Understanding factors that influence digital banking user intention: a South African banking perspective

Yashna Maharaj

Student number: 444220

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ABSTRACT

In an increasingly digital landscape, retail banks in South Africa need to keep abreast of the factors that influence consumers digital banking usage intention. According to existing literature, the most prominent factors include economic value, social influence, firm reputation, product features, product rewards and perceived ease of use. This study aims to explain the relationship between these variables and whether a user's intention to use digital banking is influenced by these factors at the start of their decision-making journey. In order to assess the impact of each of these factors, an online survey was distributed to students from a South African university. The online survey used a 5-point Likert scale to measure statements related to each variable. A cross-sectional approach to data collection was preferred. There were 191 respondents that completed the survey. Majority of respondents in this study were African females between the ages of 18 and 24. 98% of respondents indicated that they use digital banking. The key findings indicated that social influence, firm reputation, product features and perceived ease of use did in fact influence consumers digital banking usage intention in South Africa. However, economic value and product rewards were found to be statistically insignificant. It was therefore concluded that banks should focus on strategies that improve these factors to attract and retain customers, especially within the younger generation.

KEYWORDS

Digital banking, digital channels, internet banking, mobile banking, digital banking usage intention, consumer usage intention, consumer usage behaviour, consumer decision journeys

DECLARATION

I, Yashna Maharaj, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Name: Yashna Maharaj Signature: 

Signed at Johannesburg, Gauteng

On the 27th day of February 2023

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Covid19: Coronavirus disease

FNB: First National Bank

TAM: Technology Acceptance Model

DTI: Department of Trade & Industry

CHAPTER 1. INTRODUCTION

1.1 Statement of purpose

The purpose of this quantitative study is to examine the factors that influence digital banking user intention in a South African banking context by employing the technology acceptance model and additional constructs such as economic value, social influence, firm reputation and product features and rewards. It will also assess the reliability and validity of these factors within a South African banking context and help understand the competitive advantage that can be developed therein.

1.2 Background of the study

According to a study published by Juniper Research in 2020, there will be a 54% increase in digital banking users between 2020 and 2024 (from 2.4 billion to 3.6 billion). It is predicted this growth will be led by the increase in digital-only banks and the continuous focus on digital transformation by incumbent banks (Juniper Research, 2020).

The impact of Covid19 has resulted in an acceleration of digital transformation in business and the way people conduct their lives (Alkhowaiter, 2020). The development of the internet and mobile phones has led to a change in consumer habits and preferences and the development of new forms of banking and conducting financial transactions in more convenient and effective ways (Alkhowaiter, 2020).

With this increased influence of digital devices on people's lives and the complexity it brings into consumers decision-making processes, there has been a resulting increase and call for research on the factors that drive consumers decisions (Santos & Goncalves, 2021). By understanding the consumer experience and "path-to-purchase", firms have a more in-depth view of consumer

decisions and touchpoint choices that include those that the firms do not have control over (Santos & Goncalves, 2021).

Major South African banks have begun to adopt long-term strategies to ensure digital transformation that is business aligned and able to respond to rising complexities and uncertainties in the market (Maja & Letaba, 2022). With banks looking for additional avenues to predict and influence consumer behaviour and exploit market dynamics and product trends (Maja & Letaba, 2022), it is worthwhile to understand the factors that influence digital banking user intention.

1.3 Research problem

Various types of influences on consumer usage intention and decision-making methods have been documented over the years. The more traditional methods tend to unfold in a sequential nature which is no longer representative of current consumer decision-making and usage intention (Santos & Goncalves, 2021). In the current technological and digital environment, consumers have access to a range of media and channels to search for information (Hall & Towers, 2017). This access increases the number of factors that can influence consumers' decision.

Individuals appear to have become increasingly influenced by word-of-mouth marketing through the advent of social media and comparison websites (Colicev et al., 2018). Additionally, company websites, search engines, blogs, and mobile browsers (Batra and Keller, 2016) are leading the way in reducing the hierarchical nature of previous decision-making journeys, making them more complex and non-linear in nature (Varnali, 2019). This translates to multiple sources of influence on consumer's decision making and usage intention.

57 percent of millennials in South Africa indicated that they might consider changing banks for a better mobile banking experience (JP Morgan, 2018 as cited in Maduku & Thusi, 2020). This indicates the importance of understanding the factors that underlie consumer acceptance and use of digital banking channels to identify the opportunity that lies therein.

It is therefore argued based on these digital and social influences that a different set of factors emerge that influence consumer's decision-making and ultimately usage intention which represents a more knowledgeable and empowered consumer (Court et al., 2009). In this regard, this research aims to understand user intention that can provide key insights and result in a competitive advantage for banks that get it right.

1.4 Research questions

Below are the research questions to be answered by this study:

1. What is the state of digital maturity in the South African banking industry?
2. What are the key digital channel factors that influence digital banking user intention?
3. What are the barriers to consumer's digital banking usage intention?

1.5 Rationale

Consumer decision journeys has been receiving increased attention and calls for research and theory development (Rudkowski et al., 2020). These journeys serve as a tool that help companies understand factors that influence consumer choices both within and outside the company's control (Hamilton & Price, 2019).

The different characteristics that arise from these influences also increase the complexity in determining the implications on the consumer decision journey (Santos & Goncalves, 2021).

1.6 Delimitations of the study

This study will focus on consumers that use or interact with digital banking services offered in South Africa. These banking services can include mobile banking and online or internet banking. The study will also explore current theoretical and foundational consumer decision journeys and relate the stated

factors that influence consumer decisions to South African consumers decision-making processes. Factors that influence the use of physical banking channels and voice banking channels will be excluded from the study.

1.7 Definition of terms

Construct	**Description**
Economic value	Cost reduction and time savings (Kenny, 1999 as cited in Amelia et al., 2022)
Ease of use	Ease of use of a system (Davis, 1989 as cited in Amelia et al., 2022)
Social Influence	Person influenced by others to perform a new activity (Amelia et al., 2022)
Firm Reputation	A good reputation helps build trust when users do not have direct knowledge of the bank (Lohse & Spiller, 1998 as cited in Amelia et al., 2022)
Product Features	Components built to differentiate a company's products from competitors (Amelia et al., 2022)
Product Rewards	Strategic or policy driven incentive to appreciate a user's financial or non-financial contribution to increase company profits (Amelia et al., 2022)

Table 1**:** Definition of terms

1.8 Assumptions

Respondents to this study are assumed to reflect standard perspectives and experiences of a South African consumer. Thus, results of the study related to

consumer behaviour and factors that influence digital banking user intention shall reflect this standard.

Respondents are assumed to be registered for digital banking with their chosen bank; are familiar with their banks digital banking channels and use them regularly. They are also assumed to know the reason they choose to engage in digital baking versus other channels offered by their chosen bank.

1.9 Chapter Outline

Chapter one explains the purpose of the research, context of the study, the research problem and rationale behind the research. It also includes delimitations, assumptions and definitions of terms relevant to the study.

Chapter two includes a review of the available literature related to the research questions. Studies performed by other researchers are presented and analysed.

Chapter three presents the proposed research approach. It includes the research design, data collection methods, population and sampling method, and research instrument to be employed. The procedure for collecting data, data analysis strategies and interpretation, possible limitations and challenges of the study, quality assurance, ethical considerations and proposed schedules and timelines are also discussed.

Chapter four presents the research findings and key factors influencing consumer's digital banking usage intentions as disclosed through respondents' feedback. It also provides a discussion of the research findings and its relation to the research questions and literature review.

Chapter five concludes the research study and provides recommendations for further research on consumer's digital banking usage intentions.

CHAPTER 2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

The following review will attempt to explore and analyse insights from current research on South Africa's digital maturity. It will also delve into the factors influencing digital consumer decision journeys within the context of South African banking and the associated barriers that hinder progress in digital banking.

2.2 Definition of topic or background discussion

Digital banking involves "the use of technology for delivering banking services to customers" (Khan, 2022). It is a shift toward online banking whereby banks presume customers have access to the internet and digital devices such as smart-phones, laptops, personal computers, and tablets/phablets (Khan 2022). It also presumes customers are digitally literate to manage their online banking services (Khan, 2022). It includes terms such as online banking, internet banking (Alkhowaiter, 2020) and mobile banking.

There are many definitions of what is a "consumer decision journey". The term was first described as a "dynamic consumer decision-making process" by Court et al. (2009). There have been many definitions since that point. For Vazquez et al. (2014), the consumer decision journey is the "purchase process from awareness to purchase, consumption, and sharing". Shavitt & Barnes (2020), articulate the process as the "steps consumers take in their path towards building relationships with brands or experiences that are satisfying". This research is aligned with both these definitions and will focus on the factors that influence these journeys.

2.3 What is the state of digital maturity in the banking industry?

South Africa's banking sector has historically been considered a digital laggard compared to its international counterparts (Jenkin & Naude, 2018). However, digitalisation has become a key strategic focus for the sector and South Africa has emerged as a country with the highest potential to realise digital maturity ahead of other African countries such as Kenya, Nigeria, and Ethiopia (Siemens, 2017).

In South Africa, the banking sector is transforming its landscape by bringing in digital mechanisms such as blockchain, digital wallets, cryptocurrency and online and mobile banking (Jenkin & Naude, 2018). The development of FinTech companies further intensifies competition in the sector and challenges incumbents to increase their rate of digital transformation (Mandela, 2018).

Congruent to the banking sector's digital transformation is the South African consumer's transition to digital (Jenkin & Naude, 2018). The availability and access to technology by consumers and their adoption of these technologies have been on the increase (Jenkin & Naude, 2018).

Statistics for South Africa indicate that approximately 20 to 22 million of the population use a smartphone and that there are over 90 million mobile connections (Statista, 2019). Internet penetration levels across both phone and computer devices is approximately 52% (COEFS, 2017 as cited in Jenkin & Naude, 2018). However, it is estimated that only about 43 percent of the mobile population use their device to perform banking activities (BusinessTech, 2018).

Figure 2 displays a 5-year historical view of South Africa's online and digital banking population from 2011 to 2015 and the growth that has occurred over those years. According to this, 66% of the banked population have online accounts and 23% of them use digital banking (Jenkin & Naude, 2018).

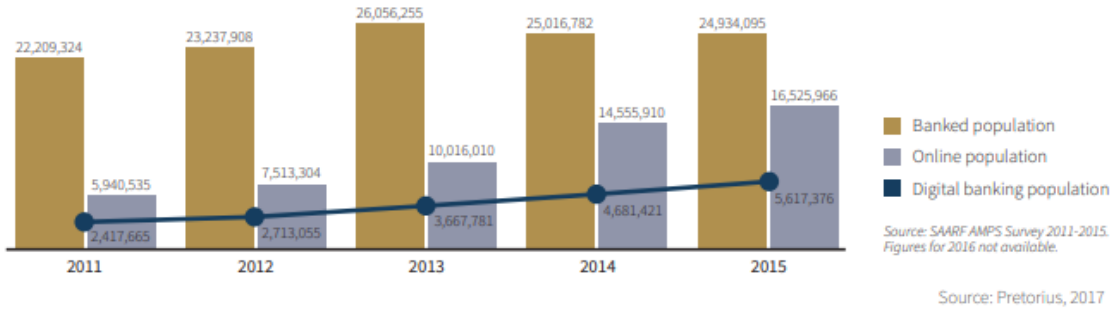

Figure 1: 5-year historical view of South Africa's online and digital banking population (Pretorius, 2017 as seen in Jenkin & Naude, 2018)

InSites Consulting South Africa conducts an annual SITEisfaction survey that analyses consumer behaviour and experience with online banking. The study focuses primarily on South Africa's six main consumer banks, namely, FNB, Nedbank, Standard Bank, Absa, Capitec and TymeBank. All six banks have an online presence through mobile and internet banking.

According to the survey most South African banks have increased in their digital rankings over the years (BusinessTech, 2021). Figure 2 displays the best digital banks in 2021 and their point increase or decrease from the prior year. Capitec Bank overtook FNB in rankings over the past year and were praised for their clear and easy to use platform (BusinessTech, 2021). In addition, both top banks received recognition for their online platform's security measures (BusinessTech, 2021).

FNB users also praised the bank for constantly improving and releasing new features and say they feel it to be a safe and trustworthy platform (BusinessTech, 2021). Nedbank was noted by customers for displaying a consistent performance across its internet and mobile banking platforms (BusinessTech, 2021).

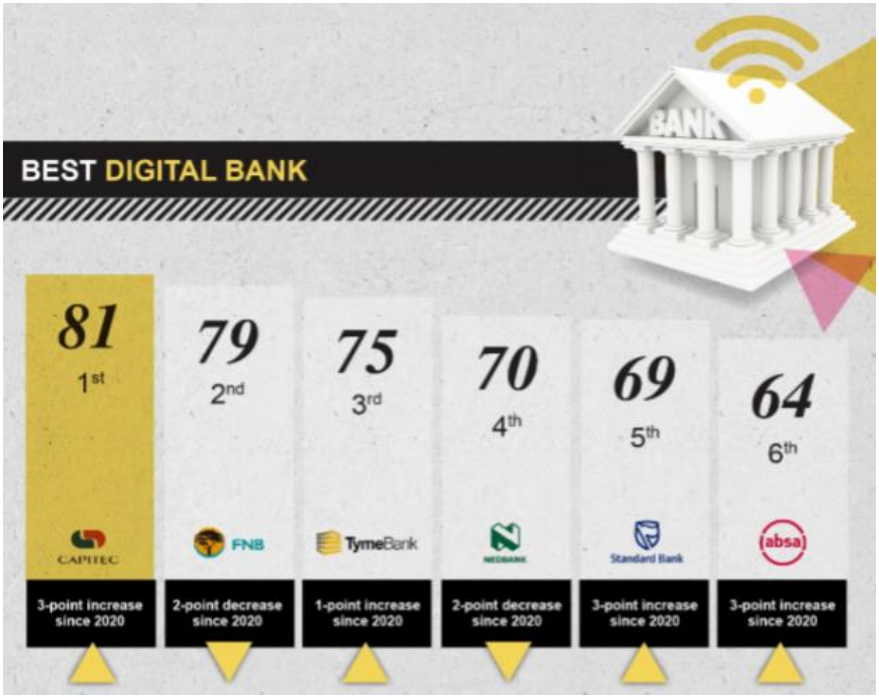

Figure 2: Best Digital Bank (BusinessTech, 2021)

Figure 3 indicates a 5-year trend of mobile banking rankings since 2017. Most banks saw an overall positive trend with the most significant increase being Absa, a previous digital banking laggard (BusinessTech, 2021).

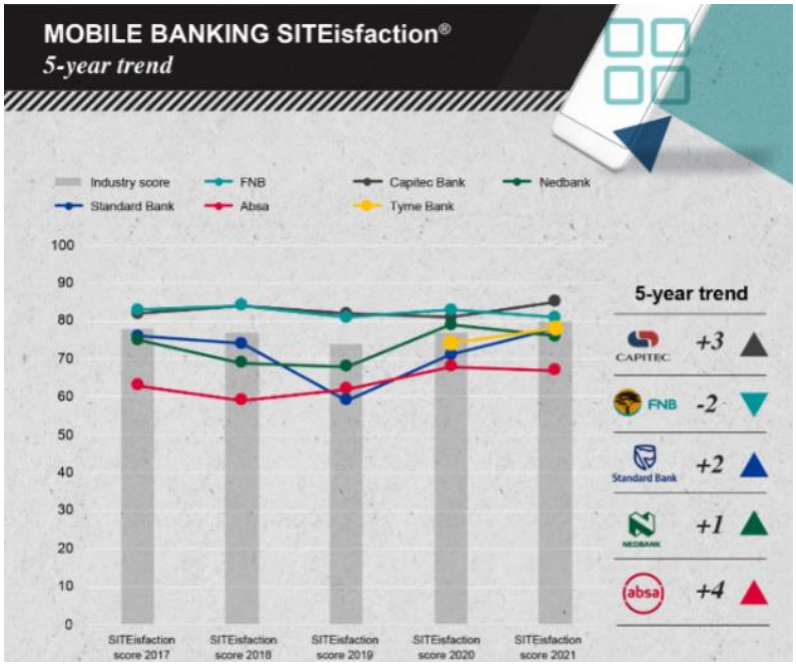

Figure 3: Mobile Banking SITEisfaction (BusinessTech, 2021)

These charts indicate South Africa's banking industry digital maturity. While it is clear the industry has been making significant progress over the years, it must be acknowledged that in the wider global context South Africa is still lagging. Understanding factors that influence digital banking user intention is one way to ensure the right strategies are employed for future development.

2.4 What are the key digital channel factors that influence digital banking user intention?

Research conducted by Amelia et al. (2022) on generation Y and Z respondents in Indonesia reflected six key factors influence consumer intention to use digital-only banking. These were "economic value, perceived ease of use, social influence, firm reputation, product features and rewards". Interestingly, two other factors tested had significantly lower impact, namely curiosity and sales promotions (Amelia et al., 2022).

In addition, having an interface that is simple and easy to use is also required to support the digital consumer experience (Amelia et al., 2022). Factors such as rewards, unique features and positive word-of-mouth are required to enhance the consumer experience (Amelia et al., 2022).

Earlier research indicates that consumer experience delivered through technology-enabled banking services is influenced by "service quality, functional quality, perceived value, employee-customer engagement, perceived usability, and perceived risk" (Mbama & Ezepue, 2018; Mbama, Ezepue, Alboul, & Beer, 2018).

Research also shows that the Internet has changed the way in which consumer's create and share information (De Bruyn & Lilien, 2008). Social media such as blogs, social networks, customer reviews, and forums all increase the sharing of digitised feedback information in the form of electronic word-of-mouth (Dellarocas, 2003; Schindler & Bickart, 2005). This can be accessed and shared anytime and anywhere which increases its level of influence among fellow consumers (Dellarocas, 2003; Schindler & Bickart, 2005).

In a study examining the influences on mobile banking adoption, performance expectancy arose as the strongest predictor on usage intention (Dwivedi et al., 2021). Consequently, usage intention is the strongest predictor on usage behaviour which impacts consumer decision-making (Dwivedi et al., 2021). In another comparison study conducted between consumers living in Egypt and the United States, it was found that country culture can also influence perceptions and intentions of consumers toward mobile banking (Hassan and Wood, 2020).

Based on this, there is room for research on factors that influence South African consumers given the unique environmental context of operation.

2.4.1 *Hypothesis*

The hypothesis is derived from researched based factors that typically influence consumer's digital banking usage intention. The aim is to discover those that influence South African consumers and the level of influence on their decision-making.

The key digital channel factors that are presumed to influence a consumer's digital banking usage intention based on prior research include economic value, social influence, firm reputation, product features & rewards and perceived ease of use. The hypotheses are as follows:

1. Economic value

H0: Economic value does not have a positive influence on digital banking user intention

H1: Economic value has a positive influence on digital banking user intention

2. Social influence

H0: Social influence does not have a positive influence on digital banking user intention

H1: Social influence has a positive influence on digital banking user intention

3. Firm reputation

H0: Firm reputation does not have a positive influence on digital banking user intention

H1: Firm reputation has a positive influence on digital banking user intention

4. Product features

H0: Product features does not have a positive influence on digital banking user intention

H1: Product features has a positive influence on digital banking user intention

5. Product rewards

H0: Product rewards does not have a positive influence on digital banking user intention

H1: Product rewards has a positive influence on digital banking user intention

6. Perceived ease of use

H0: Perceived ease of use does not have a positive influence on digital banking user intention

H1: Perceived ease of use has a positive influence on digital banking user intention

2.5 What are the barriers to consumer's digital banking usage intention?

It is no surprise that availability, affordability, and stability of internet and cell phone data is required for customers to use digital financial services (Jenkin & Naude, 2018). However, only about 37% of South African households have reliable internet access via their mobile device or computer (Siemens, 2017). Additionally, the cost of internet access is unaffordable to many as it is still

relatively high compared to other countries (Siemens, 2017). There is also the added disadvantage of an inconsistent power supply for users to charge their digital devices in South Africa (Jenkin & Naude, 2018).

Customers living in rural areas are likely to experience challenges in technical literacy especially when becoming new owners and users of smartphones and other advanced digital devices (Jenkin & Naude, 2018). The elderly are also likely to find challenges in adapting to the digital world and will probably rely on older technology (Jenkin & Naude, 2018). This challenge has been acknowledged by the Department of Trade & Industry (DTI) as a key issue in terms of how to transition to a more digital landscape but still accommodate the varied technical capabilities of the population (COEFS, 2017 as cited in Jenkin & Naude, 2018).

Incumbent banks in South Africa have a long history of being physical, cash-oriented entities and therefore find it challenging to transition to digital organisations (Jenkin & Naude, 2018). Another issue is the country's sometimes antiquated regulation and legislation which often creates a stumbling block for companies looking to develop and grow digitally (Jenkin & Naude, 2018).

With the rapid increase of new entrants' trust needs to be built with the consumer (Jenkin & Naude, 2018). This takes time as consumers also require assurances around data security and management (Jenkin & Naude, 2018). Lastly, a worldwide concern is the skills shortage specifically in technology and digital (Jenkin & Naude, 2018). The impact of this will hinder digital transformation in the banking sector (Jenkin & Naude, 2018).

2.6 ANALYTICAL FRAMEWORK

2.6.1 *Theoretical Framework*

This study will utilise the Technology Acceptance Model (TAM). A review of literature indicated that this model is the most widely accepted research framework in this area of study (Shaikh and Karjaluoto, 2015). It is also reported to be reliable and valid when measuring the acceptance of various innovative

technologies within a diverse set of societies and cultures (Shaikh and Karjaluoto, 2015).

TAM theory stipulates that perceived ease of use and perceived usefulness are the main influences on customer behavioural intentions, adaptation, and use of new technologies (Venkatesh and Davis, 2000). However, other constructs have been added in some studies to improve the usefulness of the TAM including economic value and social influence (King and He, 2006).

2.6.2 *A Hypothesised Model*

Based on factors discussed in prior sections, a conceptual framework was developed to determine the factors that influence user intention of digital banking services in terms of consumer decision-making journeys. Figure 5 displays a view of the hypothesised model.

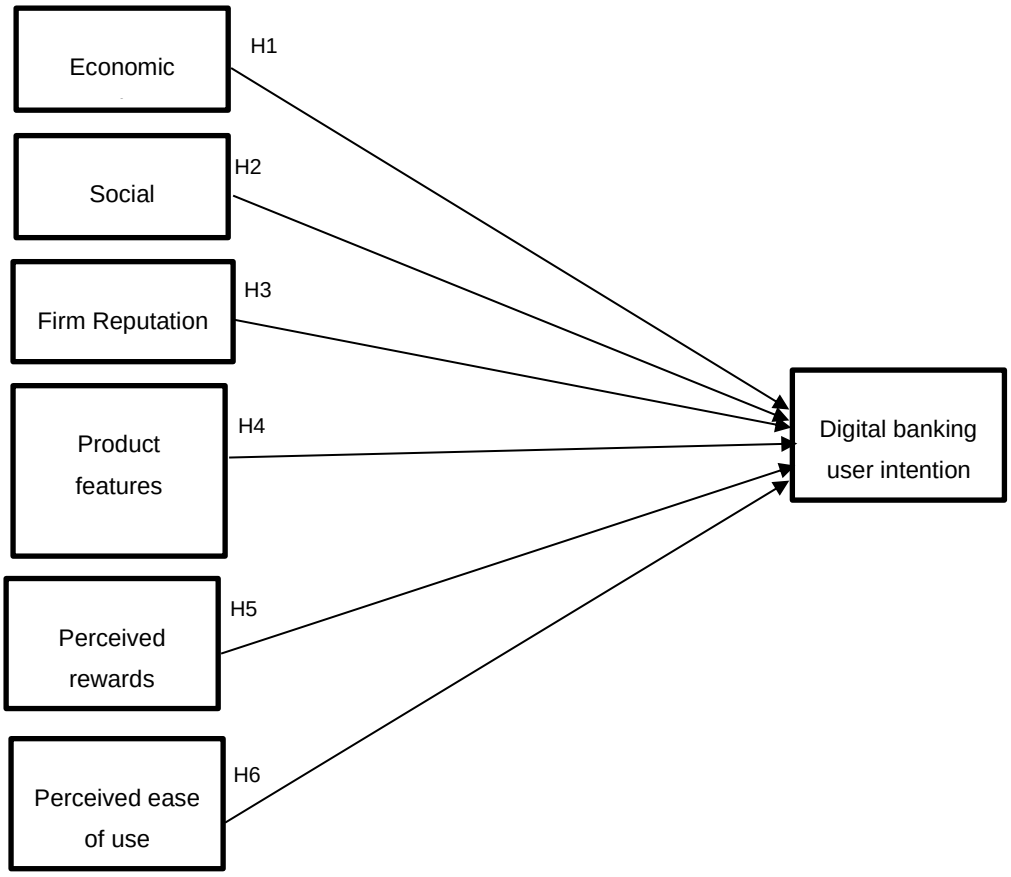

Figure 4: A Hypothesised Model

2.7 Conclusion of Literature Review

Whilst South Africa is behind compared to many other countries in terms of digital transformation, they have made significant progress over the past few years. According to research, factors that can be considered as influences on the digital banking consumer journey include economic value, perceived ease of use, social influence, firm reputation, promotion, features, curiosity, rewards, and culture. Consequently, barriers include availability, affordability, and stability of internet access. These can be used by bank's enhance their strategic plan for onboarding consumers to digital channels.

Hypotheses developed based on above research are as follows:

1. Economic value

H0: Economic value does not have a positive influence on digital banking user intention

H1: Economic value has a positive influence on digital banking user intention

2. Social influence

H0: Social influence does not have a positive influence on digital banking user intention

H1: Social influence has a positive influence on digital banking user intention

3. Firm reputation

H0: Firm reputation does not have a positive influence on digital banking user intention

H1: Firm reputation has a positive influence on digital banking user intention

4. Product features

H0: Product features does not have a positive influence on digital banking user intention

H1: Product features has a positive influence on digital banking user intention

5. Product rewards

H0: Product rewards does not have a positive influence on digital banking user intention

H1: Product rewards has a positive influence on digital banking user intention

6. Perceived ease of use

H0: Perceived ease of use does not have a positive influence on digital banking user intention

H1: Perceived ease of use has a positive influence on digital banking user intention

CHAPTER 3. RESEARCH METHODOLOGY

The following chapter will outline the research approach, research design, data collection methods, population, and sample, research instrument, and the procedure for data collection. Data analysis strategies and interpretation, possible limitations, and challenges of the study as well as quality assurance and ethical considerations are included. A schedule and timelines for this research is also proposed.

3.1 Research approach

This research will employ a quantitative approach. This approach can be regarded as a research strategy that places emphasis on quantification of data in the collection and analysis phase (Bryman, 2012). It involves a deductive approach to the testing of theory and takes an objective view of social reality (Bryman, 2012).

Most of the studies reviewed made use of a survey to collect primary data for hypothesis testing. The factors identified through prior research were used to formulate the hypotheses. A quantitative survey was used to assess the reliability and validity of these factors in a South African context. The study was intended to find out if digital banking consumer decision journeys (aka intention to use digital banking platforms) were influenced by economic value, social influence, firm reputation, perceived ease of use, product features and product rewards.

3.2 Research design

The research is cross-sectional in nature. A self-completion online survey was administered to collect primary data from respondents. As the research contains independent and dependent variables the study attempted to identify the causal relationship between these variables. Additionally, this is labelled a cross-sectional study because the outcome of the relationship between variables represents results at a point in time (Bryman, 2012). In this type of study, a

sample is selected from a population and data is collected to help answer questions of interest to the researcher (Bryman, 2012).

3.3 Data collection methods

Data was collected through an online survey which respondents completed by themselves. This data collection method was chosen because it was predicted that more respondents will be able to access and complete the survey due to it being online. Respondents were also able to complete the survey at a time and place that was convenient to them.

3.4 Population and sample

3.4.1 *Population*

The population for this research was students studying at a South African university that utilised a digital bank account at any South African bank.

3.4.2 *Sample and Sampling method*

A convenience sampling method was used. Due to the researcher being a student at the university, it was more convenient to gain permission to conduct the study within the abovementioned population. With this type of sampling method, there is a risk that responses will not represent the entire population (Bryman, 2012).

According to Field (2009), the standard predominant in literature is 10-15 observations per variable. This study has 7 variables and targeted 15 observations per variable thus the minimum number of respondents for this study was aimed at 105.

The demographic included people of all ages and race groups that have or utilise at least one digital bank account with any South African bank. The researcher

made fellow students aware of the study and encouraged them to complete the survey.

3.5 The research instrument

The research instrument was an online survey (Appendix B). The survey was structured into sections. Section A included information on respondent demographics. Section B focused on survey questions and identification of the influence of specific constructs on the respondents digital banking choices. Further information can be found in the Appendix, including a cover letter to participants inviting them to participate.

The online survey used a 5-point Likert scale, with 1 as strongly disagree and 5 as strongly agree. The statements measuring each factor was adopted from multiple sources: economic value from Lee, Pi, Kwok, and Huynh (2003), perceived ease of use, social influence, and digital banking user intention from Thakur & Srivastava (2014), firm reputation from Jin, Park, and Kim (2008), and product features and rewards from Amelia et al. (2022).

3.6 Procedure for data collection

The following steps were followed to collect the data:

- Sent a formal request to the university Research and Ethics department and obtained approval to proceed with distribution of online surveys to students.
- Once approval was obtained, an email was sent to the university's students with a message explaining the purpose of the study as well as a request for respondents to participate.
- A link was also included in the email directing participants to the online survey.
- The survey was conducted, and data collected through Qualtrics which is an online survey tool.

3.7 Data analysis strategies and interpretation

The statistical tools used included both SPSS and Stata software for analysis. A cross-sectional regression analysis was applied. This technique uses two or more independent variables to predict the result of a dependent variable (CFI Team, 2022). This technique assists the researcher to determine the variation of the model and the relative contribution of each independent variable (CFI Team, 2022).

Descriptive analysis is also used to describe the demographic characteristics of respondents. The characteristics include gender, age, race, bank account and the usage of digital banking.

3.8 Possible limitations and challenges of the study

Some of these may include:

- Sample might not be representative of the population.
- The variables in the model represent only a small portion of factors that may influence consumer intention to use digital banking in their decision journey.
- Factors included in the study are based on prior research primarily outside South Africa.

3.9 Quality Assurance

3.9.1 *External validity*

This refers to the extent to which findings can be extended or generalised across a population (Bryman, 2012). The South African university chosen represents a diverse group of students from all race groups, ages, cultural and socio-economic backgrounds. The online survey will be accessible to all students for completion

thereby enhancing the possibility of a diverse group of responses and its generalizability across the population.

3.9.2 *Internal validity*

The proposed conceptual model is based on prior research. The variables included in this study are also based on previous literature.

3.9.3 *Reliability*

This study has tried to ensure that the factors included in the study are relevant. These were also checked against existing literature to make sure it made sense in relation to the purpose of the study.

The internal consistency of the questionnaire items was assessed using Cronbach alpha. The reliability test was used to examine the statistical significance of how well the collection of items measured a particular factor. The Cronbach alpha also helps determine the similarity of responses if the questions were asked severally to the group under similar conditions.

3.10 Ethical considerations

An ethical clearance certificate was obtained from Wits Business School Ethics Committee to conduct this study and administer an online survey. According to the University of Witwatersrand table of risk level categories (2022), this study carried minimal risk.

Participants were fully informed about the study and its purpose and were able to agree to participate. The survey was administered online thus electronic consent was obtained from participants. The questionnaire was completely confidential and anonymous thus participants identities were protected. The data is being stored on a password protected computer with no identifying features related to participants are present in the data set.

CHAPTER 4. PRESENTATION & DISCUSSION OF RESULTS

4.1 Introduction

This study sought to understand the factors influencing digital banking user intention from the perspectives of the South African banking system. For the quantitative analysis, an online survey was used to collect data from individual respondents. The questionnaire was shared through emails to reach more respondents within the targeted sample. The survey took approximately 10 minutes to complete. The questionnaire addressed several issues in terms of the demographics and factors affecting digital banking usage intention from South Africa based on a 5-point Likert scale.

The study purpose was explained in the cover letter, and respondents were invited to respond to the questions. They were informed that there were no right or wrong answers and that their responses would be strictly confidential. Their anonymity was also assured by indicating that their responses would be aggregated with other responses so that no particular response could be traced to any person. A cross-sectional approach to data collection was preferred.

4.2 Demographic Characteristics of the Respondents

The demographic characteristics of the respondents were presented. The characteristics include gender, age, race, bank account and the usage of digital banking. The sample size for the study was 191. The respondent's demographic profile is presented in Figures 1-5.

4.2.1 *Gender*

The gender distribution of the respondents is summarised in Figure 6 based on a sample size of 191. It can be noted that most respondents were females, representing 65% of the total sample, while 32% were male respondents. About 2% were non-binary/third gender, and 1% preferred not to disclose their gender.

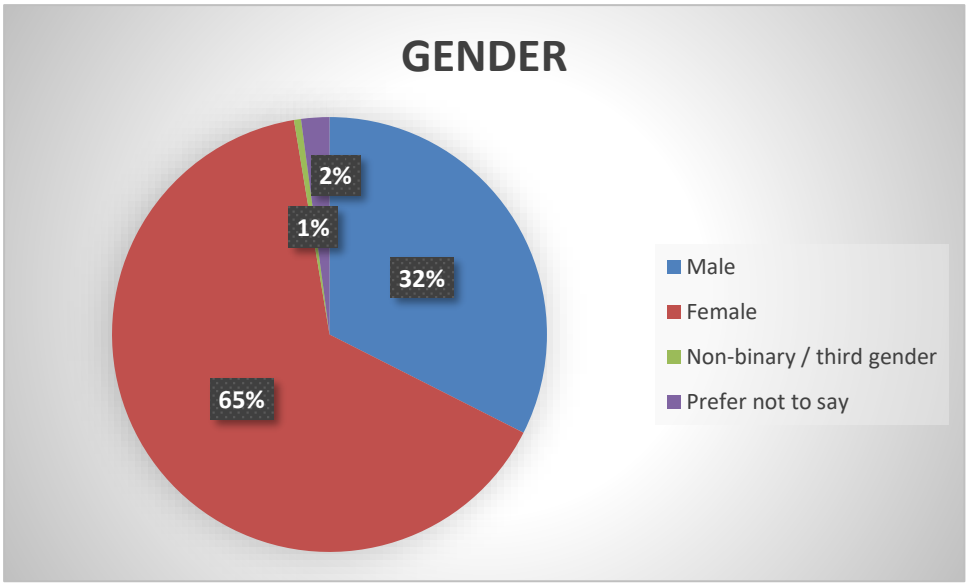

Figure 5: Gender

4.2.2 *Age*

Figure 2 provides a report on the age distribution of respondents ranging between 18 to 55+. According to the reports in Figure 7, most of the respondents are between the age range of 18-24 years, representing 53.9%% of the total sample. This is followed by the age range of 25-34, which is represented by 17.3%. About 16.8% are within the age bracket of 35-44 years, whiles about 10.5% of the respondents are between 45-54 years, and the rest (1.6%) were beyond 54 years. The survey results reveal that most of the respondents are in their youthful stage.

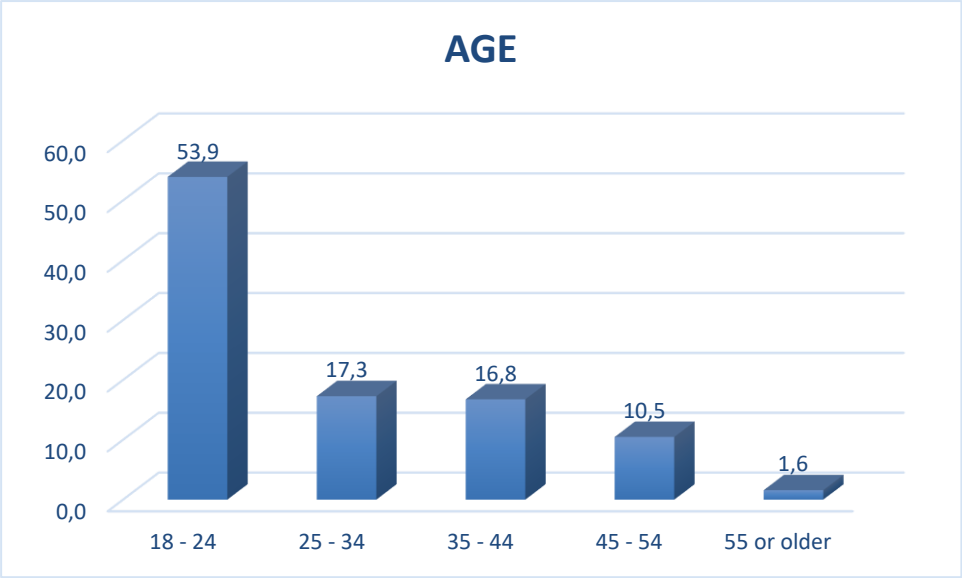

Figure 6: Age

4.2.3 *Race*

This describes the race of individual respondents. The survey results indicate that the majority (78%) of the respondents were Africans, with 9.9% of the sample indicating that they were White. The Indian/Asian race was the third highest, with a representation of 8.4%. Only 2.1% indicated that they were coloured, and 1.6% belonged to other races. The reason why most of the respondents are Africans can be attributed to the fact that the study was conducted in South Africa, which predominantly belongs to the black South Africans.

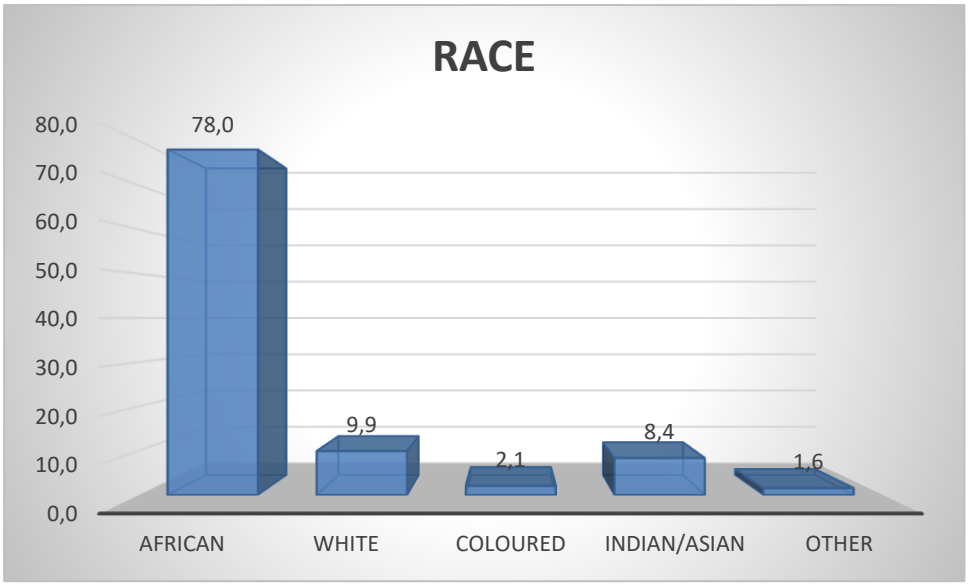

Figure 7: Race

4.2.4 *Bank Account*

The study also asked respondents whether they have a bank account or not, and the majority, representing 98% of the total respondents, affirmed that they have a bank account whiles 2% suggested otherwise. This is represented in Figure 9 below.

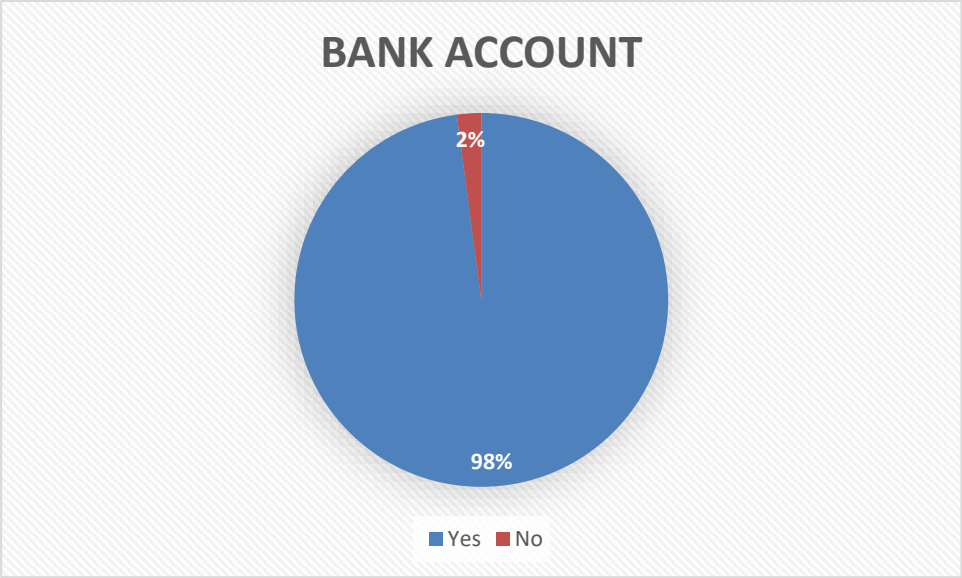

Figure 8: Bank Account

4.2.5 *Digital Banking*

In terms of the usage of digital banking, Figure 10 reveals that more than half (98%) bank digitally. Thus, they use online banking or mobile banking apps, while the rest do not use digital banking. This aligns with the response in section 4.2.4 and implies that respondents who have bank accounts also use digital banking for daily transactions. This is not surprising since most banks in South Africa have mobile apps, which makes it easier for their customers to transact online business.

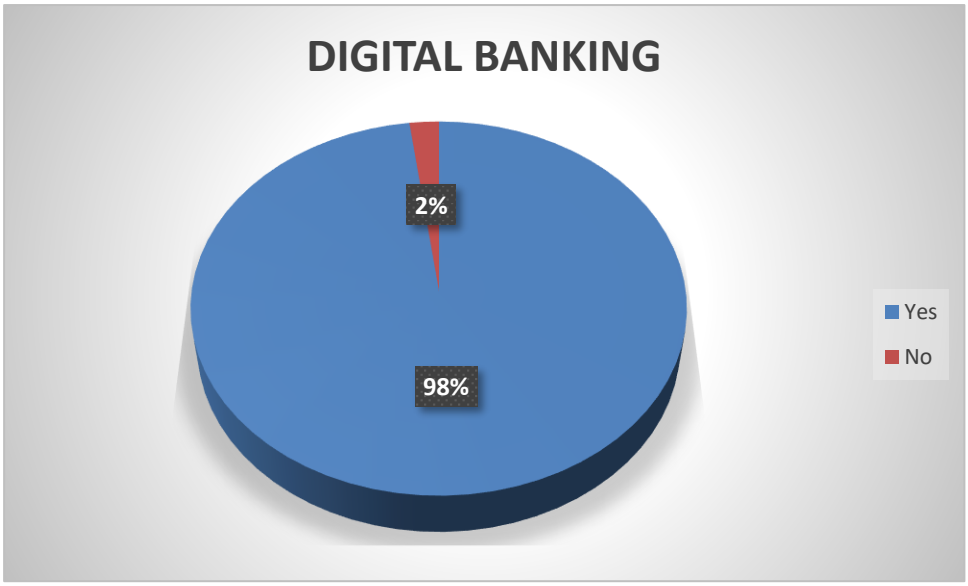

Figure 9: Digital Banking

4.3 Measurement for the study

This section describes respondents' opinions on digital banking user intention and the factors affecting it. The various factors include economic value, social influence, firm reputation, product features, perceived ease of use and product rewards. The questions were assessed using a 5-point Likert scale where (1) = Strongly Disagree, (2) =Somewhat Disagree, (3) = Neither Agree nor Disagree, (4) = Somewhat Agree and (5) = Strongly Agree. The mean value measures the average response to each question in a collective manner. An average score of less than 3 indicates a below-average score for each question, and an average value above 3 indicates an above-average for each question. A mean value above the average score shows high acceptance/agreement with the survey questions and vice-versa. The one-sample t-test was used to determine whether each item differs significantly from the average score of 3.

4.3.1 *Results pertaining to Economic Value*

Table 2: Economic Value

Economic value	Responses as Frequency (%)					N	Mean	P-Values
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
	1	2	3	4	5	N	Mean	P-Values
The digital bank that I use minimises queue time	4(2.1%)	2(1.0%)	14(7.3%)	35(18.3%)	136(71.2%)	191	3.43	<0.001
The digital bank that I use minimises the cost of payments	14(7.3%)	32(16.8%)	51(26.7%)	46(24.1%)	48(25.1%)	191	4.59	<0.001
The digital bank that I use minimises the time required to do payments	1(0.5)	2(1.0%)	11(5.8%)	46(24.1%)	131(68.6%)	191	4.55	<0.001

Source: Field Survey (2023)

Table 3 presents respondents' opinions on the economic value of digital banking usage. To achieve this, three questions were considered, as shown in Table 2. Respondents were asked to rate their level of agreement concerning the questions outlined in the table. Of the respondents, 71.2% strongly agreed that digital banking minimises queue time. This is supported by 18.3% who somewhat agreed with this assertion. Also, about 7.3% of the respondents were neutral about the notion. On the contrary, only 3% disagreed with this notion. Table 3 further shows that more than 50% of the respondents agreed that "The digital bank that I use minimises the time required to do payments." In addition, about

25% stated that digital banking minuses the cost of payments, which is supported by 24.1% of the respondents who somewhat agreed.

Regarding the mean values, the question which says, “The digital bank that I use minimises the cost of payments”, had the highest mean of 4.59, while the question that says, “The digital bank that I use minimises queue time” had the lowest mean of 3.43. Generally, all the questions under this category recorded a mean value above the expected value of 3.0, indicating high acceptance of the economic value of digital banking. The study, therefore, concludes that the use of digital banking minuses the cost of payments and delays performing bank transactions. The p-values were statistically significant, affirming the relevance of digital banking in South Africa.

4.3.2 *Results pertaining to Social Influence*

Table 3: Social Influence

Social Influence	Responses as Frequency (%)					N	Mean	P-Values
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
	1	2	3	4	5			
People in my environment who use mobile payment services have more prestige than those who do not.	23(12.0%)	21(11.0%)	62(32.5%)	50(26.2%)	35(18.3%)	191	3.28	<0.001
In general the bank I use has supported the use of digital banking	3(1.6%)	0(0.0%)	7(3.7%)	43(22.5%)	138(72.3%)	191	4.64	<0.001
Digital banking influences one’s social standing	34(17.8%)	39(20.4%)	59(30.9%)	38(19.9%)	21(11.0%)	191	2.86	<0.001

Source: Field Survey (2023)

Table 4 provides information on the social usefulness of digital banking and how it affects their image in society. About 18.3% strongly agreed that the use of digital banking services provides more prestige than those who do not have it. This is affirmed by 26.2%, while the rest remain neutral or had some level of disagreement. The majority (72.3%) of the respondents also stated that the bank they use supports digital banking. Again about 38.2% disagreed (strongly disagree and somewhat disagree) that digital banking influences one's social standing. This is against 30.9% who agree (strongly agree and somewhat agree), while the rest remained neutral.

The item with the highest mean value was the statement that "In general the bank I use has supported the use of digital banking," which had an average value of 4.64. Again, all the items had a mean value greater than the expected value of 3.0 showing high acceptance of these factors, except for the last item, which had a mean value of 2.68, showing that the majority of respondents were in disagreement or neutral. The p-values were statistically significant from zero.

4.3.3 *Results pertaining to Firm Reputation*

Table 4: Firm Reputation

Firm Reputation	Responses as Frequency (%)					N	Mean	P-Values
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
	1	2	3	4	5			
The conventional bank that supports the digital bank that I use has a good reputation	3(1.6%)	5(2.6%)	40(20.9%)	62(32.5%)	81(42.4%)	191	4.12	<0.001

The conventional bank that supports the digital bank that I use is recognised nationwide.	0(0.0%)	5(2.6%)	18(9.4%)	29(15.2%)	139(72.8%)	191	4.58	<0.001
The conventional bank that supports the digital bank that I use offers good services	2(1.0%)	6(3.1%)	15(7.9%)	79(41.4%)	89(46.6%)	191	4.29	<0.001
The conventional bank that supports the digital bank that I use offers good customer support	2(1.0%)	12(6.3%)	29(15.2%)	72(37.7%)	76(39.8%)	191	4.09	<0.001

Source: Field Survey (2023)

Respondents' opinions regarding the reputation of banks using digital banking were assessed. The essence of this construct was to identify the perception of respondents for banks adopting digital approaches for their banking system. To achieve this, four questions were considered, as shown in Table 5. Respondents were asked to rate their level of agreement concerning the questions outlined in the table. Close to half of the respondents, thus, 42.4%, strongly agreed that "The conventional bank that supports the digital bank that I use has a good reputation." This is supported by 20.9% of the respondents. In addition, more than 50% of the respondents agreed (strongly agree and somewhat agree) with the other statements that digital banks are recognised nationwide and offer good services and customer support.

Similarly, the mean score for the questions in Table 5 recorded above-average values. The results indicate a strong agreement with the various questions indicating that digital banks have a higher reputation than non-digital banks. This was confirmed by the p-values, which were also statistically significant. The study, therefore, suggests that banks in South Africa should ensure the integration of digital technologies in their business operations as this will enhance their reputation.

4.3.4 *Results pertaining to Product Features*

Table 5: Product Features

Product Features	Responses as Frequency (%)					N	Mean	P-Values
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
	1	2	3	4	5			
I like to use digital banking because it provides many useful features	1(0.5%)	4(2.1%)	15(7.9%)	45(23.6%)	126(66.0%)	191	4.52	<0.001
My digital bank provides features that I need	1(0.5%)	3(1.6%)	10(5.2%)	69(36.1%)	108(56.5%)	191	4.47	<0.001
The digital bank that I use provides features that ease my personal financial management	3(1.6%)	4(2.1%)	24(12.6%)	67(35.1%)	93(48.7%)	191	4.27	<0.001

Source: Field Survey (2023)

Regarding the product features, the study assessed whether respondents' mobile banking apps provide more convenient features for managing individual accounts. More than half (66%) strongly agreed that digital banking provides many useful features. Also, 56% were in strong agreement that digital bank provides the features needed, whereas about 83.8% agreed (strongly agree and somewhat agree) to the assertion that "The digital bank that I use provides features that ease my personal financial management." The table reveals a consistency in the results, as most respondents agreed that digital apps are easy to use in managing their personal finances. The mean values were all above the expected value of 3.0, indicating a high agreement with the product features of digital banks and were statistically significant.

4.3.5 *Results pertaining to Perceived Ease of Use*

Table 6: Perceived Ease of Use

Perceived Ease of Use	Responses as Frequency (%)					N	Mean	P-Values
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
	1	2	3	4	5			
I expect the digital banking system to be user friendly	10.5%)	0(0.0%)	5(2.6%)	23(12.0%)	162(84.8%)	191	4.81	<0.001
I expect it will be easy for me to become skillful at using digital banking services	0(0.0%)	2(1.0%)	7(3.7%)	45(23.6%)	137(71.7%)	191	4.66	<0.001
Learning to use digital banking will be easy	1(0.5%)	2(1.0%)	15(7.9%)	69(36.1%)	104(54.5%)	191	4.43	<0.001

Source: Field Survey (2023)

Table 7 presents information on respondents' perception of how digital banking should be developed. Most of the respondents were in agreement (Agree and Strongly Agree) with the assertion that the digital banking system should be user-friendly and easy to use, and learning about its features should be made easier. This is further motivated by the mean value, which is higher than the expected mean of 3.0. The highest mean was 4.81, which says that "I expect the digital banking system to be user friendly," and the lowest mean was 3.16, which says that "Learning to use digital banking will be easy." The p-values were statistically significant, showing that digital banking systems' perceived ease of use is important to bank customers.

4.3.6 *Results pertaining to Digital Banking User Intention*

Table 7: Digital Banking User Intention

Digital Banking User Intention	Responses as Frequency (%)					N	Mean	P-Values
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
	1	2	3	4	5			
I will use/continue using digital banking services in the future	0(0.0%)	2(1.0%)	8(4.2%)	24(12.6%)	157(82.2%)	191	4.76	<0.001
I intend to use digital banking during the next six (6) months	1(0.5)	3(1.6%)	6(3.1%)	19(9.9%)	162(84.8%)	191	4.77	<0.001
I intend to be using digital banking five years from now	1(0.5)	1(0.5)	10(5.2%)	17(8.9%)	162(84.8%)	191	4.77	<0.001
I encourage others to use digital banking	4(2.1%)	6(3.1%)	20(10.5%)	33(17.3%)	128(67.0%)	191	4.44	<0.001

Source: Field Survey (2023)

Table 8 reports on respondents' intention to use digital banking. That is, whether they will continue to use or intend to use digital banking in the foreseeable future. According to the results in Table 8, 82.2% of the respondents strongly agreed that they would continue using digital banking services in the future. Again, 84.8% indicated that they intend to use digital banking services during the next six months or five years from now, while 67% strongly agreed that they would encourage others to use digital banking. Just a few respondents disagreed or were neutral to the assertions provided. This reveals the importance users attach to digital banking services in South Africa.

The mean, which collectively measures the average response for each question, records an average score above 3.0, which indicates an above-average acceptance of digital banking user intention. The one-sample t-test was used to determine whether the level of agreement for these questions differs significantly from the average score of 3.0. The table shows that the p-values were statistically significant, supporting the argument that respondents have a positive attitude towards digital banking services and are more likely to suggest them to others.

4.3.7 *Results pertaining to Product Rewards*

Table 8: Product Rewards

Product Rewards	Responses as Frequency (%)					N	Mean	P-Values
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree			
	1	2	3	4	5			
I like to use digital banking because it gives me many rewards	17(8.9%)	22(11.5%)	71(37.2%)	36(18.8%)	45(23.6%)	191	3.37	<0.001
I like to use digital banking because I feel that I have saved money from the rewards.	23(12.0%)	30(15.7%)	72(37.7%)	30(15.7%)	36(18.8%)	191	3.14	<0.001
Using digital banking is very profitable for me.	27(14.1%)	19(9.9%)	71(37.2%)	37(19.4%)	37(19.4%)	191	3.20	<0.001

Source: Field Survey (2023)

Respondents were asked if digital banking is profitable and whether they receive any rewards from digital banking services. According to the survey, less than 50% of the respondents agreed with the various questions posed. For instance, only 23.6% strongly agreed that digital banking provides some rewards, which is supported by 18.8%. Most of them neither agreed nor disagreed.

Again, 18.8% strongly agreed that it helps them save money from their rewards and was supported by only 15.7% who somewhat agreed. Also, 38.8% agreed (strongly agree and somewhat agree) that digital banking is profitable, while 37.2% remained neutral.

The highest mean was 4.37, which says that “I like to use digital banking because it gives me many rewards”, and the lowest mean was 3.14, which says that “I like to use digital banking because I feel that I have saved money from the rewards.” The mean values for each question revolve around the average threshold point of 3.0, which suggest that most of the respondent do not really support the rewarding nature of digital banking services. All the results were statistically significant. This is a great call to banks in South Africa to implement some reward strategies to enhance the interest of users in digital banking.

4.4 Reliability Statistics

Table 9: Cronbach Alpha result

Factors	No. of Items	Valid Cases(N)	Cronbach Alpha
Economic Value	3	191	0.445
Social Influence	3	191	0.484
Firm Reputation	4	191	0.697
Product Features	3	191	0.632
Perceived Ease of Use	3	191	0.607
Digital Banking Usage Intention	4	191	0.788
Product Rewards	3	191	0.854

Source: Field Survey (2023)

Table 10 reports the reliability statistics of the seven main factors assessed in the survey instrument regarding digital banking user intention. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. The Cronbach`s alpha coefficient value above 0.6 is considered high reliability and acceptable index (Nunnally, 1994). It is evident from Table 9 that five Cronbach alpha coefficient values range from 0.607 to 0.854, suggesting that these study constructs were reliable. Economic value and social influence had values lower than 0.6 indicating these factors were not reliable.

4.5 Correlation Analysis

The correlation matrix indicates the extent of linear dependency among the variables used in the study. This matrix shows the correlation between every single pair of variables. The correlation matrix is presented in Table 10. The study found that product features and perceived ease of use had the highest correlation (0.514) among the independent variables. Again, product features and age were weakly correlated (0.0098). The results show low correlations among the independent variables. This implies no presence of multicollinearity; hence, all the variables are fit to be used in the regression model.

Table 10: Correlation Matrix

	DB	EC	SI	FR	PF	PEU	PR	Age
DB	1							
EC	0.3305	1						
SI	0.2371	0.2183	1					
FR	0.4084	0.3618	0.2452	1				
PF	0.5472	0.4334	0.1457	0.4353	1			
PEU	0.5242	0.4369	0.1732	0.308	0.5141	1		
PR	0.2024	0.2364	0.2828	0.2920	0.2612	0.1000	1	
Age	-0.0185	0.2359	0.0983	0.1500	0.0098	0.0861	0.0937	1

Note: DB represents digital banking user intention, EC represents economic value, SI represents social influence, FR represents firm reputation, PF represents product features, PEU represents perceived ease of use, PR represents product rewards, and age represents the age of respondents

4.6 Discussion of factors affecting digital banking user intention

The second objective of this study sought to examine the key digital channel factors that influence digital banking user intention. A cross-sectional regression technique was used to examine this objective. A composite index was created for each of the variables due to the various items that were used to assess each variable, except for age. The independent variables are based on items that define each factor (i.e. economic value, social influence, firm reputation, product features, perceived ease of use, product rewards and age). The results of the model showed an R-squared of 0.522, which indicates that the independent variables explain about 52% of the variation in the dependent variable. The Prob. > F is statistically significant at 1% (0.000), showing that all the variables are fit to be used in the regression model.

Table 11: Regression results and Hypothesis (Dependent Variable: Digital Banking User Intention)

Variables	Coefficient	Std. Err.	t	P>t	Results
Economic Value	-0.001	0.060	-0.01	0.994	**Not Supported**
Social Influence	0.074*	0.043	1.68	0.094	**Supported**
Firm Reputation	0.145**	0.057	2.50	0.013	**Supported**
Product Features	0.273***	0.066	4.08	0.000	**Supported**
Perceived Ease of Use	0.366***	0.081	4.48	0.000	**Supported**
Product Rewards	0.013	0.031	0.41	0.681	**Not Supported**
Age	-0.042	0.028	-1.45	0.149	
Constant	0.935	0.345	2.71	0.007	
Number of Observations	= 191				
R-Squared	= 0.522				
Prob>F	= 0.000				

Variables with *, ** and *** are statistically significant at 10%, 5% and 1% respectively

Source: Field Survey (2023)

4.6.1 *Discussion of the results pertaining to Economic Value as a factor that influences digital banking user intention*

The first null hypothesis and alternate hypothesis were formed as follows:

H0: Economic value does not have a positive influence on digital banking user intention

H1: Economic value has a positive influence on digital banking user intention

The regression results in Table 11 show that economic value has a negative (-0.001) impact on digital banking user intention. However, this was statistically insignificant. This indicates that the intention to use digital banking is likely to reduce when individuals find that it has less economic value.

A study done in Indonesia amongst generation Y and generation Z showed that economic value was a significant predictor of their digital banking usage intention (Amelia et al., 2022). Additionally, Yuen et al. (2018), conducted a study in Singapore and found that economic value was a significant antecedent for consumer usage intention in many technology-enabled service applications.

4.6.2 *Discussion of the results pertaining to Social Influence as a factor that influences digital banking user intention*

The second null hypothesis and alternate hypothesis were formed as follows:

H0: Social influence does not have a positive influence on digital banking user intention

H1: Social influence has a positive influence on digital banking user intention

Also, social influence had a positive (0.074) impact on digital banking user intention. The relationship was statistically significant at 10%. This supports the research hypothesis and indicates that respondents have the intention to use digital banking in the future due to the social prestige attached to it. This finding is in line with other technology adoption literature such as UTAUT by Venkatesh et al. (2003).

According to the Indonesian study conducted by Amelia et al. (2022), social influence was a positive predictor of digital banking usage intention. It has also been found that Gen Y and Gen Z are more influenced by opinions of friends and fellow consumers when making digital adoption decisions since they are more connected to peers and have a strong social conscience (Purani, Kumar, & Sahadev, 2019).

4.6.3 *Discussion of the results pertaining to Firm Reputation as a factor that influences digital banking user intention*

The third null hypothesis and alternate hypothesis were formed as follows:

H0: Firm reputation does not have a positive influence on digital banking user intention

H1: Firm reputation has a positive influence on digital banking user intention

Similarly, firm reputation shows a significant positive (0.145) relationship with digital banking user intention. The results imply that individuals have more respect for banks using digital banking services and are more likely to bank with them for a longer period.

This is in line with findings by Amelia et al. (2022) in Indonesia. It was also found that multichannel bank consumers form expectations of services based on their non-digital channel experiences (Jin, Park, & Kim, 2009).

4.6.4 *Discussion of the results pertaining to Product Features as a factor that influences digital banking user intention*

The fourth null hypothesis and alternate hypothesis were formed as follows:

H0: Product features does not have a positive influence on digital banking user intention

H1: Product features has a positive influence on digital banking user intention

For product features, the results found a positive (0.273) relationship with digital banking user intention. This was found to be statistically significant at 1%. The study, therefore, rejects the null hypothesis and suggests that individuals are more likely to use digital banking when they find out that these services have features that are easy to use and help in their financial management. Another study found that consumer's individual perceptions about the value add of features and whether they exceed expectations affect their usage behaviour (Hong, Lin, & Hsieh, 2017).

4.6.5 *Discussion of the results pertaining to Perceived Ease of Use as a factor that influences digital banking user intention*

The fifth null hypothesis and alternate hypothesis were formed as follows:

H0: Perceived ease of use does not have a positive influence on digital banking user intention

H1: Perceived ease of use has a positive influence on digital banking user intention

Similarly, the perceived ease of use variable shows a positive (0.366) and a significant relationship with digital banking user intention at a 1% significance level, supporting the research hypothesis. The study explains that when individuals find it easy to use digital banking services, their intention to use digital banking is enhanced, which gives them the desire to keep using it in the future. Hence, the study suggests that banks in South Africa should make digital banking

services consumer friendly and, where necessary, provide training services to consumers on how to enhance their skills in digital banking.

TAM theory supports a similar view in that perceived ease of use influences a customer's usage intention (Venkatesh & Davis, 2000). Amelia et al. (2022), also suggests that if "digital banking is simple, convenient, and easy to navigate", customers will be more willing to use it.

4.6.6 *Discussion of the results pertaining to Product Rewards as a factor that influences digital banking user intention*

The sixth null hypothesis and alternate hypothesis were formed as follows:

H0: Product rewards does not have a positive influence on digital banking user intention

H1: Product rewards has a positive influence on digital banking user intention

For product rewards, the study failed to discover any significant impact on digital banking user intention. The positive relationship suggests that providing rewards to individuals using digital banking will revive their intention to use digital banking services. However, as explained earlier, this relationship was statistically insignificant.

According to one study, customer satisfaction and usage intention is affected by extrinsic rewards such as cashback offered directly by the service provider (Tussyadiah, 2016). A reason for the difference could be that because rewards are offered by many banks and other institutions in South Africa, consumers now expect to be rewarded for transacting thus reducing its influence. Additionally, this may reflect that short-term strategies that promote impulsive behaviour, such as rewards, do not always translate to usage intention (Amelia et al., 2022).

4.6.7 *Discussion of the results pertaining to Age as a control variable*

Age which serves as a control variable revealed an inverse relationship. This could be attributed to the fact that younger ones are more active and appreciate digital products and hence are more likely to have greater intention to use digital banking services than the older population. Notwithstanding, this relationship was statistically insignificant.

4.7 Summary of the results

Majority of respondents in this study were African females between the ages of 18 and 24. 98% of respondents indicated that they use digital banking. The study found that product features and perceived ease of use had the highest correlation among the independent variables. The results show low correlations among the independent variables.

The study found that the factors that influence digital banking usage intention include social influence, product features, perceived ease of use and firm reputation. Economic value and product rewards were found to be statistically insignificant. Age served as a control variable.

CHAPTER 5. CONCLUSIONS & RECOMMENDATIONS

5.1 Introduction

This final chapter provides conclusions to each of the research questions stated at the beginning of the research paper. Thereafter, it provides recommendations to help companies improve their competitive edge in the market. Lastly, it explains some of the limitations of this study and makes suggestions for further research.

5.2 Conclusions regarding research question 1: What is the state of digital maturity in the South African banking industry?

According to the research findings, 98% of respondents indicated they had bank accounts. Additionally, 98% also affirmed that they banked digitally. Seeing as majority of respondents were within the ages of 18 and 24, this shows that it is the younger generation that will drive digital maturity forward in South Africa.

One reason for this is that the younger generation has better access to technology and are quicker to adopt it compared to older generations. According to a study by Jenkin & Naude (2018), 23% of the banked population in South Africa bank digitally. It is clear from the findings of this report that amongst the younger generation, that percentage is far higher thus ensuring future maturation of digital capabilities within South Africa.

From the literature review, it can be seen that banks in South Africa are competitive and are trying to capture their share of the market through highly competitive digital offerings. This is supported by the fact that the main six banks in South Africa all have an online presence either through mobile banking or internet banking and are constantly improving their digital offerings much to the

satisfaction of consumers (BusinessTech, 2021). The focus on improving digital offerings is an indicator of increasing digital maturity within the banking sector.

5.3 Conclusions regarding research question 2: What are the key digital channel factors that influence digital banking user intention?

It was found that the key factors that influence digital banking user intention in South Africa were social influence, firm reputation, perceived ease of use and product features. Economic value and product rewards were found to be statistically insignificant.

In an examination of correlation amongst independent variables, product features and perceived ease of use had the highest correlation. This shows that it is worthwhile for banks to focus on building easy-to-use products combined with features that add value to consumers.

Similar studies to this were mostly conducted in Asian countries. However, the findings of this study indicate many similarities to our Asian counterparts in the factors that influence digital banking usage intention in South Africa. An interesting difference is seen in product rewards and economic value whereby the relationship to digital banking usage intention was statistically insignificant in this study.

5.4 Conclusions regarding research question 3: What are the barriers to consumer's digital banking usage intention?

Seeing as perceived ease of use ranks highly as a factor that influences digital banking usage intention, banks that are unable to meet this need risk losing customers. This can be a major barrier especially for the elderly who struggle with technical literacy challenges (Jenkin & Naude, 2018).

The study showed that 50.8% of respondents were either neutral or disagreed with the statement “The digital bank that I use minimises the cost of payments”. Additionally, this is supported by 24% of respondents whose response to the statement “Using digital banking is very profitable for me” was within the range of strongly disagree and somewhat disagree. This finding reflects many don’t view digital banking as being the less expensive option compared to other channels thus raising the barrier to usage intention.

Again, 27.7% indicated a negative response to “I like to use digital banking because I feel that I have saved money from the rewards”. This reiterates that the cost savings from using digital banking is not clear to customers. This perception can become a barrier to digital adoption and usage intention if not addressed by banks.

5.5 Recommendations

Based on the study findings, it is recommended that conventional banks ensure they have digital offerings that cater to their customer needs. Additionally, those digital products and offerings need to be simple and easy to use and have product features that are useful to customers.

Banks also need to remain adaptable to the changing needs of customers. Whilst older generations may require more guidance in using digital platforms, younger generations are interested in innovation and new ways of doing things. Thus, staying abreast of digital trends and providing novel digital banking offerings can aid in influencing younger customers to bank digitally and improve customer retention rates.

It is also important for banks to have an online presence on social media and maintain good brand reputation as social influence and firm reputation play a significant role in influencing a user’s digital banking intention. While the influence of economic value was found to be insignificant on customers decision to bank digitally, it would be worthwhile for banks to offer better payment fees for

customers that bank digitally. Reducing these fees for customers can make the value proposition and benefits of digital banking more self-evident to them.

5.6 Limitations of the study and Suggestions for further research

A limitation of this study is that survey respondents were primarily university students. Future research should attempt to have a broader distribution of respondents to delineate differences that may arise for example due to age.

Another limitation is that this study adopted a cross-sectional research method which translates to data being collected at a single point in time. This means responses could change over a period creating uncertainty on whether the responses will remain consistent. Longitudinal studies tend to be more stable as the researcher can monitor responses over a period of time and observe if they have been modified. Thus, this could be another possibility for future research.

This study also mainly focused on digital banking user intention. Further research can investigate the effect of usage intention on consumer decision journeys and methods to enhance customer lifetime value. Measuring customer engagement can be another possible area for future research. Additionally, research can be conducted to investigate which digital banking product features have a greater impact on consumer user intention and continued use.

Lastly, according to Hofstede (2014, as cited in Khan, 2022), certain cultural moderators also impact individual use behaviour. Due to globalisation of business and systems, there is now a need to understand the influence of culture on consumer behaviour and acceptance of new technologies at a country-specific level (Straub et al., 1997).

Table 12: Consistency table: research questions, propositions, data collection and data analysis

RQ #	Research Question	Hypothesis #	Hypothesis	Data collection detail	Data analysis method
1	What are the key digital channel factors that influence digital banking user intention?	2.4.1	Economic value does not have a positive influence on digital banking user intention	Questionnaire Likert statement Q5_1 to Q5_3	Regression analysis
2	What are the key digital channel factors that influence digital banking user intention?	2.4.1	Social influence does not have a positive influence on digital banking user intention	Questionnaire Likert statement Q5_4 to Q5_6	Regression analysis
3	What are the key digital channel factors that influence digital banking user intention?	2.4.1	Firm reputation does not have a positive influence on digital banking user intention	Questionnaire Likert statement Q5_7 to Q5_10	Regression analysis
4	What are the key digital channel factors that influence digital banking user intention?	2.4.1	Product features does not have a positive influence on consumer's digital banking usage intention	Questionnaire Likert statement Q5_11 to Q6_2	Regression analysis

RQ #	Research Question	Hypothesis #	Hypothesis	Data collection detail	Data analysis method
5	What are the key digital channel factors that influence digital banking user intention?	2.4.1	Product rewards does not have a positive influence on consumer's digital banking usage intention	Questionnaire Likert statement Q6_10 to Q_12	Regression analysis
6	What are the key digital channel factors that influence digital banking user intention?	2.4.1	Perceived ease of use does not have a positive influence on digital banking user intention	Questionnaire Likert statement Q6_3 to Q6_5	Regression analysis

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APPENDIX A

Cover Letter

Dear Students,

Please assist me by completing the survey below.

Relevant information about this survey:

1. Your participation will assist me in understanding factors that influence digital banking consumer decision journeys in South Africa. This forms part of my Master of Management in Digital Business research project.
2. The questionnaire will be completely confidential and anonymous.
3. It should take approximately 5-10 minutes to complete the survey

Please click on the following link to access the survey: https://wits.eu.qualtrics.com/jfe/form/SV_3UvPYWZ8W4BgcOq

Thanking you in advance for your participation and contribution to this study.

Regards,

Yashna Maharaj (444220@students.wits.ac.za)

APPENDIX B Instrument

Online survey

Section A

1. What is your age?
    a. 18-24
    b. 25-34
    c. 35-44
    d. 45-54
    e. 55 or older
2. Do you identify as:
    a. Male
    b. Female
    c. Non-binary/third gender
    d. Prefer not to say
3. Which of the following best describes you? Select all that apply.
    a. African
    b. Indian/Asian
    c. Coloured
    d. White
    e. Other
4. I have a bank account: Yes or No
5. I bank digitally (eg.use online banking/mobile banking app): Yes or No

Section B

Please rate the following statements from 1 to 5 with 1 being strongly disagree and 5 being strongly agree.

1. The digital bank that I use minimises queue time.
2. The digital bank that I use minimises the cost of payments.
3. The digital bank that I use minimises the time required to do payments.
4. People in my environment who use mobile payment services have more prestige than those who do not.
5. In general, the bank I use has supported the use of digital banking.
6. Digital banking influences one’s social standing.
7. The conventional bank that supports the digital bank that I use has a good reputation.

8. The conventional bank that supports the digital bank that I use is recognised nationwide.
9. The conventional bank that supports the digital bank that I use offers good services.
10. The conventional bank that supports the digital bank that I use offers good customer support.
11. I like to use digital banking because it provides many useful features.

Section C

1. My digital bank provides features that I need.
2. The digital bank that I use provides features that ease my personal financial management.
3. I expect the digital banking system to be user friendly.
4. I expect it will be easy for me to become skillful at using digital banking services.
5. Learning to use digital banking will be easy.
6. I will use/continue using digital banking services in the future.
7. During the next six (6) months, I intend to use digital banking.
8. Five (5) years from now, I intend to be using digital banking.
9. I encourage others to use digital banking
10. I like to use digital banking because it gives me many rewards.
11. I like to use digital banking because I feel that I have saved money from the rewards.
12. Using digital banking is very profitable for me.