVIEW SCHEDULE

SECTION A: PRE-SCREENING INTERVIEW QUESTIONS

1. Tell me about yourself

A) Please state your gender

- Male
- Female
- Other (if other, state in the space below)

B) What is your ethnicity Group?

- African
- Indian
- Coloured
- White
- Other (if other, state in the space below)

C) Select the appropriate age group

- 18 – 25
- 26 – 35
- 36 – 45
- 46 – 55
- 56+

D) What is your employment status?

- Student
- Civil servant/ Government/ institutional worker
- Corporate worker
- Employed
- Unemployed
- Self employed

Other (if other, state in the space below)

E

E) What is you highest level of Education?

- Matric
- Diploma
- Degree
- Postgraduate
- Other (if other, state in the space below)

F) What is your income per month?

- Less than R2000
- R2001 – R6000
- R6001 – R10 000
- Greater than R10 001

G) How often do you use Fintech services?

- Never
- Occasionally
- Usually
- Always

2. How often do you use cash for payment?
    - Never
    - Occasionally
    - Usually
    - Always
3. How often do you use your bank card for payment?
    - Never
    - Occasionally
    - Usually
    - Always
4. How often do you use bank electronic services to make payments?
    - Never
    - Occasionally
    - Usually
    - Always

5. How often do you use other electronic services to make payments?
    - Never
    - Occasionally
    - Usually
    - Always
6. Which traditional bank do you use?
    - Absa
    - African bank
    - Capitec
    - Discovery bank
    - FNB
    - Standard bank
    - Tyme bank
    - Investec
    - Nedbank
    - Old Mutual South Africa
    - Other (if other, state in the space below)

7. Which Fintech services do you use?

8. Channel of account usage
    - ATM
    - Mobile phone
    - Internet/online banking
9. I currently use Fintech to transfer money
    - Yes
    - No

10. Which Fintech service do you currently use or did you use in the past or intend to use?

- Apple Pay
- SamsungPay
- PayPal
- Google Pay
- Your online banking Services
- M-PESA
- Amazon Pay
- Facebook Pay
- AliPay
- We Chat Wallet
- None
- Other

SECTION B: SEMI-STRUCTURED INTERVIEW QUESTIONS

1. According to your experiences, what is your understanding of digital banking Fintech services?
2. What made you use the Fintech services, and have you always had an interest in digital banking Fintech services? Why or why not?
3. Do you think using digital banking Fintech services are safe/unsafe for the consumers? Why?
4. What role do you think Fintech services play in society?
5. What are your experiences in digital banking Fintech services in township/ urban communities?
   a. Do you think there is a difference between the adoption of digital banking Fintech services by township and urban consumers?
   b. How else can you increase the adoption of digital banking Fintech services in township/urban communities?
6. What are challenges to using Fintech?
   a. What are the challenges for people living in townships in using Fintech services?
   b. What are the challenges for people living in urban areas using Fintech services?
7. In your view. why are consumers in township areas, and consumers without university degrees amongst the lowest in adoption of digital banking Fintech services?
   a. How can Fintech adoption be improved to allow inclusion of the poor to directly benefit from the new Fintech innovations?
   b. What should be done by regulators to improve financial literacy on digital banking Fintech Services payment solutions?
8. To what extent has the current setup of digital banking Fintech payment solutions in SA improved the welfare of lower-income consumers who were previously excluded?

9. What are the factors associated with influencing adoption of digital banking Fintech payment solutions powered by Fintech?
10. How much does it cost you to use Fintech services?
    a. According to you, is the cost of using Fintech services affordable?
11. Which one do you trust more, traditional Banks or Fintech and why?
12. Besides sending money, payment and receiving, what else do you use Fintech services for?
13. Do you think that Fintech companies will replace traditional financial institutions?
14. What type of influence do you think Fintech companies have on improving the usage aspect for lower-income groups?
15. Do you think your family and friends can affect/influence you to use Fintech services?
16. What role do you think community leaders (Church leaders, political leaders, Traditional leaders) play in accelerating consumer adoption of digital banking Fintech services?
17. Would you recommend Fintech services to others and why?

Appendix 2: Consent Forms (Participant)

Consent Form

Research study: Factors influencing consumer adoption of digital banking Financial Technology (Fintech) services payment solutions by South African Urban and Township Consumers
Name of researcher: Mrs. Xolisile Mabuza, student no. 2418693

I .... agree to participate in this research project.

1. I agree that the purpose of the study was explained to me and I understand what the study is about.

2. I have agreed to take part in the study and I understand that I can volunteer to be part of it.

3. I agree to providing responses to the questions asked by the interviewer and that this will be recorded for analysis purposes.

4. I agree and understand that my name will not be used by the researcher in the research report.

5. I agree and understand that other researchers may use my information and that my personal information will not be used or passed on.

Name of the respondent:………………………..

Date:……………………………………………..

Signature:………………………………………..

Appendix 3: Consent Form (Divisional Head)

LETTER TO: SENIOR LEARNING MANAGER Date:

Dear Senior Learning Manager

My name is Xolisile Mabuza, I am a master's student in the Faculty of Commerce, Law and Management, University of the Witwatersrand, Business School.

I am doing research on the understanding of factors influencing consumer adoption of digital banking Financial Technology (Fintech) services payments solutions for South African urban and township consumers. The chosen participants are from Diepsloot and urban consumers and will focus on participants within the Old Mutual Insure 2022-2023 graduate intake in Gauteng province.

The study will utilise a qualitative research approach and semi-structured individual interviews will be used to collect the data as well as surveys (in person or via email) to preselect participants. The reason why I have chosen Old mutual Insure is because of the relationship I have established with my employer. I am inviting the Old Mutual Insure graduates to participate to share their experiences, knowledge, and understanding of factors influencing consumer adoption of digital banking Financial Technology (Fintech) services and payments solutions for South African urban and township consumers. The purpose of the study is twofold. Firstly, to critically explore factors that influence consumer adoption of digital banking Financial Technology (Fintech) services payment solutions by urban and township consumers. Secondly, to gain insight into whether urban and township consumers are amenable to adopting digital banking services.

The interviews will take approximately 45 minutes to an hour per session, per participant. The participants in this research will not be advantaged or disadvantaged in any way. All research participants will be reassured that they can withdraw their permission at any time during this research without any penalty. There are no foreseeable risks in participating in this study. The participants will not be remunerated for this study.

The names of the research participants and the identity of the organisation will be kept confidential at all times and in all academic writing about the study. Your individual privacy will be maintained in all published and written data resulting from the study.

All research data will be destroyed between 3-5 years after completion of the research.

Please let me know if you require any further information. I look forward to your response as soon as is convenient.

Senior Learning Manager Name: ____

Permission to interview graduates granted

YES/NO

Sign______________________________ Date____________________________

Yours sincerely,
Mrs Xolisile Mabuza
8 Nevada Drive
Northcliff Ext 15
Randburg
2115

Appendix 4: Transcript (Graduate 1)

Question 1: According to your experiences what is your understanding of digital banking Fintech services?

Answer:

According to my understanding, digital financial banking services is the use of technology to make the banking and financial services operations much easier using just artificial intelligence and blockchain cloud computing and all of those technological advancements.

Question 2: What made you use the Fintech services, and have you always had an interest in digital banking Fintech services? Why or why not?

Answer:

Technology, it's always advancing at like kind of an exponential rate. With new technology comes new advancements and new developments. Fintech is not something that I was always familiar with growing up. But again, with the advancements we become exposed to just new tech and the new sort of easier and more convenient ways of doing things such as now in our context banking. And I find it of value, and I take high interest in it now because it really saves time. It's so convenient and it's for me and my instance it's easily accessible to me. Having to cut out on going to the physical banks or doing things the traditional ways and it really does give it. The value in it lies in just convenience and saving time and that's why it really is something that I do enjoy and partake in.

Question 3: Do you think using digital banking Fintech services is safe or unsafe for the consumers? Why? Please elaborate.

Answer:

It is a yes and no answer that I have in the instance that let's start with why it wouldn't, why it wouldn't be safe. I think it's just because the highest risk is data security and often if you, if one is not knowledge well enough or is not fully equipped with just taking the more of the advanced authentication or like risk measures, like you know on banking apps now, we can, you have the two-factor authentication, the biometrics systems and so forth. All of those tech tools those can easily be a possibility of them being breached. And if the end user doesn't take just those substantive procedures to really make sure that they log in their two-factor authentication so that if someone tried to hack into that system, they won't be able to get through the 2nd firewall and that instance I would say that it is safe. And knowing what you need to do to be able to protect yourself the online services, it's safe. But if you also don't know about those things that two-factor authentication, knowing how to back it up or how other people wouldn't be able to access your app or so forth using the biometric systems and then you would be in danger because as we know we're in the times where online scams are also a huge thing and if you just don't have the proper knowledge it can easily be quite dangerous for you.

Question 4: What role do you think Fintech services play in society?

Answer:

We first of all, we've we learned so much more there's the learning aspect of it and it also, it teaches us to move with the times being more agile, just being able to suit to society. I think we're being offered so much more, like we said, Fintech instruments, they bring us so much more to the society and these are just tools that we can easily access or easily use, while people who do have you know access to first of all, a smart phone or a laptop or any, just like a digital tool to be able to use all of these services. Society it really just about bringing us convenience, more options and more ways of doing things. My experience.

Question 5: What are your experiences in digital banking Fintech services in Township/ Urban communities?

a. **Do you think there is a difference between the adoption of digital banking Fintech Services in Township and Urban consumers?**

b. **How else can you increase the adoption of digital banking Fintech services in Township/ Urban communities?**

Answer:

In an urban area, I think that's really where it at its peak, and it's probably used by, I'm sure, 90% of the population here. And that's just because it's accessible and people in urban areas have an advantage that they can access, that they have better access to smartphones or computers, laptops, just these gadgets where you'll be able to just take part of Fintech that's offered, especially in banking. In the rural areas, it's it does happen, but not as much as in an urban area because one they limited resources, they might not have access to a smartphone and laptop, which are the things you kind of need to be able to operate those services and two, also now the it's just the data issue, the fact that Wi-Fi or data is not as easily accessible in those areas. There's also network coverage issues I don't even know if I've used it in a rural area.

I think the most recent thing now that they're doing is they've got the Yoco machines and Ikhokha they've also machines, which you can just swipe your card at the local convenience stores in the rural areas that's something that hadn't happened in the past. But that is something they are implementing and it’s also good to see that there is progression or movement or an interest on the rural area side but it's just happening at a much slower rate that's because they just have a few more setbacks than users in the urban areas have. Where and in the urban areas, I mean, we use it every day it's part of our lives. Online banking will always transact online. You're always buying things online. It's so easy and there's payment gateways now online and we use this now to even get our groceries or just buy clothes on an online store or just, to easily make any sort of transaction or even in investments and you can literally just make it at the top of a button now.

To increase the adoption of digital banking fintech services, I think you know, especially in the banking services, they could do reach out programmes and campaigns and just show these smaller communities that they are other services and that they can take advantage of instead of having to do things the old way of traditional way and most of just the manual procedures and that can now be automated and but they also just need to know how to do it.

Them being exposed to just knowing more about it, the exposure in the rural areas is not also as much as what we've got in the urban areas and again, as much as that can also be done, for instance, if the user doesn't even have a smartphone it's of no use to them that information because they don't even have the tool to be able to take advantage of those like those convenient services. But most banks like even in the branches they do have, they do have laptops or PCs around like a station where users can like log into the online banking and transact over there. So maybe then it won't necessarily stop them from having to go to the branch, but it would stop them from having to queue in the branch and just go and use the PC that they've got in their bank and there's also like on demand assistance and they'll be people on the ground floor in the branches to be able to help them and then in that way how they can also learn.

In my opinion with those that don't in the urban areas, I think it's just because they're worried about the security and that's what I see mostly happening is that they're worried that there's the security will be breached then having more information and insight on the security side of Fintech and just to sort of show us the measures that are being put in place that will encourage smaller portion that are not using the services.

Question 6: What are challenges to using Fintech

a) What are the challenges for people living in townships in using Fintech services?

b) What are the challenges for people living in urban areas using Fintech services?

Answer:

In the urban area it goes back to again the security, just the data security as my stuff safe online and what are the further procedures that I can perform to make sure it's even more protected and stored and in my rural areas, I think it's again there's just a limit of resources and as much as they might also have a high interest. It's just that they may not be able to access these services.

XM:

So just unpack a bit if you say limited resources, what do you mean by that?

Participant 1:

There's one that now it actually covers both the urban and rural as of recent with the load shedding stage 6 and all of that now becomes at play in the rural areas, even just your basic network coverage just being in a rural area that is already an issue and they might not be able to get the a stable connection to be able to get online and use the services and that is also an issue that really would have to also involve not only the Internet service providers but the network service providers on improving the coverage in all of those areas because then they can be able to buy data or access or Wi-Fi at any Wi-Fi spot that there is.

Question 7: In your view why do consumers in township areas, and consumers without university degrees are amongst the lowest in adoption of digital banking Fintech services

a) **How can the Fintech adoption be improved to allow inclusion of the poor to directly benefit from the new Fintech innovations?**
b) **What should be done by regulators to improve financial literacy on digital banking Fintech Services payment solutions?**

Answer:

When you have a degree or just you are studying towards something you start to become a community of other people everyone is coming from different backgrounds again it's the principle in all of this is just being exposed, it's an exposure matter you find that these students who have degrees, it's because they've been exposed to all of this when you're studying towards a degree or qualification, current affairs and current matters are often integrated in those studies to make sure you're keeping up with times in terms of the current affairs and what's happening. That is why, because they are more exposed and more educated on it that’s why they become a part of it or they converge to being end users of those products and services. It's in the do you know about it and the and the know-how, like do you know how to access this, how to go about operating it and for that to happen, you need to be exposed to know about it limited time or exposure and you can miss out on opportunities like this.

Fintech adoption can be improved by teaching them or showing the poor how to use it, and how they can use it in just some of the everyday living but the issue that will be challenging is if they don't even have access to those tools to be able to operate those fintech services then what happens, do the banking services going to find ways to offer or maybe build in some like local drop off stations in the communities where the users can come in and maybe there's like computers or something like build that sort of a station? have it going on in the community to encourage more and more users and then maybe from that they might be encouraged to maybe get a smart phone because not everyone reality s of South Africa is that not everyone in the in the rural area or the poor have access to a smartphone.

XM:

What should be done by regulators to improve financial literacy on digital banking, fintech services? Payment solutions?

Participant 1:

I think for that to improve, the end user just needs to know more about the rules and regulations. Just creating even more contact content around that and possibly how that could be implemented is maybe having a pop-up or just even a section on those platforms where users can go there navigate, just to learn more and to keep up with any changes that are also happening in that space of data security just informing the end user more about how they data is secured and creating just fun and light and simple language content around that so it's understandable to the end user as well.

Question 8: To what an extent has the current system of digital banking Fintech payment solutions in SA improved the welfare of lower-income consumers who were previously excluded?

Answer:

It makes things convenient for the person, everything can be at tap of a button to be able to transact whatever that transaction may be. People who has previously disadvantaged from this service they would still have to do things the traditional way like there will still catch a taxi to go to town stand in a queue in line, spending money going to town and you're spending time at the bank over there. Now it's something that they can access on their phones without having to make that trip, without having to queue in those lines it's cost and time effective.

Question 9: What are the factors associated with influencing adoption of digital banking Fintech payment solutions?

Answer:

The campaigns about making it known, the latest updates, just being advertised across all platforms on social media, circulating on social media, in the bank themselves, just outside on the billboards and so forth. We see it everywhere the YouTube adverts it really is about getting the information out there. that's how it's really encouraged, and they'll tell you about the cost benefits, the cost versus the benefits of that latest service that you can use how it really benefits the end user, that's just the focal point of it those benefits they are they are, it's quite clear they are stated the end user. Just yeah understands how they can benefit from that and that the thing that's just how they are encouraging it.

Question 10: How much does it cost you to use Fintech services?

a) **According to you is the cost of using Fintech services affordable?**

Answer:

it's quite affordable, depending on which type of platforms you use, you are charged based on the activity, based on the pay transaction, the costs are quite reasonable, and we also do have options like one maybe may have high cost, you do have the options of others that just perform the same services and but at a lower fee or at a lower cost. On average on a monthly basis, I can say that my charges would not go over 200. But also, with some of these fintech services, you also get back like rewards and for the fact that you are transacting at the end of the month, you also get back rewards when you just even net off the interest that you got or those rewards that you got, you actually see that actual the true cost even ends up being even less than 200 for me just when I net off what I got back from that. We can average it then on a net basis to 150 that's also what encourages and actually that reminds me that this is something that also could encourage users to make more use of those fintech services, because there's rewards programmes, savings and that's how they also attract more users into using fintech services.

Question 11: Which one do you trust more traditional Banks or Fintech and why?

Answer:

I actually trust fintech more and the reason why I say that is that I can see what's happening and at any given time and I have access to all the information at any given time just to see what's happening whereas in a traditional system, you'd have to physically go or call even after calling the even back then, I don't even think the security questions were sufficient enough to be able to access information that you're requesting through a call you ended up to even having to go to the branch. Whereas now if you call them, you'll be able to get answers through the security questions there's even like OTP messages that they send you to verify that you are indeed the correct person, and they can share that confidential information with you. I also do my research on the ones that I use and just see and do my research on the security and data side of things It's convenient saves time and my information is always accessible at any time.

Question 12: Answer: Besides sending money, payment and receiving what else do you use Fintech services?

Answer:

I also use them to take advantage of those like the rewards programmes that they have in place and for investment purposes there's a few platforms where you can buy sell stocks and ETF, ETN's or even a Bitcoin all of those coins, Ethereum and the platform that I use is easy equities and yeah, that's just besides the banking services. I use it that is my investment portfolio.

Question 13: Do you think that Fintech companies will replace traditional financial institutions?

Answer:

They could, but not entirely thinking about having the branches of banks I don't think they could completely be wiped out or never be a need for them. It will definitely replace a much bigger percentage of it, but they will still be the traditional based ones just for users, who don't have access to actually using Fintech. They can't completely wipe that out and they'll still have to cater for those types of users.

Question 14: What type of influence do you think Fintech companies have on improving the usage aspect for lower-income groups?

Answer:

Even some of the apps and stuff, maybe they could find a way of actually making them data free and so not having to need data or just Wi-Fi to be able to access and use those services that would be a good start.

Question 15: Do you think your family and friends have an influence in you using Fintech services and vice versa?

Answer:

Family members and friends are also contributing factor in exposing you to these services and that's often also where we learn a lot about things. When it's referred to also by somebody we deem as credible or like just somebody who's quite reliant, then it's even easier to do that thing then start and actively becoming a user. The community will then also be hearing it from somebody they can relate to and somebody who like, is one of them, and then they'll be able to trust that person's, their recommendations, and suggestions. It could be definitely be a way of how they can start adopting it when you're hearing it, with them, with the trust issue and wondering if it's safe, but when they can relate to a person who's also from where they are from and then that they're trying this, it will be easier for the people to trust that person and then they can be more encouraged to use it.

Question 16: What role do you think community leaders (Church leaders, political leader's, Traditional leaders play a role in accelerating consumer adoption of Digital banking Fintech services?

Answer:

Church leaders that's actually an interesting one because at my church, when you give tithe you can now even do it via EFT or snap scan by them keeping up with times and all of these advancements that, you can even find out about it in, in the church or religious place it goes back to them they are informing and exposing them of all these different things that are available.

Question 17: Would you recommend Fintech services to others and why?

Answer:

Yes, I definitely would, the three main points are because it saves time, it saves you money and it's convenient. Convenience right now is something that is quite valuable if we can save you money and time, that's something that's quite convenient, you're also learning in that process, which is a good thing.

Appendix 5: Transcript (Diepsloot 4)

Question 1: According to your experiences what your understanding of is digital banking Fintech services?

Answer:

Digital banking services speaks to a new age everything is digital it's there for Convenience gone are the days where you go to the bank to do an investment, you simply log on to your phone and you complete everything from the financial part. You are able to withdraw the funds, it is good to have such Apps.

Question 2: What made you use the Fintech services, and have you always had an interest in digital banking Fintech services? Why or why not?

Answer:

As a consumer I got interested the moment I realized that I had to do transaction when I first started working and then it required me to actually take some time off work and it took me about 3 days to finally complete that transaction because they kept on asking me to come back due to missing information. The moment I was able to do the transaction about two years later online that got me be interested where you get to do things digital. Like investing, forex trading via online platforms then I would say that there really I.

Question 3: Do you think using digital banking Fintech services is safe/ unsafe for the consumers? Why?

Answer:

I have never experience whereby I was a victim of such crime, but I can say there are people who experience it I can say I am neutral I will have to see it happen to me in order for me to feel some type of way about it because I know it is a concern. Last time I was reading an article about someone who physically plugged their phone in the public charging socket and there were able to retrieve their information even their banking information. Until it happens to me for me, I'm happy and I feel safe.

Question 4: What role do you think Fintech services play in society?

Answer:

They do play an important role, they create job opportunities for those niche jobs that have a demand like IT space, It really gives platforms to those kind of people to also get a chance to part of something there's a friend of mine who create apps and he is now getting a lot of business because you noticing that people have a big demand for such apps he's always occupied, he's getting business and he's doing quite well. I would say the role it plays is a vital one.

Question 5: What are your experiences in digital banking Fintech services in Township/ Urban communities?

a) **Do you think there is a difference between the adoption of digital banking Fintech Services in Township and Urban consumers?**

Answer:

Yes, it to do and my previous answer saying that basically I don't know if I'm using the right words under privileged. People don't have information especially in the townships I can say that is there is a gap on that part. Most people are not well informed in the Township about certain apps there's another app that allows elderly people to be able to take the part of their pension put in the app and then they get to do run around for you and then they actually buy you pills, they get your meds for you. It's like someone you send, but it's actually requiring a financial transaction for them to be able to assist. It will save a lot of money if people in the township know about it the elderly people don't like traveling because of health conditions, it's hard for them to be able to access their financial institution like a normal bank. It's a disadvantage for the township compared to urban area. In the urban areas the access is there if you don't want to use these digital platforms, you are still able to go to branches. I think they need is more in townships than in urban areas. overall more internship than Interment areas.

b) **How else can you increase the adoption of digital banking Fintech services in Township/ Urban communities?**

Answer:

Basically, to create awareness there's not enough awareness around such digital fintech services whenever the government comes to the townships to campaign, and they should be able to give our people such services because they are not only limited to the private sector. Even government is using digital services, so I'm just talking digital services as a whole, even for something like paying a traffic fine online people do not know about it have session with the people create awareness, have maybe townhalls prepare well in advance so that people can come in numbers, the date for the for the session people will be able to appreciate such information. It's gonna even allow our government to operate more efficiently because our people are compliant. There should be more awareness, they should drive initiative that informs our people in the townships about such services.

Question 6: What are challenges to using Fintech?

a) **What are the challenges for people living in townships in using Fintech services?**

Answer:

Some of the challenges of using financial services and say I'd say the challenges are more financial because this service in most of the time I will say 90% percent of the time would require people to get money for data and we all know that in the township, a lot of people are not privileged, people can’t afford data. Unless maybe there was a gap from the services where they make it free, and you pay upon using these services but access and to navigate should actually be free.

b) **What are the challenges for people living in urban areas using Fintech services?**

Answer:

Because a lot of people in urban areas they tend to have fibres in their houses, they have operating Wi-Fi that they can access anytime we're going to, but whenever there's a need. I unlike people in the townships, whereby they struggle the biggest challenge that I can think of right now would be the services using data. The fact that there are a lot of institutions around in urban areas would be a challenge for such services because some of them might not see the need to use such services because they can easily access their banking branches it is close to where they are staying. The challenge would be lack of need.

Question 7: In your view why do consumers in township areas, and consumers without university degrees are amongst the lowest in adoption of digital banking Fintech services?

Answer:

I don't know. I I'd say I'd say because people that don't have degrees normally are not really exposed. when you are at school you tend to use technology because you get to spend time with people who are interested in such spaces like IT, people get to be friends with people who are in IT that inform you or teach about some of these fintech services. Not being exposed is the reason why there is a gap. People who have degrees use the services and people who do not have degrees has show that a lower usage for such services.

a) **How can the Fintech adoption be improved to allow inclusion of the poor to directly benefit from the new Fintech innovations?**

Answer:

They can try to have contracts or some form of agreement with people that actually sell like your cell phones, laptop and all of that to be actually the major players in this in this type of services. Maybe have those apps or whatever services that they are offering already included or installed in the devices. If someone buys your normal cell phone, you find that the app is already there, or the service is already depending on how important that is digital service is.

b) **What should be done by regulators to improve financial literacy on digital banking Fintech Services payment solutions?**

Answer:

They should have support services that would be operational for 24 hours whereby consumers can easily access when they need assistant on anything be it the case of fraud, be it the case of not able to access something on their platforms they should be able to have online support whereby someone can chat to you while you are on their site. The regulators should put measures in place and be stricter about the people offering the services. They should be stricter about them assisting customers efficiently. They should drive urgency around efficiency and also ease of access. They should put rules in place that binds them to assist the consumers.

Question 8: To what extent has the current setup of digital banking Fintech payment solutions in SA improved the welfare of lower-income consumers who were previously excluded?

Answer:

It improve the welfare in terms of now it's so for example you need to apply they have introduced pre approval you do not have to submit documents before you get an approval you just go onto their platform you are able to apply and get an approval it saves you time, saves you money, for someone who is a low income earner it cost money to go to the Internet shop to print these documents and take them back to the bank even if you request for documents from your institution, some will charge you. Now that they have made these services accessible through digital fintech services it is easier to use it also helps them financial not just only saving time and effort.

Question 9: What are the factors associated with influencing adoption of digital banking Fintech payment solutions powered by Fintech?

Answer:

Covid-19 was a huge contributor as a factor to use these services. If someone is sick they can't be mobile. Using such services assist for the person to do their transaction on these digital platforms. Sometimes you are at work there is a challenge that comes across your kids needs something you can quickly access the services.

Question 10: How much does it cost you to use Fintech services?

a) According to you is the cost of using Fintech services affordable?

Answer:

I would say it is affordable because I am a working class, people who are unemployed, would find it expensive. It's very affordable for me if you are transacting on the online platforms, there are no fees that are charged unlike going to the actual branch you have to speak to someone, and that person have to be paid to assist you and then you end up being charge for the service on the regard it is very mut affordable.

Question 11: Which one do you trust more traditional Banks or Fintech and why?

Answer:

Because of the generation I was born in I would say fintech, we are more comfortable doing things ourselves rather than generations before me whereby they are used to speaking to someone getting information in person, getting to know the person that is assisting you and trusting them and you always have reference should something go wrong you will know which person you were speaking to.

Question 12: Besides sending money, payment and receiving what else do you use Fintech services?

Answer:

I'm trading, investing trading would be like foreign exchange predicting whether markets will go up or down or crash for that matter. You are also able to invest in some of these platforms easily just log on put your details make the payment and then you get feedback, monitor your transactions. Some of them offer a service where they will deliver stuff to you don't have to go to them they would send to you at the convenience of your home you just click

Question 13: Do you think that Fintech companies will replace Traditional financial institutions?

Answer:

Yes, I do believe is possible but no because the human touch has to be there. I am looking at current services if I do not get any answers, I end up going to the branch to see someone to get more clarity on whatever challenge I was facing. The answer is no but there is a high possibility depending on how well they refine their services.

Question 14: What type of influence do you think Fintech companies have on improving the usage aspect for lower-income groups?

Answer:

It is convenience nowadays people are just so occupied with a lot of stuff it now having to add going to do like for example banking or having to go physically standing, at the queue to transfer money to someone It can be a cumbersome process I would say convenience, time saving those are the kind of influence that they will have.

Question 15: Do you think your family and friends can affect /influence you to use Fintech services?

Answer:

When I come across, a certain app and I use it and it's basically user friendly it gave me what I actually needed will definitely recommended it to my friends and family just like the same way if they come across a certain app they will recommend.

Question 16: What role do you think community leaders (Church leaders, political leader's, Traditional leaders play a role in accelerating consumer adoption of Digital banking Fintech services?

Answer:

They play a big role they have huge platforms, and with those platforms, they can use it to educate the people about such services. If we touch one church lot of people go to church and people that you see on a weekly basis, it's easier to influence to use the services even with community leaders we do have meetings now and then were we discuss issues in our community. This can also be addressed as an issue in order for us to save more, educating people about finances you can introduce such services to them they will see the bigger picture and how they benefit from using these services.

Question 17: Would you recommend Fintech services to others and why?

Answer:

Yes, I would because they have you have removed the need of having to move up and down in my life. I can recommend so that the next person can also benefit they can transact, access services from the ease of their home or at work or wherever they are.

XM:

Is there anything that maybe you might want to add to contribute to this study?

Diepsloot 4

No, I can’t think of anything.

Meeting adjourned.

Appendix 6: Data analysis process

Research questions	Codes	Sub-themes	Themes
What possible factors shape urban and township consumers' adoption of Fintech digital banking services?	Benefits of using Fintech services Consumers' expectations How well fintech helps consumers to make their lives easer Improvements brought about by fintech services Security and safety	• Performance expectancy, • Social influence, • Perceived usefulness, • Trust, • Convenience	User acceptance of technology
What is the nature of Fintech digital banking services in South Africa's urban and township settings?	A focus on smartphones Technology-driven affordable banking solutions Inventive payment solutions that improve the efficiency of financial transactions Universal financial access	• Mobile-first approach, • A focus on low-cost solutions, • Innovative payment solutions, • Financial inclusion.	Technology-enabled financial inclusion
How does consumers' context influence adoption of Fintech digital banking services?	Opportunity to address socio-economic inequalities Education and technological literacy Availability and ease of use of physical and digital resources Social and economic conditions, circumstances and opportunities.	• Socioeconomic status, • Education • Digital literacy, • Access to infrastructure	Resource accessibility
Do urban and township consumers have a high level of efficacy to adopting digital banking services?	Poor awareness in townships Better infrastructure in urban areas Ability of individuals to use digital technologies Affordability How easily individuals can afford to purchase and use Fintech services		Digital divide and technology access

Appendix 7: Editor's letter

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28 April 2023

TO WHOM IT MAY CONCERN

I certify that I have edited the Master's thesis

Understanding factors influencing consumer adoption of digital banking Financial Technology (Fintech) services payment solutions in South African Urban and Township Consumers

by

Xolisile Anastasia Mabuza

However, the correction of all errors/missing information remains the responsibility of the author.

GHannant.

G.C. HANNANT
BA HED

Appendix 8: Coding of Code themes and subthemes

Quotes	Sub-themes
Township participant 1: *it's efficient rather than going to stand in the long queues of the banks. I can just do anything that is financially related, if I want to pay for my bills, I can just do it on my phone, sitting at the comfort of my own place and it's quick.* **Township participant 2:** *Fintech digital banking services are faster; they are easy to use.* **Township participant 3:** *They are delivering benefits to the consumers at an effective competitive price as compared to traditional banks. They also increased access to digital and online payments for majority of consumers.* **Township participant 4:** *I have always had an interest because of performance, they are faster; it makes the process easier.* **Urban participant 1:** *They are very useful; people are now able to send money to other countries using Mukuru. You do not have to have a bank account for you to be able to receive or send money you can withdraw your money from retail shops like Pick n pay, Shoprite and Checkers etctera.*	Performance expectancy

Urban participant 2: *It makes the process of accessing financial services easy and quick.* **Urban participant 3:** *They made it easier for me to receive and to send money, especially living at Res. Having to receive money from my mom's, it would be much easier than having to go and make withdrawals or having to go to Shoprite to take out money when I could literally just get into my bag and start using the services.* **Urban participant 4:** *I would say it is cheaper and affordable, because if you go to town, you need transport money. If you have a smartphone, you just need to have Internet.*	
Township participant 1: *Definitely it was the church that introduced me to snap-scan more than anyone….* **Township participant 2:** *They have an influence in their community and people listen to what they have to say. I've seen more people moving from carrying their cash into doing EFT's or tapping or maybe swiping inside the church. So, I think they have a lot of influence in influencing their people or the people that they are leading because people respect them.*	

Township participant 4: *Pastors play an important role; they have an influence over their people because they are trusted. Most people changed because of the level of crimes they were encouraged to migrated to using digital payment solutions such as YOCO or Ikhokha for tithes and offering from the church goers.* **Urban participant 2:** *They play a huge role in particular church leaders, they discourage cash and promotes the use of payment devices such as ikhokha, Yoco, Capitec Mobile card Machine, snap-scan etc. It makes it easier for us to pay for our tithes and offerings and it is safe. This promotes the adoption of digital banking fintech services because we trust our church leaders.* **Urban participant 4:** *Church leaders that's actually an interesting one because at my church, when you give tithe, you can now even do it via EFT or snap scan. The are keeping up with times and all of these advancements you can now find out about in the church or religious place. They are informing and exposing people to all these different fintech services that are available.* ***Township participant 1:*** *Yes, I was influenced by friends to start using Fintech. I always feared that the bank might take my money, but friends shed some light on the benefits of using Fintech.*	Social influence

Township participant 3: *Yes, I think they can, and they have influenced me. They have influenced me in the past, for example, online shopping when I came this side through work from the township, I was not much of an online shopper, but because of the friends I was associated with, they were more into online shopping than I was. So, they've told me the benefit of doing things online rather than having to wait on long queues in a store. They have taught me how to be smart while doing shopping online and things like that, so yes, they influenced me.* ***Township participant 4:*** *Yes, they do I trust my family and friends, they will not mislead me, if they have used a certain service and they are happy with the experience they always recommend and they are never wrong similarly if they experience a bad service, they will not recommend, they only recommend based on good experience.* ***Urban participant 1:*** *The community usually hear about it from somebody they can relate to and somebody who is one of them, and then they'll be able to trust that person's recommendations, and suggestions. it will be easier for the people to trust that person and then they can be more encouraged to adopt it.*	

Urban participant 2: *Family members and friends are also a contributing factor in exposing you to these services and that's often also where we learn a lot about things. When it's referred to by somebody we deem as credible or somebody who's quite reliable, then it's even easier to try Fintech services and then becoming a user.* ***Urban participant 4:*** *They have had an influence, if there's a new fintech innovation that a friend notifies me of, then I would appreciate them notifying me of it and then I will definitely look into it and do my own research on that definitely yes.*	
Township participant 1: *they are faster, they are easy to use compared to like going to the branch and maybe just to update that limit or just need to close your card and stand in a queue for hours. It's easier to use the app instead of going straight to the bank. So, it makes that process easier and faster.* **Township participant 2:** *Digital Fintech services are easier, faster I like to use technology and prefer using technology rather than the manual process.* **Township participant 4:** *I would say it is very useful, it's cheaper and affordable, because if you go to town, you need transport money. If you have a smartphone, you just need to have Internet.*	

Urban participant 1: *it's faster, easier, safer and much cheaper. You do not have to deal with a rude employee at the bank.* **Urban participant 2:** *I think it provides convenience. It makes the process of accessing financial services easy and quick.* **Urban participant 3:** *it’s very easy for me I don't have to stand in lines in order to get my bank statement, I don't have to go through a branch in order for me to opening a saving savings account. I can just do it over my phone, so that's what attracted me or made me use Fintech products.* **Urban participant 4:** *It just making things a lot easier because I used to see how my parents would bank in a more traditional way and it does take quite a long time*	Perceived usefulness
Township participant 1: *I do believe its safe reason being, at least from my experience is that every time I close my banking application, it does automatically log me off.* **Township participant 2:** *I trust the fintech platforms, nowadays cyber security has improved to protect the users I believe the traditional banks they use paperwork*	

because you are dealing with a human there is a chance that your documents can be misplaced and your user information be exposed If it's on these papers if it's online then it is safe with proper cyber security the risk is there but minimal. **Township participant 3:** *I do believe it's safe, that one reason why so many people are using it* **Township participant 4:** *The digital platforms are safe they have put some cyber security measures in place to protect the consumers from cyber-attacks. As long as you do not click on phishing email or sharing your credentials with anyone for now, I would say it is safe.* **Urban participant 1:** *I think these apps are protected and I think they use technology to protect user info. Otherwise, people will not use them.* **Urban participant 2:** *Even though traditional banks seem to be safer because you are face to face with the consultant and you get to do things physically rather than doing them on the cloud or online. So, I feel that they are both safe, but traditional is safer and can be more trusted because obviously you with the consultant face to face and yeah, it's there for you can be 100% sure that you are not being scammed by any poster or anything like that.*	Trust

Urban participant 3: *For me, its trust, and convenience of having to transact at any given time. You are able to safely pay your monthly bills, send money, receive money at a blink of an eye.* **Urban participant 4:** *I actually trust fintech more and the reason why I say that is that I can see what's happening and at any given time and I have access to all the information at any given time just to see what's happening whereas in a traditional system, you'd have to physically go or call even after calling the even back then,*	
Township participant 1: *what made me to be more interested in using digital fintech services is convenience, it's very easy for me I don't have to stand in lines in order to get my bank statement. I don't have to go through a branch in order for me to opening a saving savings account. I can just do it over my phone, so that's what attracted me or made me use Fintech products, It's the convenience that they bring.* **Township participant 2:** *I'm just going to go back to just convenience they make banking easier for us.*	

Township participant 3: *Digital banking services speaks to a new age everything is digital it's there for convenience.* **Township participant 4:** *I had always had an interest in digital fintech services because of the convenience, it's efficient rather than going to stand in the long queues of the banks.* **Urban participant 1:** *It's so convenient and It's easily accessible to me. Having to cut out on going to the physical banks or doing things the traditional ways is what really gives it the value. Its value lies in convenience and saving time….* **Urban participant 2:** *It makes things convenient for people, everything can be a tap of a button to transact.* **Urban participant 3:** *it's convenient. Convenience right now is something that is quite valuable if we can save you money and time, that's something that's quite convenient.* **Urban participant 4:** *it's convenient it's easier for everyone.*	Convenience

Township participant 1: *Their main advantage is that they focused more on services that can be accesses on smartphones. lots of people have smartphones.* **Township participant 2:** *it's something that they can access on their phones without having to make that trip, without having to queue in those lines it's cost and time effective.* **Township participant 3:** *I'm part of FNB, I've got the FNB application on my cell phone so therefore that enables me to transact through there whether is to send money, whether is to pay the bills whether it's to pay tithe at church.* **Township participant 4:** *I would look around me everywhere I saw smartphone I don't even know if those people make use of digital banking services but the thing is that they do have that kind of access.* **Urban participant 2:** *To make use of these Fintech services you are required to have data and a smartphone.* **Urban participant 3:** *Cheapness definitely because it's free, but then also a lot of fintech services are also user friendly. Snap-scan is very simple to use all they do is just ask for your bank card number and they ask for your cell phone number and then*	Mobile-first approach

there is verification with your bank, turn on your camera on your phone, the app scans it is a lot easier **Urban participant 4:** *When you in trouble and you know you can at it encourage them, because I think it's just convenient and much easier to live your life when you can easily do things on your phone.*	
Township participant 1: *it's quite affordable, depending on which type of platforms you use, you are charged based on the activity, based on the transaction, the costs are quite reasonable, and we also do have options like one may have high cost, you do have the options of others that just perform the same services and but at a lower fee or at a lower cost.* **Township participant 2:** *…. with some of these fintech services, you also get back like rewards and for the fact that you are transacting at the end of the month, you actually see that the true cost even ends up being even less.* **Township participant 3:** *The role that fintech services play in society is providing access to affordable services to consumers. They are shaping the consumers preference by delivering the same solutions far cheaper compared to traditional brick and mortar bank.*	A focus on low-cost solutions

Township participant 4: *Fintech services are affordable and cheaper.* **Urban participant 2:** *It's very affordable for me if you are transacting on the online platforms, there are no fees that are charged unlike going to the actual branch you have to speak to someone, and that person have to be paid to assist you and then you end up being charge for the service on the regard it is very much affordable.* **Urban participant 4...***with fintech at least you don't have to pay a subscription fee or anything of that nature like snap scan for an example is free. They make their money through commission. You're still paying the standard price. The commission is being taken away from the business owner who's selling the product through Snap-scan it is a lot easier for the consumer because the consumer doesn't have to worry about paying for the service.*	
Township participant 3: *Instant so in that I can instantly send you money and you will get it instantly or you'll get in some form of notification that hey someone has sent you money and you can instantly send me something or to understand that.*	

Township participant 4: *it's efficient, rather than going to stand in the long queues of the banks. I can just do anything that is financially related, if I want to pay for my bills, I can just do it on my phone, sitting at the comfort of my own place and it's quick.* **Urban participant 1:** *I mean, we use it every day it's part of our lives. Online banking will always transact online. You're always buying things online. It's so easy and there's payment gateways now online and we use this now to even get our groceries or just buy clothes on an online store or just, to easily make any sort of transaction or even in investments and you can literally just make it at the top of a button now.* **Urban participant 2:** *It also became such a really big thing in my life when I started using it for online shopping it's easy to connect your online banking service to your online shopping experience.* **Urban participant 3:** *Fintech gives you the convenience of having to transact at any given time. You are able to pay your monthly bills, send money, receive money at a blink of an eye. You do not have to stand in those long queues in order to make a simple transaction. I am encouraged to not to stand in those long queue's just to make a deposit or withdraw cash these are the factors that influenced adoption of digital fintech banking.*	Innovative payment solutions

Urban participant 4: *It made it easier for me to receive and to send money, especially living at Res. Having to receive money from my mom's, it would be much easier than having to go withdrawals or having to go to Shoprite to take out money when I could literally just get into my bag and start using my banking apps and online banking and so forth.*	
Township participant 2: *They have massive influence; they target the unbanked and the low-income earners.* **Township participant 3:** *…. they have disrupted the financial industry.* **Township participant 4:** *People are now able to send money to other countries using Mukuru. You do not have to have a bank account for you to be able to receive or send money you can withdraw your money from retail shops.* **Urban participant 2:** *The fact that fintech is targeting the low income and the unbanked consumers has improved the welfare of low-income earning consumers.* **Urban participant 4:** *These types of consumers are the ones the normal traditional banks will not attract, fintech saw the gap and they capitalized on it hence the*	Financial inclusion

disruption this has made a difference in the lives of the poor and the previously excluded consumers.	
Township participant 1: *Most importantly the awareness in the township is not there because of lack of resources people cannot afford to buy smart phones.* **Township participant 2:** *Sometimes it's the fear, when you are not well educated or when you have not been exposed to something you become scared.* **Township participant 3:** *In township areas we have people who can't afford smartphones and those that don't have access to the data.* **Township participant 4:** *It's easier for the people living urban to adopt quickly, there is easier access to Internet they've got a wealth of information that they have access to, and they can do the research. Access to Internet is a bit harder in the township areas when something new is being introduced, they need some time to at least understand what it is and how it works.*	Socioeconomic status

Township participant 2: *It's even bigger problems It's just a fear of the unknown when you are less educated you tend to look down on yourself and think. You might think I can never know this because I don't know English.* **Urban participant 1:** *a lot of lower-income consumers are in the township, and they are not familiar with digital banking. I think being exposed to digital banking depends on which class you are in.* **Urban participant 2:** *If you are uneducated the exposure is very limited, in township majority of the people do not have a post matric qualification as such they lack the knowledge and they tend not to adopt the digital fintech services.* **Urban participant 3:** *In Township besides the data prices, I think one other factor is maybe the education.* **Urban participant 4:** *Many people in the township community are not informed about these fintech services, I also think they are scared that someone is going to take their money. So, they are very resistant.*	
Township participant 1: *People who are living in the Township, the education system in the townships is not good they are also struggling you need to have a basic*	

understanding of English and most of them lack that part it is also about education you need to have understanding English and technology, if you don't you will struggle to use these fintech technologies. **Township participant 2:** *Education is important if you are not educated it will not be easy to navigate these apps as mentioned you need to have a good grasp of English.* **Township participant 3:** *a lot of lower-income consumers are in the township, and they are not familiar with digital banking.* **Township participant 4:** *South Africa has more poor communities and in poor communities' people are very reluctant to change because of lack of education on technologies.* **Urban participant 1:** *also, in some cases because people are illiterate, they can't use the app, especially in townships.* **Urban participant 2:** *In urban areas people are exposed to technology, they have Wi-Fi. This makes them more likely to understand Fintech services faster.*	Education and Digital literacy

Urban participant 3: *I think being exposed to digital banking depends on which class you are in, in the township digital literacy is lower compared to urban areas.* **Urban participant 4:** *Most people are not well informed in the Township about certain apps.*	
Township participant 1: *Connectivity is a challenge in the township sometimes when I want to transact there is no connection, I just wait for the network to be better before I can transact online.* **Township participant 2:** *…even just your basic network coverage just being in a rural area that is already an issue and they might not be able to get the a stable connection to be able to get online and use the services and that is also an issue that really would have to also involve not only the Internet service providers but the network service providers on improving the coverage in all of those areas because then they can be able to buy data or access or Wi-Fi at any Wi-Fi spot that there is.* **Township participant 3:** *Improvement on the infrastructure and connectivity remains the biggest issue. You may have the right tools and willing to adopt if connectivity is a problem, you cannot be able to use the services.*	

Township participant 4: *The issue comes up when these for example our infrastructure and townships, especially our network infrastructure is not maintained as often as we'd like we have issues with network, especially when there's load shedding or when it's raining sometimes you might need to pay for something or access your bank for some reason.* **Urban participant 1:** *So, for people in townships mostly their challenges, it's connectivity and also like data access.* **Urban participant 2:** *For people living in townships, it is mostly connectivity. By connectivity I mean the network signal is not very good where they are staying. The connection is very bad in townships.* **Urban participant 4:** *People living in townships like they have network connectivity issues network is very bad in Township compared to urban areas, so it's easier for a person who lives in urban areas to adopt digital fintech services because they have WIFI's.*	Access to infrastructure

Township participant 1: *People living in townships have network connectivity issues, network is very bad in Township compared to urban areas, so it's easier for a person who lives in urban areas to adopt digital fintech services because they have WIFI.* **Township participant 2:** *I do believe that there is a difference in adoption between those two areas because people who are living in urban areas are more open to change and their lifestyles as they're living in those places that inspires them to adopt digital banking services easily.* **Township participant 3:** *People in urban areas have easy access to mobile devices or computers that you need to be able to access fintech services. For people who are in Township access is problem libraries are mostly in urban areas people cannot afford data in Townships.* **Township participant 4:** *adoption is low in townships because many people in the township community are not informed about these fintech services, I also think they are scared that someone is going to take their money. So, they are very resistant. I also think it's about the mentality. People in the townships view Fintech Services as "izinto zabulungu" (white people things) not theirs*	Digital divide

Township participant 2: *Lifestyle and affordability also play a huge role, it is no use for me to have access to fintech, whereas I'm not even using it as much. I'm not even requesting rides that much, I'm not ordering food online, I'm not purchasing, so I just have it for the sake of having it, In the township, what's the use if I know I won't to use it? Because it won't be of any benefit to me. So, I think that also affects the adoption of people from the townships.* **Township participant 1:** *OK, so I live in a Township area it works as long as there this proper infrastructure in place or you have network you can easily access the fintech services. The issue comes up when our network infrastructure is not maintained as often as we'd like, especially when there's load shedding or when it's raining sometimes you might need to pay for something or access your bank for some reason, but you can't. So, I'd say that its tricky in that sense but other than that on a normal day it works really well.*	
Urban participant 1: *In the township areas, adoption is there, but not as much as in urban areas because one, they have limited resources; they might not have access to a smartphone and laptop which are the things you need to be able to access fintech services and two, data issue; Wi-Fi or data is not as easily accessible in those areas. There are also network coverage issues I don't even know if I've used it in a rural area.*	

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Urban participant 2: *I think there is a difference between the adoption of digital banking Fintech Services in township and in urban areas. In townships people are discouraged by lack knowledge, education and awareness.* **Urban participant 3:** *In an urban area, I think that's really where adoption is at its peak, and it's probably used by maybe 90% of the population here. And that's just because it's accessible and people in urban areas have an advantage that they have access; they have better access to smartphones, computers, laptops. These gadgets allow them to adopt Fintech services that are available, especially in banking.* **Urban participant 4:** *I think adoption is lower in township areas. The education system in the townships is not good they are struggling; you need to have a basic understanding of English and most of them lack that part. You need to understand English and technology if you don't you will struggle to use these fintech technologies.*	Technology access