

The Influence of Temperaments on the Adoption of Branchless Banking by SMMEs

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in the field of Digital Business

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George Samwel Maina

0706616w

Supervisor: Dr. Euphemia Godspower-Akpomiemie

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ABSTRACT

Recently, innovations driven by Financial Technologies (Fintechs) are posing challenges to the conventional financial service providers and might have a widespread and lasting impact on the financial sector. Branchless banking is a classic Fintech that offer financial services to individuals and corporates, especially Small Medium and Micro Enterprises (SMMEs).

This study set out to investigate the influence of temperaments on adoption of branchless banking by SMMEs. The study's main focus was to explore how temperaments of SMME owners influence adoption of branchless banking services. Secondly, to examine the factors which inhibit SMME owners from adopting branchless banking services as well as identify incentives for switching from conventional to branchless banks.

To achieve these objectives, 12 SMME owners were interviewed. who were selected from a database provided by iSell, which is a company that deals in the residential, commercial, industrial and leisure property markets in South Africa (very active in Gauteng province).

The results indicated that melancholy and phlegmatic temperaments influenced adoption of branchless banking among SMMEs. SMMEs of melancholy temperament were found to be willing to adopt branchless banking compared to their phlegmatic counterparts. The results also showed that the top inhibitors to adoption were preference to engage with physical customer service representatives, requirement of internet access, limited channels to cash out or deposit money and loyalty, trust and satisfaction in the conventional bank services. The results further indicated that lower bank charges were the most important incentive for SMMEs to switch from conventional to branchless banking.

In view of the above findings, branchless banking service providers should tailor their marketing approaches to address potential customers who have different temperaments as well as address the identified inhibitors and incentives.

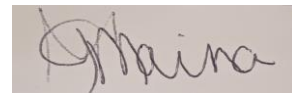
KEY WORDS

Fintech, Branchless Banking, Personality Traits, Temperaments

DECLARATION

I, _____ George Samwel Maina, 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: George Samwel Maina Signature:



Signed atMidrand.....

On the7th day ofDecember.....
2023

DEDICATION

I dedicate this research to my late brother John as well as my late sister Hilda. Both passed away in August and October 2021 respectively when I was in the middle of the coursework for this degree. The two deaths left me with so much of emotional pain and unprocessed grief, I sincerely dedicate this research to them.

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I would like to thank the Almighty God for the strength and patience to be able to complete this research. I would like to express my sincere gratitude to my supervisor Dr. Euphemia Godspower-Akpomemie for her critical review of my work, continuous support, patience, and immense knowledge in the field of digital financial services. Her Guidance helped me during the time of research and writing of this thesis.

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LIST OF ACRONYMS

ATM	Automated Teller Machine
BNPL	Buy-Now-Pay-Later (BNPL)
CAGR	Cumulative Annual Growth Rate
ECM	Enhancement Criteria Model
FINTECH	Financial Technologies
GDP	Gross Domestic Product
ICT	Information and Communication Technology
SMME	Small Medium and Micro Enterprises

CHAPTER 1. INTRODUCTION

1.1 Introduction

This section introduces this study by providing the research background, motivation for the study, as well as the objectives. The significance of the study is discussed as well as the potential beneficiaries of the findings from this study. The research outline which details the chapters of the study, and their expected contents is also provided.

1.2 Statement of purpose

The purpose of this qualitative study is twofold: to explore the role and perceived influence of temperaments on adoption of branchless banking services among Small Medium and Micro Enterprises (SMMEs) owners in Gauteng Province, South Africa. Secondly, to examine the factors which inhibit rejectors from adopting the branchless banking services and potential incentives to facilitate switching from conventional to branchless banks.

1.3 Background of the study

The financial services industry is witnessing disruptions due to technological innovations (Singh et al., 2020; Armstrong & Lee, 2021). Those innovations, which are driven by Financial Technologies (Fintechs) are posing challenges to the conventional financial service providers (Singh et al., 2020; Coetzee, 2019; Van Niekerk & Phaladi, 2021). Consequently, Fintech has become an important dimension of the financial services industry because of constant innovations (Singh et al., 2020). Innovative business models and technologies are enabling Fintechs to improve and disrupt the financial services sector (Singh et al., 2020).

Academic literature and research on the uptake of Fintech services, especially in the context of South Africa for both individual consumers and SMMEs, is limited (Slazus & Bick, 2022). The SMMEs are a key pillar of the economy in South Africa

and globally, due to their contribution to the Gross Domestic Product (GDP) and the high number of employees employed by the SMMEs (Raji, 2021; Fedder, 2022).

1.4 Research problem

Digital-based Fintech services are transforming the way financial services are delivered, with increased convenience and lower operating costs being the major differentiators (Zalan & Toufaily, 2017). According to Ernst and Young (2019a), the global Fintech adoption rate rose steadily from 16% in 2015 to 33% in 2017 and 64% in 2019. These figures show a steady growth of Fintech adoption across the world. The Fintech adoption rates highlighted above, are across all customer sectors, but the SMME sector is increasingly playing a critical role in South Africa and globally due to its contributions to the economy. However, the SMME adoption of Fintech services is below average in South Africa at 16% against a global average of 23% in 2019 (Ernst & Young, 2019b).

Fintech has the potential to improve SME financing processes in Africa by enabling faster KYC processes, big data driven credit scoring and improved documentation processes which should make financing less costly and thus more profitable. Lower charges for operations, a flexible virtual banking system, and saved time for customers are some of the advantages of adopting branchless banking, which would be missed if not adopted (Ernst & Young, 2019b).

Based on the identified problem, this study aimed to investigate the role and potential influence of temperaments on the adoption of branchless banking services by SMME owners. Understanding the temperaments of the owners will help the branchless banking service providers to market their services differently and increase the adoption for the benefit of the service providers and SMMEs. The motivation to base the research on SMMEs owners is because of the influencing role they play in the running of the businesses, as they are key decision makers. The study also explored inhibitors to adoption and potential incentives to switch from conventional banks to branchless banks.

1.5 Research objectives

The objectives of this study are summarized as follows:

- a. To explore how temperaments of SMME owners influence adoption of branchless banking services.
- b. To examine the factors which inhibit SMME owners from adopting branchless banking services.
- c. To identify potential switching incentives for SMME owners to switch from conventional banks to branchless banks.

1.6 Rationale

Although there is growing availability of Fintech services, the adoption of the services is still limited or selective (Singh et al., 2020) and curiosity arose on how temperaments could influence SMMEs adoption of branchless banking services. The study assumes that the temperament of an SMME owner influences the adoption of branchless banking services.

1.7 Significance of the Study

Through conducting this study, it is believed that the findings from this study will provide insights on the potential influence of temperaments on adoption of branchless banking services. Based on those insights, branchless banks service providers will be able to market the branchless banking services differently with temperaments in mind.

1.8 Delimitations of the study

This research is limited to the adoption of branchless banking services as well as the inhibitors and switching incentives for SMMEs owners to switch to branchless banking in Gauteng, South Africa. It therefore only focussed on branchless banking services. This study used a qualitative research approach and semi-structured individual interviews carried out in face-to-face or virtual meetings.

1.9 Definition of terms

a) Branchless Banks (Digital banks)

A branchless bank is a bank without branches which offers its services by means of individual computers or electronic tools, ATM, and telephone (Slazus & Bick, 2022).

b) Fintech

Technology-driven financial innovation that translates into new business models that have a significant impact on the financial service providers, and the delivery of financial services (Puschmann, 2017).

c) Mobile Banking

Mobile banking (m-banking) is a subset of e-banking in which customers have access to a range of banking products, such as savings and credit instruments, via electronic channels (Porteous, 2006).

d) Personality Trait

Personality traits define people in terms of unchanging patterns of behaviours, thoughts, and emotions (Coelho, 2022).

e) SMME

According to National Small Business Amendment Act, 2004¹ SMME is defined as a distinct commercial entity, including cooperative enterprises and non-governmental organizations, managed by a one or more owners. The enterprise might have branches or subsidiaries and will predominantly operate in a sector or sub sector mentioned on column 1 of schedule 1 in Appendix C². An enterprise is classified as a micro, a very small, a small

¹ National Small Business Amendment Act, South Africa. (2004). Government Gazette. Government Gazette. https://www.gov.za/sites/default/files/gcis_document/201409/a29-04.pdf

² Government Gazette. Revised Schedule 1 of the National Definition of Small Enterprise in South Africa. https://www.gov.za/sites/default/files/gcis_document/201903/423041gon399.pdf

or a medium enterprise based on thresholds in column 1,3 and 4 of schedule1 in Appendix C.

f) Temperaments

Temperament is the emotional nature of each person, mainly involving, energy level, mood, and sensitivity to stimulation (Akmal, 2022). Temperaments refers to the foundational roots of the personality, are linked to the genetic makeup of a person and tend to remain the same throughout a person's life (Karvonen et al., 2020).

1.10 Assumptions

This research assumes that the participants shared insights in their responses to the questions. Their responses helped to determine the real temperaments of the participants as well as their perspectives and experiences with branchless banking services.

1.11 Chapter Outline

The introductory chapter provides background to the research, the problem that is being addressed, research objectives, and the rationale for the selection of the research. Chapter two presents the literature review, which is mainly a review of existing research in adoption of branchless banking services, and the research gaps which gave rise to the research topic. Chapter three presents the research methodology, which is concerned with the collection and analysis of data to meet the research objectives. Chapter 4 presents the result and findings on the data gathered from the research participants. Chapter 5 discusses the results and findings. Chapter six presents the conclusion of the research study and makes recommendations based on the research findings.

CHAPTER 2. LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature related to this study, including the conceptual framework for this study. The literature review focuses on outlining the disruptions in the financial industry and the drivers of that disruption. Fintech adoption by SMMEs is reviewed with reference to branchless banking services as well as the potential influence of temperaments on adoption.

2.2 Background

The financial services industry is experiencing disruptive changes brought about by technological innovations (Singh et al., 2020; Punchman, 2017). Although the use of technology in banking is not new, the importance and magnitude of technology has grown significantly in the past decade. Non-traditional competitors with strong technology-driven offerings have entered the traditional banking environment and are disrupting the traditional modes of financial technology solutions (Coetzee, 2018). Innovative business models and technologies make it possible for FinTech's to enhance and disrupt financial services (Singh et al., 2020). As FinTech's expand their offerings, they grow as companies, expand their global reach and stimulate new competition (Ernst & Young, 2019b).

The other threat to conventional banks is the growth of completely branchless banks in which banking services are only accessible using mobile phones and the internet (Slazus & Bick, 2022). In a study of 217 respondents, 74% indicated that they would join a bank without branches, allowing them to access banking services solely through a mobile phone (Slazus & Bick, 2022). Discovery bank is a branchless bank launched in the beginning of 2021 and grew its customer base to 400,000 customers by November 2021. That was a growth of 31% from the

beginning of the year³. In June 2022, Discovery's client base had grown to 450,000 customers and had reached a milestone of over one million accounts (Discovery Bank, 2022).

TymeBank is another branchless bank in South Africa that was launched in 2018 and by June 2022, it had onboarded over 4 million customers (Jenik, 2022). TymeBank onboards approximately 110,000 customers per month through kiosks. The examples show a propensity to accept branchless banking.

2.3 Conceptualization of Fintech

Fintech is a financial technology acronym, which integrates banking knowledge into modern management techniques and computer technologies (Huong et al., 2021). They are advanced technology firms that have the potential to transform the provision of financial services spurring the development of new business models, applications, and whose products and services are directly applicable in the delivery of financial services (Van Niekerk & Phaladi, 2021). According to Puschmann (2017), Fintech is a Technology-driven financial innovation that translates into new business models that have a significant impact on the financial service providers, and the delivery of financial services. Buckley and Webster (2016) concur with the two definitions by defining Fintech phenomenon as the delivery of financial products and services via the marriage of technological platforms and innovative business models.

2.4 Small Medium and Micro Enterprises (SMMEs)

SMMEs have been identified as productive drivers of inclusive economic growth and development in South Africa and around the world⁴. In South Africa, SMMEs contribute an inclusive economic growth that makes up about 60% of the

³ BusinessTech. (2021). Discovery Bank reveals customer numbers and plans for 2022.

<https://businesstech.co.za/news/banking/545476/discovery-bank-reveals-customer-numbers-and-plans-for-2022/>

⁴ The Banking Association of South Africa. (2020). Small & Medium Enterprise: <https://www.banking.org.za/what-we-do/sme/>

employment force. They also contribute about 34% of the GDP and represent about 91% of the formal businesses. Across the African continent, 60 million SMMEs constitute the backbone of African economies (Fedder, 2022). They produce about half of the countries' GDP, represent 90% of businesses and provide about 60% of the jobs. The total financing gap is estimated to be a massive US \$330 billion. At present, Fintech firms are only contributing about 1% of the total financing gap for African SMMEs (Fedder, 2022). There is therefore a huge potential for SMMEs to switch to Fintech firms for financing.

2.5 Branchless (Digital) Banks & Mobile Banking

a) Branchless Banking

In South Africa there are three branchless banks namely: Discovery Bank, TymeDigital and Bank Zero (Coetzee, 2019). These digital banks are focusing on implementing systems that are digital and real-time (Coetzee, 2018). They are not just posing real competitive threats to the conventional banks but are also offering frictionless customer experiences because they are not constrained by legacy systems which are hard to modify and add new functionality (Fedder, 2022). Some of the advantages of digital banks include lower charges for operations, flexible virtual banking system, saving time for the customers as there are no branches and queues and they can access the information any time (Coetzee, 2019). The digital banks also have some disadvantages which include access costs for the customer because of access mechanism which requires an internet connection.

b) Mobile Banking

According to Porteous (2006), there are four mobile banking models. The four models are pure bank driven (bank has control of the account and consequently sells its own products and services), joint-venture (bank retains ownership of the account but collaborates with non-bank organizations like mobile network operators), non-bank-led (the bank controls the account, but the brand of a non-bank company like a mobile

network provider becomes dominant) and non-bank-driven (non-bank companies such as a mobile network operator hold accounts and can provide financial services to the account owner).

2.6 Potential Influence of Temperaments on Fintech Adoption

Adoption of any innovation whether a new idea, behaviour, or product does not happen instantaneously. It is rather a process whereby some people are more apt to adopt the innovation than others because people have different characteristics (Karim et al., 2022). There are five main steps in an adopter's decision process, namely: knowledge (finding out about the idea); persuasion (forming a favourable or unfavourable attitude towards the innovation); decision to adopt or reject; implementation (effecting the decision) and confirmation (reinforcing the decision) (Armstrong & Lee, 2021). The element of people having different unique characteristics is revealed through their personalities as discussed below.

2.6.1 Personality Traits and Temperaments

a) Personality Traits

Personality is defined as the behaviours, activities, and characteristics of a person (Bano et al., 2019). It represents the characteristics of the person that account for steady patterns of feelings, thoughts, and behaviours (Coelho, 2022). Personality traits help to define people in terms of unchanging patterns of behaviours, thoughts, and emotions. The following are the five personality traits (Bano et al., 2019; Coelho, 2022):

- i) **Neuroticism** - implies propensity of a person to encounter negative emotions such as fear, guilt, anger.
- ii) **Extraversion** - extraverted people are open-minded, sociable, assertive, fun-loving, affectionate and opportunists.
- iii) **Agreeableness** - people who have the agreeableness trait are confident, easy-going, kind and helpful.

- iv) **Openness to experience** - implies openness to change and people with this characteristic are inquisitive, experimental, imaginative and innovative.
- v) **Conscientiousness** – people who have this personality trait are dependable, meticulous, prompt, and self-controlled.

b) Temperaments

Temperaments refer to the foundational roots of the personality (Karvonen et al., 2020). Notably, personality is influenced by temperament, environment and experience (Coelho, 2022). Temperaments tend to remain the same throughout a person's life unlike personality which is influenced by life experiences. Temperaments are linked to the genetic makeup of a person and influence behaviour such as moods, emotional responses, energy levels, curiosity and adaptability (Coelho, 2022).

There are four basic temperaments indicated by a combination of two dimensions namely: introversion – extroversion and emotional – unemotional. An extreme introvert lives inwardly keeping their thoughts and feelings to themselves (Mol, 2017; Akmal, 2022). An extreme extrovert on the other hand lives outwardly and often expresses their thoughts and feelings (Mol, 2017). An extremely emotional person experiences a high degree of emotional fluctuations whilst an extremely unemotional person experiences no emotional fluctuations (Mol, 2017; Akmal, 2022). According to Coelho (2022), the following are the four temperaments with their corresponding characteristics: sanguine (warm, positive, social), phlegmatic (calm, indifferent, slow-moving), melancholic (logical, quiet, nostalgic) and choleric (short-tempered, fast to react).

2.6.2 Influence of personality or temperament on adoption of branchless banking services

According to Bano et al (2019), personality traits can predict and justify acceptance and use of technology. The personality traits of agreeableness, extraversion, openness, and conscientiousness are significant predictors of adoption of information technology (Bano et al, 2019). Individuals with

neuroticism trait have a lower propensity to adopt technology (Özbek et al., 2014).

Although the above findings link technology adoption to personality traits, they do not have a reference to temperament categories namely, choleric, sanguine, phlegmatic, and melancholy. Secondly, the adoption is on technology in general and not related to branchless banking services adoption by SMMEs. As noted by Karvonen et al (2020), temperaments are a foundational component of personality traits and would potentially influence SMME owners' adoption of branchless banking services.

2.6.3 Proposition 1

Temperaments have potential influence on adoption of branchless banking services. Impulsiveness is an issue for sanguines when it comes to making decisions, as they are likely to make hasty decisions that are later reversed or regretted (Mol, 2017). Melancholics tend to be introspective, which causes their moods to be easily influenced by their emotions and their emotional energy to be directed inwardly rather than outwardly (Mol, 2017). Choleric individuals are quick, sometimes impatient, with strong emotions, and are frequently hot-tempered and prone to violent emotions (Akmal, 2022). Phlegmatic individuals are slow, balanced, have hardly any emotions, and are unable to ruffle (Akmal, 2022). They are comfortable with other people making decisions for them (Mol, 2017).

2.7 Adoption of Branchless Banking Services by SMMEs

According to Arendt (2008), SMMEs do not leverage use of ICT and e-Business solutions compared to large organizations. This exposes the SMMEs to vulnerabilities of changing economic conditions due to diminished competitiveness. Adoption of Fintech services by SMMEs is important because Fintech solutions bring significant benefits to SMMEs (Kaerhoeg, 2022). The benefits derived from SMMEs adoption of Fintech services include automation of time-intensive administrative tasks which then enables SMMEs to focus on offering better services to their customers (Kaerhoeg, 2022). Although, SMMEs are progressively more equipped with computers and access to the internet, their

use of ICTs for business purposes is still inadequate (Arendt, 2008). Lack of awareness, knowledge and skills are the biggest contributors to SMMEs trailing large corporations in adoption of not just Fintech services but ICT in general.

As noted by Karim et al (2022), SMMEs in Indonesia and Malaysia are highly aware of Fintech solutions and have therefore largely adopted digital modes of doing business using technological innovations. Those SMMEs have sufficient knowledge of the Fintech offerings to be able to take advantage of their benefits (Karim et al., 2022). In South Africa, the adoption of Fintech services by SMMEs is at 16% which is below the global average of 25% based on 2019 figures (Ernst & Young, 2019b). This means South Africa's SMMEs adoption rate is below the curve and the inhibiting factors should therefore be investigated. Digital banking (Branchless banks) is a classic Fintech offering and is an increasingly important service for SMMEs who have difficulties opening bank accounts with the larger and well entrenched financial service providers (Kaerhoeg, 2022). There are limited studies on the inhibitors to SMMEs adoption of branchless banking services in South Africa which leads to the following proposition.

2.7.1 Proposition 2

Some factors inhibit SMMEs from adopting branchless banking. Temperaments are likely to influence the factors which inhibit SMME owners from adopting branchless banking. Cholerics, for instance, have a strong willpower and often try to outwit those who disagree with them. Attempts to alter their beliefs, particularly regarding opinions, tastes, and preferences, are almost doomed to fail. Hard facts or cold logic are the only things that can make them change their minds (Mol, 2017).

2.8 Incentives for SMMEs to Switch from Conventional Banks to Branchless Banks

Adoption of Fintech services by SMMEs is different from that of individual normal consumers. Unlike individual consumers, who often pick a Fintech service based on attractive rates or fees, SMMEs are more concerned with features and

functionality. The other top two reasons why an SMME would pick a Fintech challenger over an incumbent financial institution are round-the-clock availability of service and ease of set-up, configuration, and usability of the Fintech services. Rates and fees are ranked lowest among the top four factors for determining adoption of Fintech services by SMMEs (Ernst & Young, 2019b).

Lack of awareness and understanding of the available Fintech services is a top reason inhibiting consumers from switching from incumbent financial institution to a Fintech challenger (Ernst & Young, 2019a). In Chile, France and Japan, trust is the only deciding factor in a consumer's decision to transition from a conventional financial services provider to a fintech challenger (Ernst & Young, 2019a). According to Setiyono, Shihab, and Azzahro (2019), initial trust in a branchless banking application positively influences users' intention to use branchless banking and affects the perceived usefulness of the service. Based on the identified factors, the switching incentives for an SMME should include the following incentives in order of priority: features and functionality of Fintech service, service availability, ease of set up, configuration and usage of service followed by the cost of the service. Trust should also be factored.

2.8.1 Proposition 3

There are potential incentives for SMMEs to switch from conventional to branchless banks. Temperaments are likely to influence the choice of incentives for an SMME owner to switch from conventional to branchless banks. Sanguines for example, find it difficult to spend time contemplating issues and they feel uneasy when faced with uncertainty. In addition to buying things on impulse, they are often unable to resist a persuasive salesperson (Mol, 2017).

2.9 Conceptual Framework

This study used the Enhancement Criteria Model (ECM) adopted from Slazus and Bick (2022). Slazus and Bick (2022), identified enabling and hindering factors, which enable or hinder the uptake of Fintech services from a South

African consumer perspective. The enabling and hindering factors are described briefly as follows.

a) Enabling Factors

- i) **Perceived Usefulness (PU)** - this is about the degree to which somebody believes they will benefit from the use of Fintech services (Davis et al., 1986).
- ii) **Trust** - users are looking for certainty when making transactions even within conventional financial services (Mayer et al., 1995; Gu et al., 2009)
- iii) **Perceived Ease of Use (PEOU)** - is the degree to which an individual believes that using the system will be free of effort (Davis et al., 1986)
- iv) **Self-Efficacy** - this is the perception of trust in the usage of technological inventions (Koksal, 2016)
- v) **Economic Benefit** - the economics of the Fintech service from the consumer's perspective (Slazus & Bick, 2022)
- vi) **Social Influence** - the impact of peer review and positive recommendations to encourage prospective clients to adopt Fintech services (Slazus & Bick, 2022)
- vii) **Enjoyment, Innovation and Novelty** – the inherent motivation for using information systems (Venkatesh et al., 2003)

b) Hindering factors

- i) **Perceived Risk** - this implies more attentiveness when using digital channels to access financial services due to increased cybercrime threats (Slazus & Bick, 2022)
- ii) **Perceived Cost of Use** - the extent to which a user believes that using a Fintech service will cost money (Slazus & Bick, 2022)

Based on the enabling and hindering factors, Slazus and Bick (2022) recommended use of ECM by Fintech service providers to improve the businesses models as well as align to South African consumer perspectives. The ECM encapsulates external and internal environments as shown in figure 2-1.

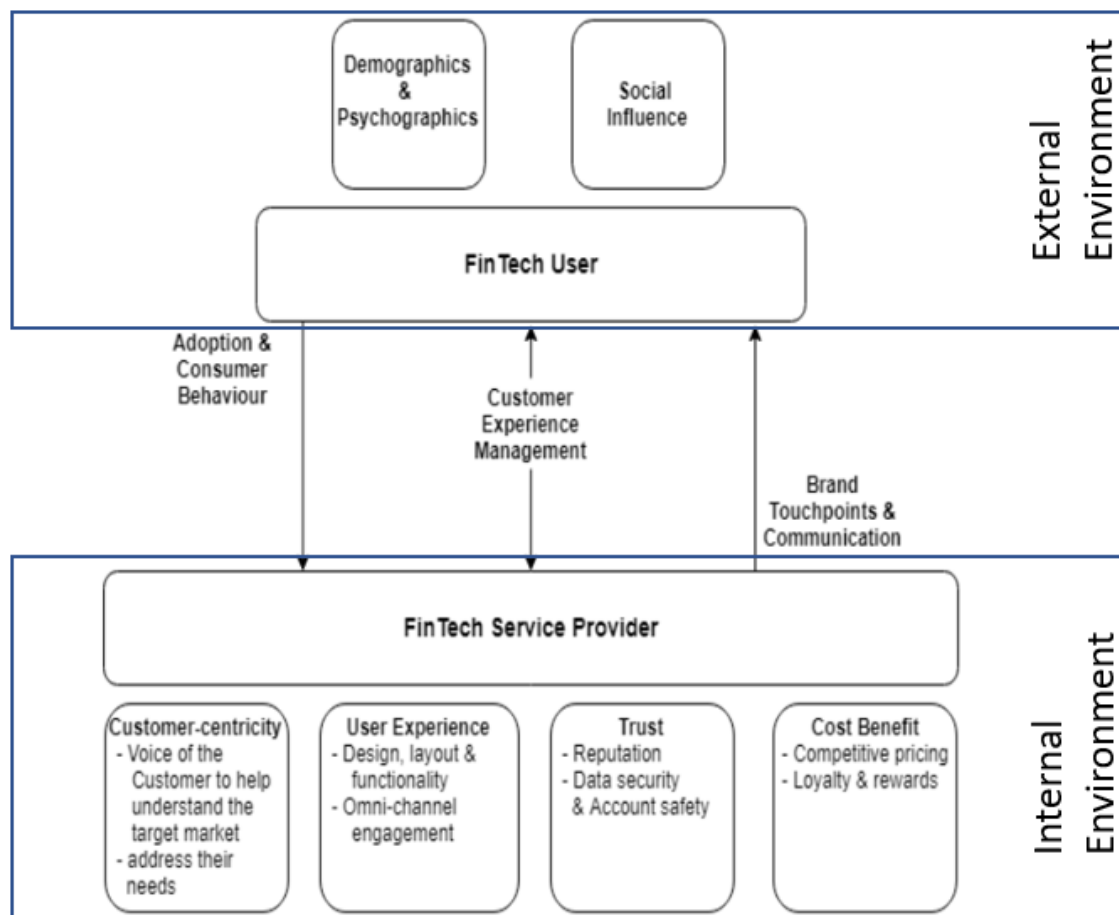


Figure 2-1: Enhancement Criteria Model

Source: Slazus & Bick (2022)

The ECM contains two main components from the external environment which can influence existing and potential users. Those two components are demographics & psychographics and social influence (Slazus & Bick, 2022). As noted by Sulaiman et al (2007), demographic factors (age, gender, personal income, and educational background) were important for mobile banking adoption in Malaysia. However, in Kenya, gender was not significant for the decision to adopt mobile banking services with reference to perception of ease of use and risk (Kweyu & Ngare, 2014).

The ECM was chosen for this study because it already has the psychographics component and one of the research objectives is to explore the perceived influence of temperaments on adoption of branchless services. The psychographics component in the model was extended as shown in figure 2-2 to include the temperaments sub-component. The ECM also contains the social influence component under external environment. As noted by Slazus and Bick

(2022), FinTech suppliers should be aware of the influential role played by social influence in FinTech adoption as it was found that reputable community members, family and friends impact users' intention to use FinTech services.

Based on Slazus and Bick (2022), the other ECM components in the internal environment which are linked to the research objectives of inhibitors and potential switching incentives include.

- a) user experience - optimizing users' interactions with the brand involves ensuring ease of use is prioritized.
- b) trust - to be a trusted provider of financial services, FinTech suppliers must ensure data security and safety, which is a critical factor.
- c) cost benefit - consumers are seeking high-quality services that are priced competitively.
- d) customer centricity - adopting a customer-centric business philosophy is crucial for FinTech providers instead of focusing solely on products.

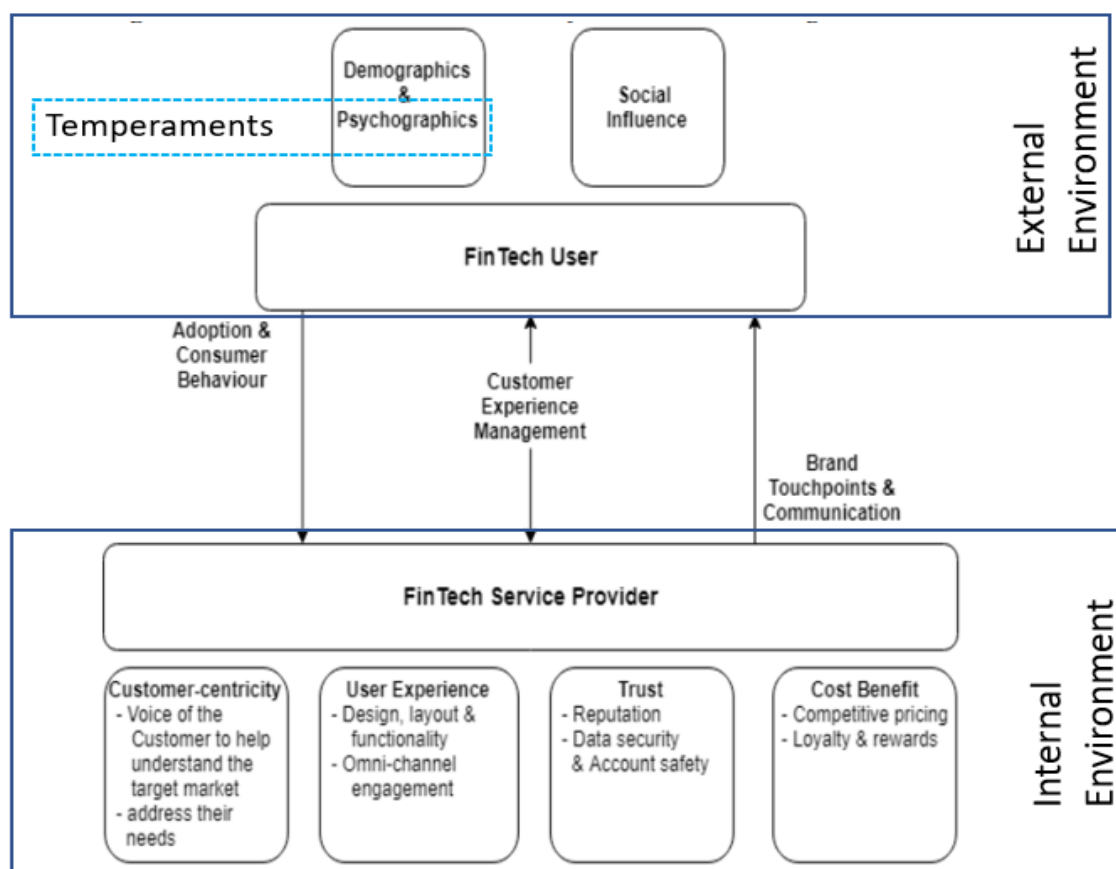


Figure 2-2: Extended Enhancement Criteria Model

Source: Slazus & Bick (2022)

The temperament of a participant is measured using questions adopted from Mol (2017) and the participant scores are then be mapped to the four quadrants in figure 2-3.

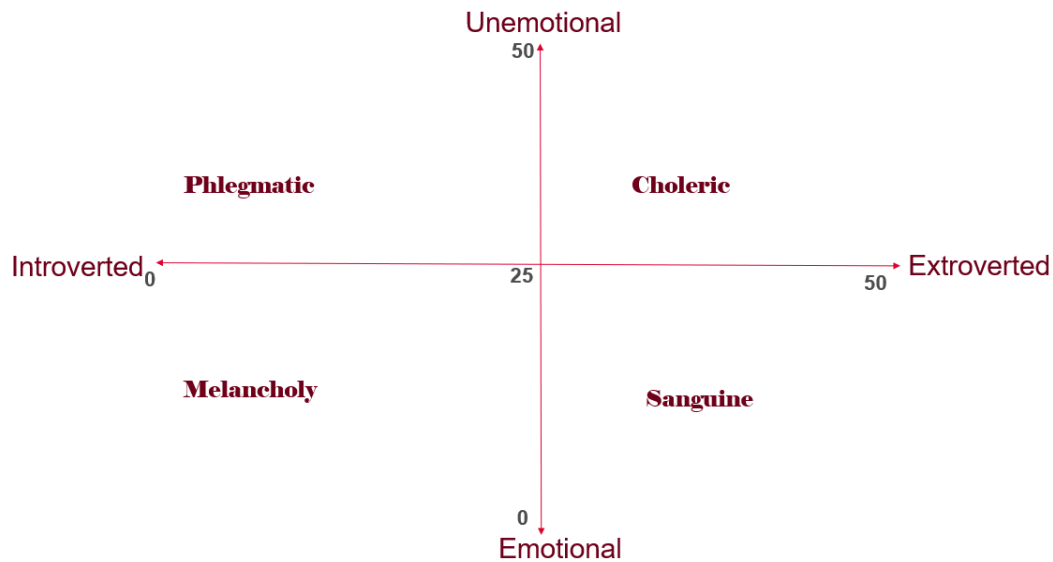


Figure 2-3: Temperaments Inventory

Source: Mol (2017)

2.10 Chapter Summary

The literature review presented in this chapter began with providing the background of the study and the drivers of disruption in the financial services sector. The key constructs of the topic were also defined. Personality traits and temperaments were defined followed by a review of the relationship between them. Literature on adoption of Fintech Services by SMMEs was reviewed covering the benefits derived by SMMEs from adopting Fintech services. Further, literature on incentives for SMMEs to switch to Fintech service providers from a South African perspective was reviewed. Finally, the ECM was chosen as the conceptual framework for the study because it contains the psychographics component which is linked to personality traits. In the modified framework, the psychographic component in ECM was extended to create the temperament sub-component. The other components in the internal environment which are linked to the factors which inhibit SMMEs adoption of branchless banking, and potential switching incentives were also reviewed.

CHAPTER 3. RESEARCH METHODOLOGY

This chapter covers the following key methodological concepts: research approach, research design, data collection methods, data analysis, limitations of the study, transferability, dependability, credibility, confirmability, as well as the ethical considerations.

3.1 Research approach

There are three broad research approaches which a researcher can use to conduct a study (Greener, 2008; Creswell, 2014). The categories are qualitative approach, quantitative approach, and mixed method (Greener, 2008). This study used a qualitative paradigm, which is dependent on research occurring in the natural setting of the participants (Creswell, 2014). Qualitative research process involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from specifics to general themes, and the researcher making interpretations of the meaning of the data (Creswell, 2014).

The qualitative approach obtained insights and explanations on branchless banks adoption or rejection by the SMMEs. The content analysis approach was used to identify the themes from the data in accordance with the research objectives. Based on the above reason, the qualitative approach was appropriate for this study to explore the potential influence of temperaments on branchless banks adoption by SMMEs. The study also examined inhibitors to SMMEs switching from the conventional banks to branchless banks as well as identified potential incentives for SMMEs to switch from conventional banks to branchless banks.

3.2 Research design

In a qualitative research design, a researcher can use the following research designs: qualitative general, narrative research, grounded theory, ethnography, Case studies and phenomenology (Creswell, 2014). The various research designs are explained briefly and the appropriate one for the study selected. A qualitative general research design seeks to describe, understand, explain or

interpret human perceptions, behaviours, action, attitudes, value or creations. Narrative research is where a researcher studies the lives of individuals to provide stories about their lives (Creswell, 2014). Grounded theory looks for theory through a structured method of investigation of what is written or said (Greener, 2008).

Ethnography entails a researcher studying the shared patterns of behaviour, language, and actions of an intact cultural group in a natural setting over a prolonged period by submersion of the researcher in the context under study (Creswell, 2014; Greener, 2008). Case studies entail the researcher developing a thorough analysis of a case, often a program, event, activity, process or several people (Creswell, 2014). A phenomenological design entails a researcher describing the lived experiences of individuals about a phenomenon as described by participants (Creswell, 2014). The description culminates in the essence of the experiences for several individuals who have all experienced the phenomenon (Greener, 2008).

This study aimed to understand and explain SMME owners' perceptions, behaviours, actions and attitudes towards branchless banking services. Based on the above aims, the qualitative general research design was best suited for the study.

3.3 Data collection methods

Some of the qualitative data collection approaches available to a researcher include observations, interviews, documents, and audio-visuals materials (Creswell, 2014). An interview can be structured, semi-structured or unstructured (Greener, 2008). A structured interview format asks questions which are asked in a consistent way (Greener, 2008). A semi-structured interview is based on a question guide but because it is not fully structured, the participants are allowed to expand more on the questions (Creswell, 2014). Unstructured interviews are based on open-ended questions and are intended to elicit views and opinions from the participants (Greener, 2008). This study used structured and semi-structured interviews to provide a guide to the interview and allow the participants

to provide in-depth details. It also enabled the researcher to probe further on the responses.

3.4 Population and sample

3.4.1 Population

A population is a full universe of participants from which the sample is selected (Greener, 2008). The population targeted for this study is all SMMEs operating in South Africa across all sectors of the economy. Categorization of an SMME into small, micro, or medium enterprise is based on the sector the organization operates, size of enterprise, number of employees and annual turnover⁵.

3.4.2 Sample

A sample is the section of the population chosen for the study (Greener, 2008). The purposive sampling method in which the researcher uses own judgement to select the sample was adopted. This method was preferred because it allowed the researcher to have access to SMMEs owners or employees nominated by the owners who were available and willing to participate in the research. The participants of this study comprised of twelve SMMEs owners and the criteria to participate was based on having been in business operation for at least two years at the time of the study. The reason for using a minimum of two years of business operation for the SMMEs is because it takes two to three years on average for a business to become profitable⁶. Although profitability was not a consideration in the research, it was important to have businesses that had already completed the initial stabilization stage. The sample size of twelve participants conforms to Guest, Bunce, and Johnson (2006) where after twelve interviews the codebook is complete and stable. Secondly, as noted by Boddy (2016), data saturation starts to become apparent at six in-depth interviews and evident at twelve in-

⁵ Government Gazette. Revised Schedule 1 of the National Definition of Small Enterprise in South Africa.
https://www.gov.za/sites/default/files/gcis_document/201903/423041gon399.pdf

⁶ What Business Should I Start? 6 Factors to Help You Decide.
<https://www.uschamber.com/co/start/startup/deciding-what-business-to-start>

depth interviews. Consequently, the sample size of twelve participants guaranteed a practically sufficient, steady and complete dataset for the study.

A database provided by iSell was used to identify the SMME organizations for this study. iSell deals in the residential, commercial, industrial and leisure property markets in South Africa and the company is very active in Gauteng. Secondly, the company has a rich database of customers including small medium and micro enterprises (SMMEs) who were the target participants for my study.

3.5 The research instrument.

The study used two sets of questions in which the first set of questions were semi-structured, while the second set was structured. The individual interviews were conducted either face-to-face or virtually depending on the preference of participant. The semi-structured questions in the first set were used to discover what is known about branchless banking from the participant's perspectives. The questions drove the participants to expand on their experiences with branchless banking services and allowed the researcher to ask follow-up questions. The questions had been designed using the current literature on adoption of branchless banking services and covered the objectives explored in the literature review. The responses from the interview addressed the research objective of potential switching incentives and inhibitors for adoption of branchless banking services. The semi-structured interview questions are presented in Appendix A.

The second set of questions were used to determine the temperament of an SMME participant to address the research objective on potential influence of temperaments on adoption of branchless banking services. The structured questions are presented in Appendix B.

3.6 Procedure for data collection

The researcher conducted the interviews through face-to-face or virtual meetings. The respondents were informed about the purpose of the study and a written consent sought from them. The researcher recorded the interviews with the

permission of the interviewees to avoid disrupting the flow of the interview. The recording process helps to ensure that no data is lost during the collection process. It is also imperative for the researcher to avoid agreeing or disagreeing with the subjects or influencing the respondent in any manner. The semi structured interview questions contained four sections which were used to collect data on the demographics of the participants, inhibitors to adopting branchless banking, incentives for switching from conventional to branchless banks and other Fintech applications currently in use or considered for future use. The structured questions which were used to collect data on temperaments contained four sections as follows: section A and B to measure extroversion and section C and D to measure the unemotional score. For each question, the user answered “yes”, “no” or “?” where a “?” implies “I do not know or sometimes”.

3.7 Data analysis strategies and interpretation

3.7.1 Analysis of Temperament Data

The data set on temperaments was analysed and interpreted using the guidelines below adopted from Mol (2017). The temperament quadrant of the participant was then linked to the same participant in the semi-structured data.

a) Extroversion score

Section A - a “yes” answer scored 2 points, a “?” scored 1 point and a “no” scored 0 points.

Section B - a “no” answer scored 2 points, a “?” scored 1 point and a “yes” scored 0 points.

The totals from sections A and B added together gave the extroversion score.

b) Unemotional score

Section C - a “yes” answer scored 2 points, a “?” scored 1 point and a “no” scored 0 points.

Section D - a “no” answer scored 2 points, a “?” scored 1 point and a “no” scored 0 points.

The totals from sections C and D were added to give the unemotional score.

The participants were classified using the following guidelines:

- i) **Melancholic** - extroversion score of less than 25 and unemotional score less than 25.
- ii) **Phlegmatic** - extroversion score less than 25 and unemotional score greater than 25.
- iii) **Choleric** - extroversion score greater than 25 and unemotional score greater than 25.
- iv) **Sanguine** - extroversion score greater than 25 and unemotional score less than 25.

3.7.2 Analysis of Data Collected in Semi Structured Interviews

Data analysis started with transcription of interviews, followed by coding of data based on the research objectives. The qualitative content analysis approach shown in figure 3-1, which emphasizes interpreting the content of textual data through a systematic process of categorizing coding and theme identification, was used (Hsieh & Shannon, 2005).

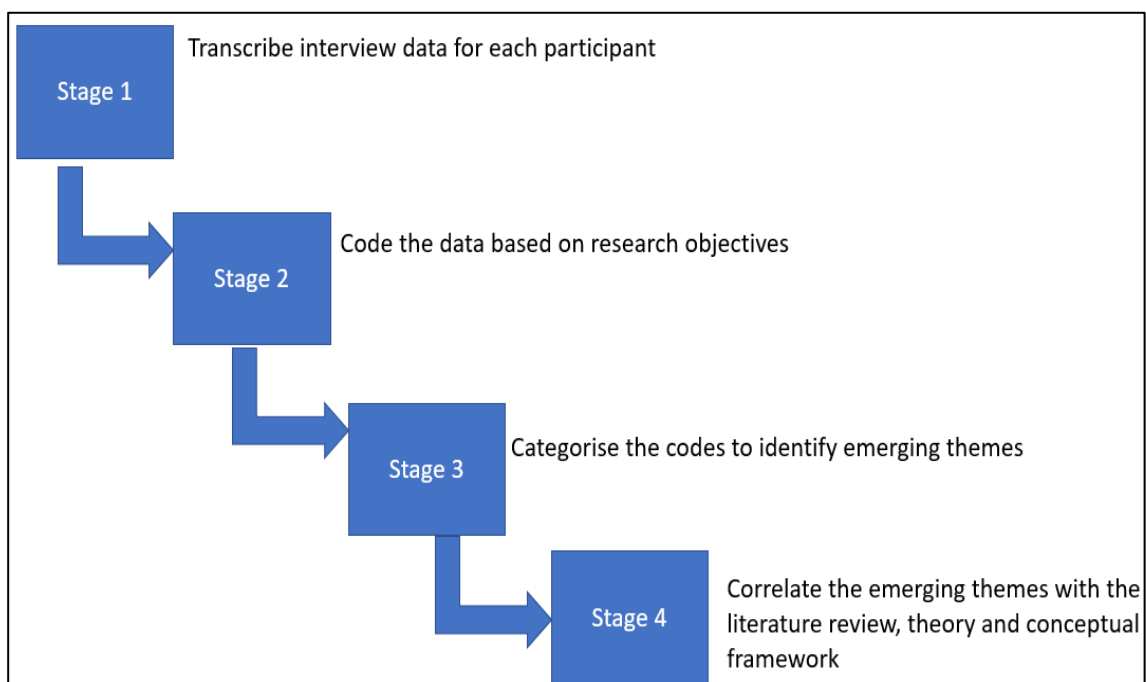


Figure 3-1: Content Analysis Approach

Source: Creswell (2014)

3.8 Possible limitations and challenges

As noted by Sofaer (2002), semi-structured questions are a critical component of qualitative interviews, and it takes practice and training to write good semi-structured questions. Consequently, the researcher prepared for the interviews using a peer-review process where the interview questions were shared, and practice runs conducted with friends and colleagues. Secondly, this study only focussed on SMMEs that have been in operation for at least two years. This implies that SMMEs which do not satisfy the criteria were excluded.

3.9 Quality Assurance

3.9.1 Credibility

One way to determine the accuracy of qualitative findings is a process called member checking where the transcripts are sent back to the participants to determine whether they are accurate (Creswell, 2014). In this study, credibility was achieved by giving the participants the transcripts of the interview to review their responses. The researcher transcribed the audio records in a very objective way to avoid bias in translating what participants said in the interviews (Cohen, Manion & Morrison, 2007). Finally, the use of audio recorders during the interview ensured that the transcriptions were according to the audio recording to minimize errors.

3.9.2 Transferability

According to Lincoln and Guba (1985), transferability implies findings can be applied to other contexts. Rich contexts and detailed explanations of the data collected should therefore be provided, so that other researchers can transfer it to other contexts (Lincoln & Guba, 1985). To ensure transferability in this study, detailed descriptions were used to describe the findings as well as provide a realistic understanding of the setting and experiences of the participants. This allows other researchers to transfer the research methods to another context.

3.9.3 Confirmability

Confirmability was achieved firstly by the researcher being immersed in the interview process and therefore understood the participants experiences and meanings within their contexts. The researcher also worked closely with the supervisor to ensure that the interviews were conducted efficiently as well as provide ongoing feedback on the research.

3.10 Ethical considerations

Ethics relate to moral choices affecting decisions, standards and behaviour and should be adopted and maintained throughout the research process (Greener, 2008). Based on these identified needs for ethical considerations, ethical approval was obtained from the University of Witwatersrand ethics committee prior to administering the research instrument to the targeted population. To address and mitigate the ethical issues, the ethical principles of informed consent, anonymity, confidentiality, and the right to withdraw were enforced.

3.10.1 Informed Consent

As noted in the Belmont report, research involving human participants should take note of the following three fundamental ethical principles: respect for autonomy, beneficence and justice which are associated with the following practices, informed consent, risk-benefit assessment and fair-selection processes (Aita & Richer, 2005). The participants were given informed consent forms which allowed them to participate in the study, to be interviewed and to be audio recorded. The researcher explained all the details about consent before the participants took part in this study.

3.10.2 Anonymity & Confidentiality

Confidentiality and anonymity are key considerations when carrying out research. The key feature of anonymity is that information provided by participants should not in way divulge their identity and the most common form

of anonymisation consists of assigning pseudonyms to the participants (Saunders et al, 2015). In this study the participants were assigned pseudonyms to hide their identities for anonymity. All the data collected in the study remained confidential and anonymous. The data was stored in password project devices and will be purged once it is no longer needed.

3.10.3 Right to withdraw

The participants were informed that they could withdraw from the study at any time if they no longer wanted to participate and they would not be held liable for withdrawing. The participants were also informed that the study was for academic purposes only and consequently there were no personal gains. The researcher ensured that all applicable documents including permission letter to conduct the research, consent form, questionnaires and clearance certificate were provided to the participants prior to the interviews. The researcher also ensured that the participants rights were protected including their right to withdraw from the study. The purpose of the study was explained as well as seeking consent from the individual participants to take part in the study.

3.11 Consistency Matrix

Table 3.1: Consistency Matrix

Sub Problem	Literature Review	Research Objective	Source of data	Type of data	Analysis
Temperaments influence on adoption of Fintech services for branchless banks.	(Slazus & Bick, 2022) (Mol, 2017) (Akmal, 2022)	Explore how temperaments influence adoption of Fintech services for branchless banks	Interview Data	Qualitative Data	Content Analysis
Factors inhibiting rejecters from adopting Fintech services for branchless banks.	(Slazus & Bick, 2022) (Singh et al., 2020) (Karim et al., 2022)	Examine the factors which inhibit rejecters from adopting Fintech services for branchless banks.	Interview Data	Qualitative Data	Content Analysis
Potential switching incentives for adopting Fintech services for branchless banks.	(Slazus & Bick, 2022) (Singh et al., 2020) (Karim et al., 2022)	Identify potential switching incentives for adopting Fintech services for branchless banks.	Interview Data	Qualitative Data	Content Analysis

CHAPTER 4. PRESENTATION OF RESULTS / FINDINGS

4.1 Introduction

This section presents the results and findings of the study. The four-step process of analysing qualitative data using content analysis was used (Hsieh & Shannon, 2005). The process included transcription of data for each participant, identification of broad content themes, segmentation of identified thematic contents into separate units of analysis followed by codification of the themes and analysis of each theme's frequency, context and relationship to each other. The analysis covered opinions and attitudes of the SMME owners towards branchless banking. Data analysis started with transcription of interviews, followed by coding of data based on the research objectives. The qualitative content analysis approach shown in figure 3-1, which emphasizes interpreting the content of textual data through a systematic process of categorizing coding and theme identification, was used (Hsieh & Shannon, 2005).

4.2 SMME Participants

Twelve SMME owners participated in the study from across the following sectors: real estate construction & maintenance, fashion and design, vehicle repairs, Information Technology consulting, solar power installations, food catering, physio spa therapy and hair dressing. Six participants were interviewed face to face at the premises of the participants at a time that was most convenient to them while the other six were interviewed in virtual meetings at times agreed with each of the participant.

4.3 Transcription of data

After the interviews, the researcher's notes were examined for clarity. Each interview was saved and identified using a participant number to ensure validity of the data and to maintain the anonymity of the respondents. The structured

temperament interview questions comprised of four sections and the extroversion, and emotional scores were computed based on the following guidelines. In Section A, a “Yes” scored 2 points, a “?” scored 1 point and a “No” scored 0 points. In Section B, a “No” scored 2 points, a “?” scored 1 point and a “No” scored 0 points. Summation of scores from Section A and B gave the extroversion score. In Section C, a “Yes” scored 2 points, a “?” scored 1 point and a “No” scored 0 points. In Section D, a “No” scored 2 points, a “?” scored 1 point and a “No” scored 0 points. Summation of scores from Section C and D gave the unemotional score.

The raw transcribed data from the semi structured interviews were first grouped into categories according to the research objectives and interview questions. The grouped categories were then organised onto a Microsoft Excel spreadsheet for ease of reference, showing the responses to each research question for each participant. This approach ensured easier comparison between the questions and the responses. It also helped to isolate broad themes arising from the data to come up with common themes across the participants’ responses. Using content analysis, common words or phrases were highlighted for further review.

4.4 Presentation of the results

In this section, the results from the analysis are presented, starting with demographic information of the participants. Out of the 12 participants interviewed in this study, some of them were willing to adopt branchless banking while some were not willing to adopt at the time of the study. However, only one participant had adopted branchless banking. This shows that the adoption of branchless banking is still at its infant stage among SMMEs in South Africa. Therefore, the need to analyse the factors that inhibit adoption of branchless banking is paramount, which is the second objective of the study.

Table 4.1: Profile of respondents

Participant	Gender	Age Group	Industry	Years of Operation	Extroversion Score	Unemotional Score	Temperament Quadrant	Aware of Branchless Banking	Currently adopted Branchless Banking	Willingness to adopt
1	M	40 - 50	Physio Therapy and Hair Saloon	2	16	16	Melancholy	Yes	No	Yes
2	F	50 - 60	Fashion Design	20	14	20	Melancholy	Yes	No	Yes
3	M	40 - 50	Construction	7	22	32	Phlegmatic	Yes	No	No
4	M	40 - 50	Construction	5	12	22	Melancholy	Yes	No	Yes
5	M	20 - 30	Fashion Design	2	16	38	Phlegmatic	Yes	No	No
6	M	30 - 40	Vehicle Repairs	4	24	24	Melancholy	Yes	Yes	Yes
7	F	30 - 40	Hair Saloon & Beauty Spa	5	5	38	Phlegmatic	Yes	No	Yes
8	M	40 - 50	Solar Power Installations	2	16	44	Phlegmatic	Yes	No	No
9	F	50 - 60	Catering Services	2	15	22	Melancholy	Yes	No	Yes
10	M	30 - 40	ICT Services	6	26	36	Choleric	Yes	No	No
11	F	50 - 60	Real Estate	4	26	22	Sanguine	Yes	No	No
12	M	30 - 40	ICT Services	10	22	35	Phlegmatic	Yes	No	No

4.4.1 Demographics

According to Das and Das (2023), Fintech service usage is influenced by demographic characteristics and this section therefore focuses on the analysis of the demographic characteristics of the participants including: age group, gender, sector and number of years in operation.

a) Gender

The results in figure 4-1, show that there were twice as many male participants as female participants. Despite the researcher's effort to have a fair gender representative sample, more male participants agreed to take part in the study compared to the females. Consequently, the sample was made up of 67% male and 33% female.

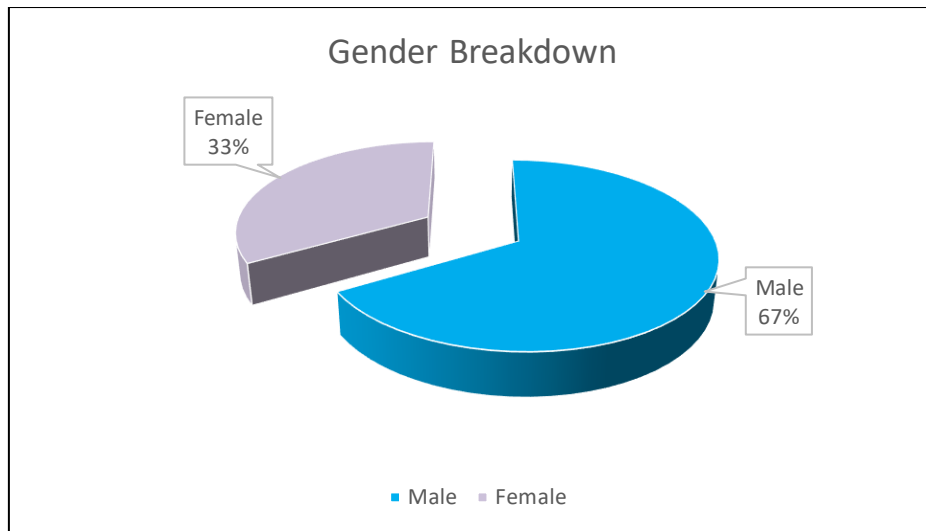


Figure 4-1: Gender Representation

b) Age Group

Based on figure 4-2, most of the participants were in the age brackets of 30 to 40 and 40 to 50 with each group representing 33% of the entire sample. The sample was made of 41% of the participants being less than 40 years old.

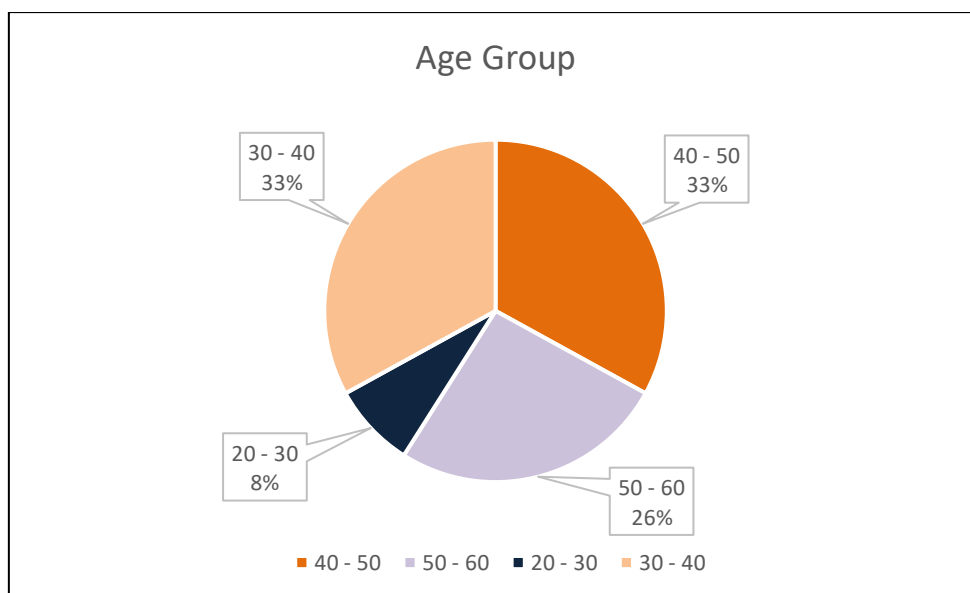


Figure 4-2: Age Group Representation

c) Number of years in operation

Based on figure 4-3, majority of the SMMEs who participated in the study were businesses which have operated for less than six years, and they represented 68% of the sample as follows: 2 years (34%), 4 years (17%) and 5 years (17%).

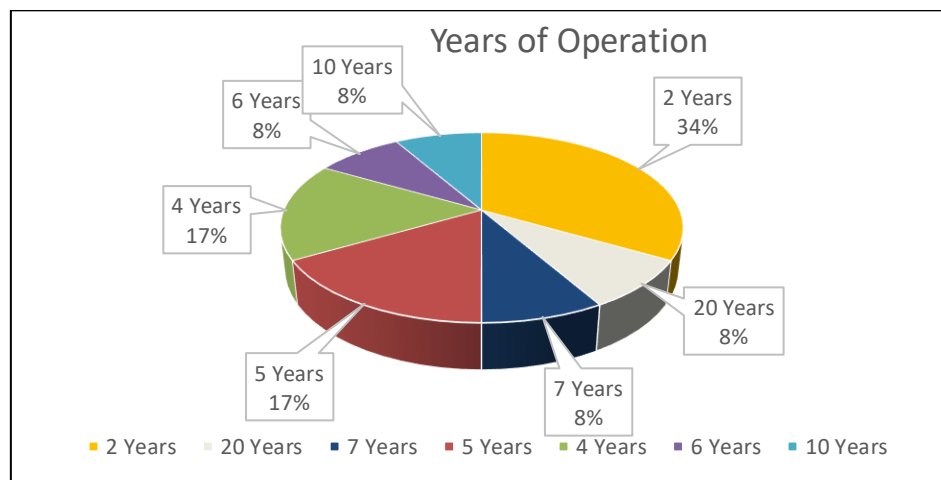


Figure 4-3: Period of Operation

d) Sector

Eight SMME sectors were represented in the sample as shown in figure 4-4. The sample contained a diverse range of sectors including ICT services, real estate, catering services, fashion design, vehicles repairs, construction, hair saloon and beauty spa and solar power installers.

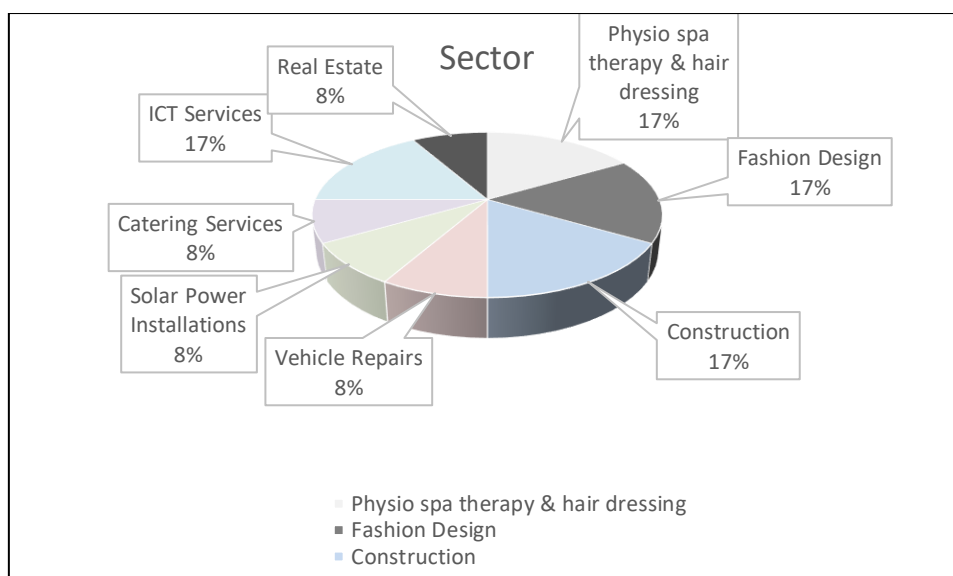


Figure 4-4: Sector Representation

4.4.2 Adoption across demographic factors

The results in figure 4-5 show that 100% of the participants were aware of branchless banking but only 8% of the participants had adopted. The results also show that 42% were willing to adopt while 50% were unwilling.

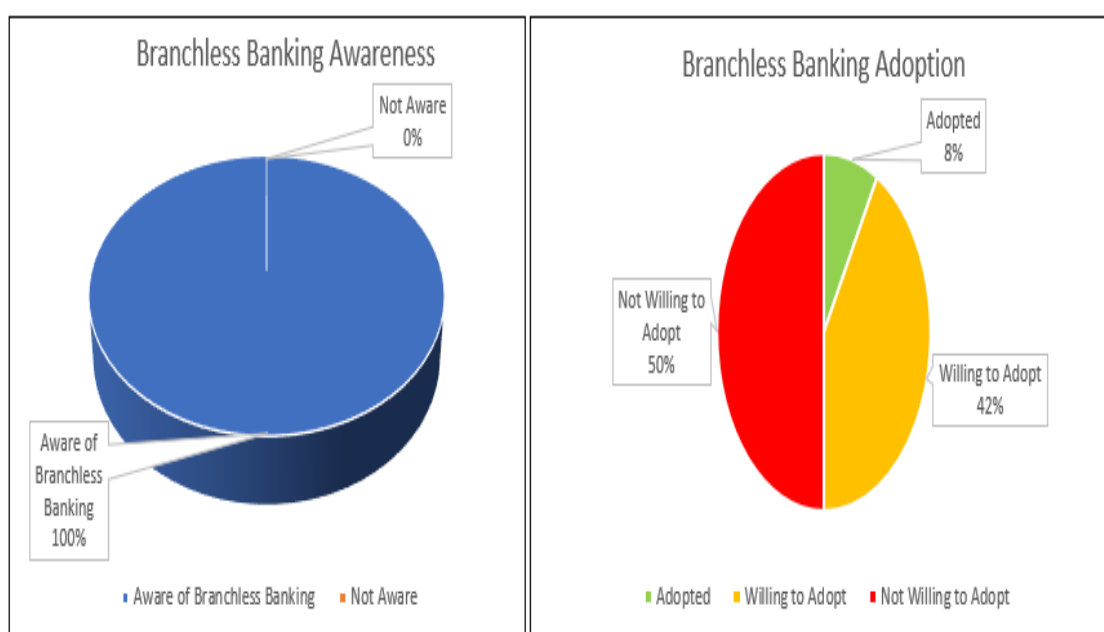


Figure 4-5: Adoption Breakdown

a) Adoption by gender

Within the males, 13% had adopted branchless banking for the operation of their businesses, 25% were willing to adopt and 62% were unwilling. There were no adopters within the females but 75% were willing to adopt and 25% were unwilling.

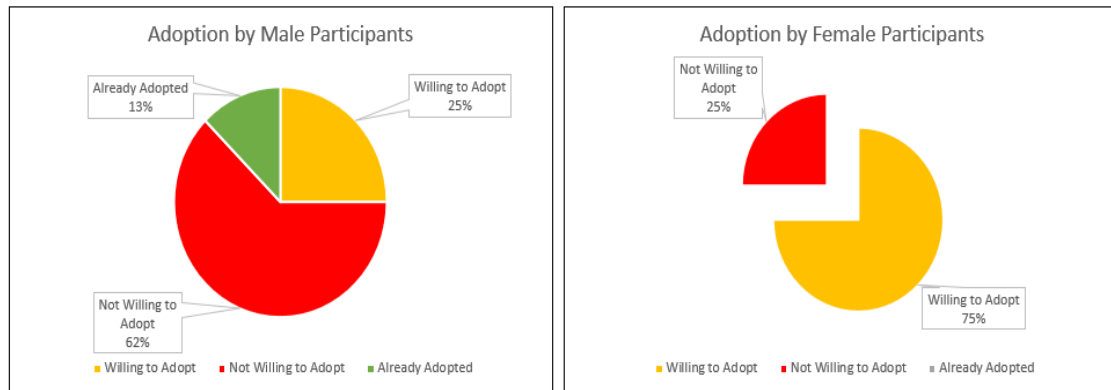


Figure 4-6: Gender and Adoption of Branchless Services

b) Adoption by age group

There was a higher willingness to adopt in the 30 to 40 and 40 to 50 age groups. The participant who had already adopted was in the 30 to 40 age group. The 20-30 age group had only one participant, showing that there was uneven representation across age groups. This representation skewed the data in favour of the dominant groups.

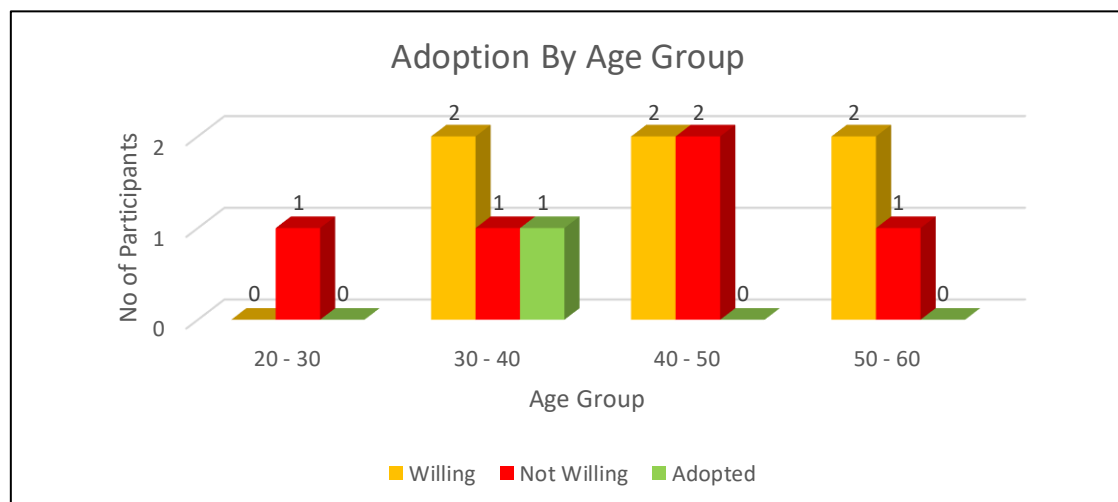


Figure 4-7: Adoption by Age Group

c) Adoption by sector

The Physio Spa therapy & hair saloon sector had the highest number of willing participants whilst ICT services had the highest number of unwilling participants. The distribution of participants across sectors was not evenly distributed. Vehicle repairs, solar power, catering services, and real estate each had one participant each. This representation skewed the data in favour of the dominant sectors.

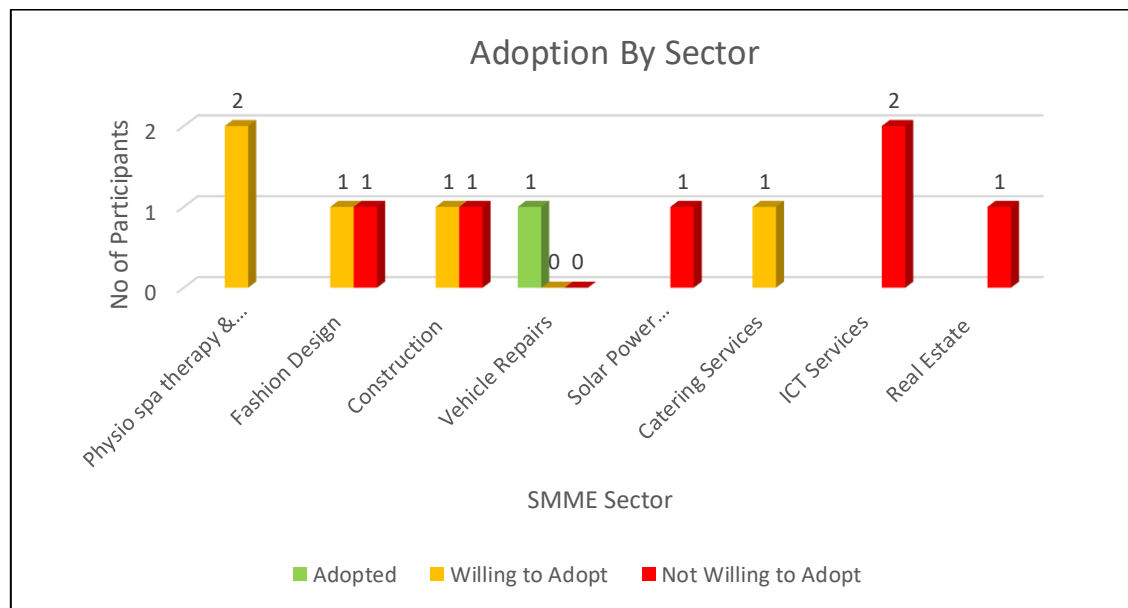


Figure 4-8: Adoption by Sector

4.5 Influence of temperaments on adoption of branchless banking services

To achieve the first research objective, questions on influences of temperaments on adoption of branchless banking services were asked. The responses to the temperament questions were used to calculate the extroversion and unemotional scores for each participant. Based on the two scores, the temperament quadrant was determined as shown in Table 4.1. The temperament distribution of the twelve participants with the corresponding scores is shown in figure 4-9.

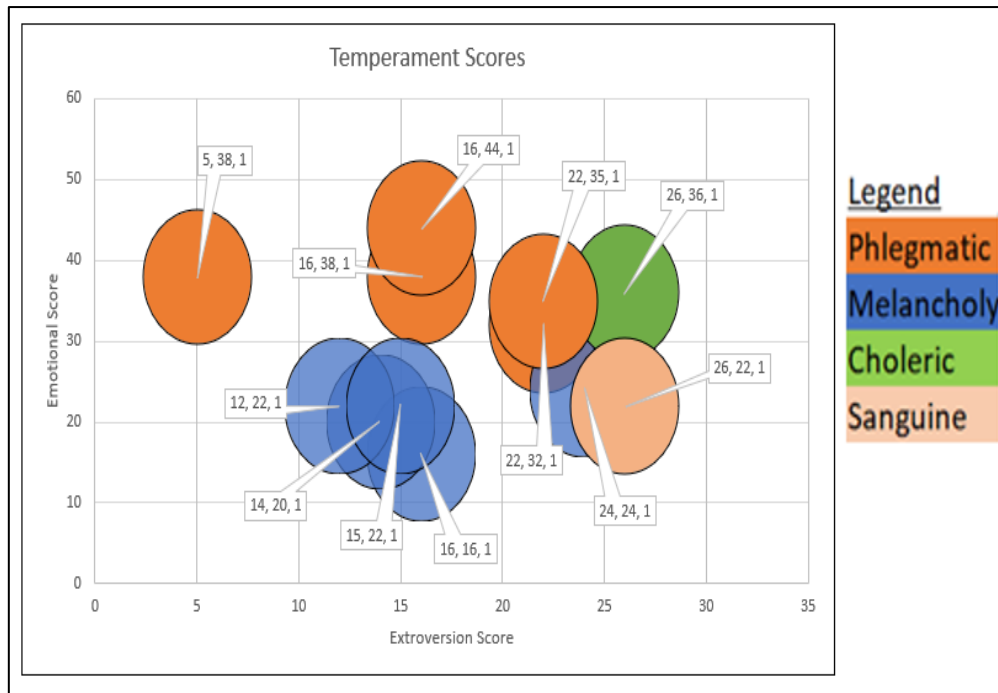


Figure 4-9: Participants Temperaments

Based on figure 4-10, majority of the participants were of Melancholy and Phlegmatic temperaments with each group representing 42% of the entire sample. The Sanguine and Choleric participants represented 8% each.

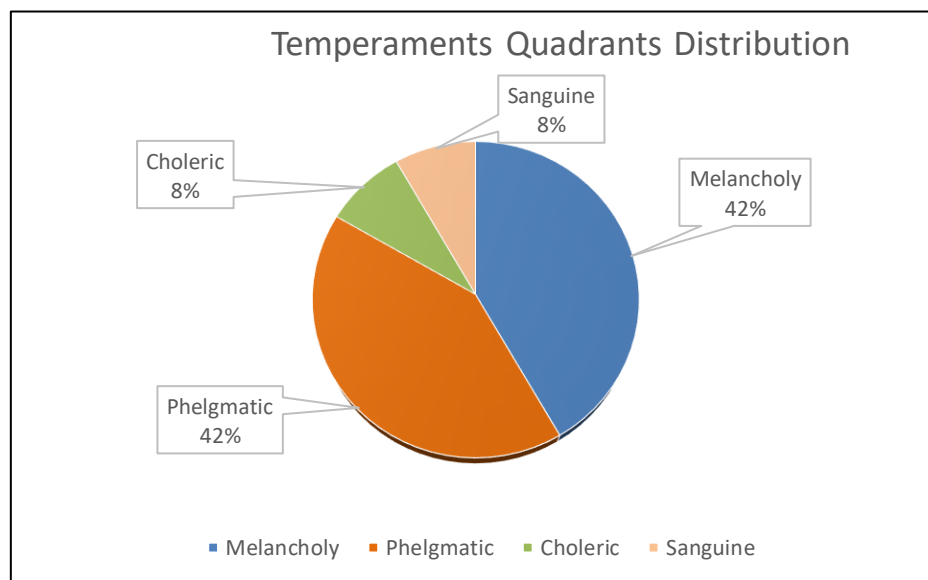


Figure 4-10: Temperaments Distribution

Adoption of branchless banking within each temperament quadrant is shown in Figure 4-11. Only the Melancholy quadrant had a participant who had adopted

branchless banking and that constituted 20% of the Melancholy participants. The other 80% of the melancholies were also willing to adopt. The adopter in the Melancholy group was in the age group of 30 - 40 years, worked in the vehicle repairs sector and the business has been in operation for 4 years. In the Phlegmatic temperament, 40% of the participants were willing to adopt while 60% were unwilling. Participants of Sanguine and Choleric temperaments represented 16% of the sample which is small compared to the other two temperament groups but were nevertheless all unwilling to adopt. The sanguine and choleric temperaments were underrepresented with one participant each, and the results for the two groups could therefore not be generalized in terms of adoption or non-adoption.

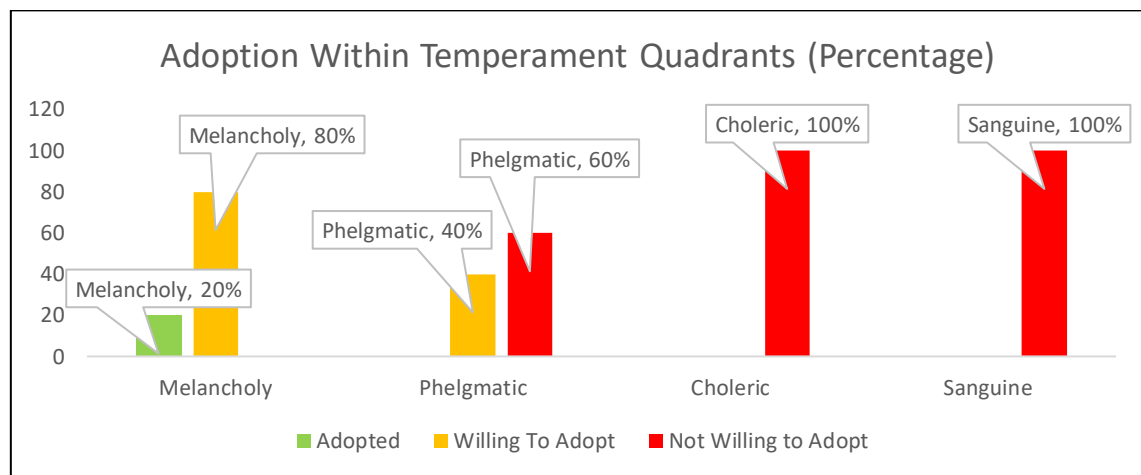


Figure 4-11: Adoption Within Temperament

4.6 Factors that inhibit SMME owners from adopting branchless banking services

To achieve the second research objective, questions on factors that inhibit SMME owners from adopting branchless banking services were asked. From the respondents it was gathered that the four inhibitors to adopting branchless banking services are: preference to engage with physical customer service representatives, requirement of internet access to be able to access branchless online services, limited channels to cash out or deposit money and loyalty, trust and satisfaction in the conventional bank services.

4.6.1 Preference to engage with physical customer service

Based on the responses, the participants preferred to engage with physical customer service representatives as opposed to online interactions. Participant 3 stated *“I prefer engaging with physical customer service representatives and I am therefore unlikely to switch”*, which aligns with Participant 8 who responded, *“I would like to talk to a human face in a branch”*. The above responses are aligned to Participant 9 who said as follows *“I am already getting benefits from my current conventional bank and the physical branch customer service guarantees assurance of a great service”* which aligns with Participant 1 who stated, *“Physical branches inspire confidence”* and is supported by Participant 4 who responded, *“Opening an account at FNB is an easy process and the customer service I get from the branch is excellent”*.

The above opinions on customer service at the branch were confirmed further by Participant 5 who responded *“I sometimes require physical customer service interaction for issues which cannot be resolved online. Switching for me can only be considered if the branchless customer service is better than the physical bank customer service. It should not result in long frustrating calls for support, especially because online is the only contact mechanism.”* Participants 3, 5, and 8 had phlegmatic temperaments, while 1 and 9 had melancholic temperaments. All the above participants preferred access to a physical customer service representative or physical branch. This is an indication a need for human touch by the participants. However, being sociable, warm and around people is a trait that is associated with sanguines and not phlegmatic or melancholic temperaments. Notably, there was only one sanguine participant in this study and therefore not enough to collect data on that aspect.

4.6.2 Use of internet connectivity

The requirement to always have internet connectivity to access the banking services online is a key inhibitor based on the following responses from the participants. Participant 1 stated *“I would require data to be able to connect to the branchless banking services”* which aligns with Participant 3 who responded as follows *“I require data to connect online”* and Participant 9 stated *“I would require connectivity to the internet to access the branchless service”*. The above views are supported by Participant 11 who stated, *“Internet connectivity is critical for branchless banking services”* and is aligned to Participant 4 who responded *“The branchless services will mean I should always have a connection to the internet either using data bundles or Wi-Fi”* which is further aligned to Participant 7 who stated *“Branchless banking will require mobile data to be on or access to a Wi-Fi to be able to access the services”*.

4.6.3 Limited cash withdraws and deposit channels.

The limited channels to withdraw or deposit money is a key inhibitor based on the responses from the participants. Participant 7 stated *“Limited number of ATMs where to deposit or withdraw money is a key issue”* which aligns with Participant 2 who responded, *“lack of ATMS for the branchless banks is a problem for me”* and is supported by Participant 10 who stated, *“I am concerned about where to deposit cash for branchless banks”*. It is supported further by Participant 11 who responded, *“I cannot be restricted to transferring money to other bank accounts to enable me withdraw”*.

The above views are supported further by Participant 12 who stated, *“I am worried about where to deposit and withdraw cash as I cannot only transact online”*. Participant 6 is the respondent who had already adopted branchless banking offered by Tyme bank and stated *“In the case of Tyme bank, due to its partnership with Pick n Pay and Boxer stores, every till-point becomes an access point to withdraw and deposit money. Secondly, withdrawals at the till*

points are free. However, there are bank charges when I use automatic teller machines of conventional banks”.

4.6.4 Loyalty, Trust and Satisfaction in the conventional bank services

Loyalty and trust in the current conventional banks are key inhibitors based on the responses from the participants. Participant 5 stated *“I am currently very happy with my conventional banking provider and switching from my current provider to a branchless provider will introduce inconveniences. I am therefore unlikely to switch”* which aligns with Participant 10 who responded, *“the branchless banks are new and still building their reputations”*. The above responses align with Participant 11 who stated, *“I am currently very satisfied with my conventional bank including their mobile platform and I am unlikely to switch”*. It is further supported by Participant 12 who stated *“I have always used a conventional bank and I also use their mobile services. I will prefer to stick with my current service provider. I am very loyal to my brand and branchless banks are still new”*. In terms of temperaments, participants 5 and 12 were both phlegmatic and preferred to remain with the conventional banking providers.

4.7 Incentives for SMME owners to switch from conventional to branchless banks.

To achieve the third research objective, questions on incentives that drive SMMEs to switch from conventional banks to branchless banks were asked. Lower bank charges were identified in this study as the key incentive for SMME owners to switch to branchless banking based on the responses. Participants 4 and 9 responded *“Lower costs would motivate me to change”* and *“Lower costs would be a key factor”* respectively which aligns with Participant 7 who stated *“Lower fees would motivate me to switch. I currently use conventional banking services, but I am open to branchless banking”*. The above responses are supported by Participant 11 who responded, *“Reduced bank charges are a key incentive”* and Participant 12 who stated, *“Lower bank charges would make me*

consider switching". All the above responses align with Participant 6 who is the only respondent who had adopted and stated, "*Lower bank charges is one of the main reasons why I use branchless banking services*". Participants 4, 6 and 9 had melancholic temperaments, while 7 and 12 had phlegmatic temperaments. All the above participants considered lower costs as the key motivator to switch from conventional to branchless banking.

4.8 Choice of Fintech services

After getting information on the factors that inhibit SMMEs from adopting digital financial services, as well as motivation towards adoption, the study went further to enquire about the Fintech platforms SMMEs are or might be interested in. Because there are over 1000 Fintech start-ups in South Africa according to a report by the South African National treasury, titled Fintech Scoping in South Africa (2019) and Huawei Cloud (2023)⁷, it will be interesting to know which Fintech platforms are more attractive to SMMEs. The respondents were asked to mention which Fintech start-ups they currently use or would prefer to use should they have the opportunity to do so.

Most of the respondents indicated that they use Easy Equities for shares management and Hallo Paisa for money transfers. For instance, Participant 1 stated "*I use Hallo Paisa to transfer money*" which aligns with Participant 2 who added "*I use Mukuru for money transfers, but I will be switching to Hello Paisa*". The above responses are supported by Participant 11 who added "*I make use of Hallo Paisa to transfer money to my mobile wallet and I will also evaluate Mama Money and compare with Hallo Paisa*".

On Easy Equities, Participant 5 stated "*I use Easy Equities to buy and sell shares online*" which aligns with Participant 12 who stated, "*I use Easy Equities to manage my shares*". The above responses are supported by Participant 11 who

⁷ <https://www.itweb.co.za/content/Pero3MZ3PV4qQb6m>

[https://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Scoping%20in%20SA_20191127_final%20\(002\).pdf](https://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Scoping%20in%20SA_20191127_final%20(002).pdf)

responded *“I am planning to get into shares and I will review Easy Equities app based on recommendations from my son”* which aligns with Participant 10 who responded *“I have been introduced to Easy equities in the past but I have not used it”* and is supported by Participant 9 who stated *“I am aware of Easy equities and I will consider it in future”*.

Notably, Participant 5 is the only respondent who used PayJustNow and responded as follows *“I have enabled PayJustNow on my online shop as a flexible payment option for my customers and it is very popular”*. PayJustNow is a payment solution which offers buyers three interest free instalments and is in the category of Buy-Now-Pay-Later (BNPL) payment methods. According to Modise (2023), use of BNPL products is gaining popularity and their use is projected to grow. It will be interesting to understand why the uptake of PayJustNow and by extension Buy-Now-Pay-Later products is low among SMME owners.

4.9 Summary of the research findings

In this chapter, the results of the interviews were presented. The chapter started by analysing the demographic factors of the respondents, including age groups, gender, sector of SMME they operate and duration of operation. The results were grouped and presented according to the research objectives. The next chapter discusses the findings.

CHAPTER 5. DISCUSSION OF THE RESULTS OR FINDINGS

5.1 Introduction

This chapter discusses the results according to the objectives of this study and links to the existing literature to explain the findings.

5.2 Demographic Characteristics

Based on figure 4-6, no female participant had adopted branchless banking, 75% of the female participants were willing to adopt while 25% were unwilling. Further breakdown shows 13% of the male participants had adopted branchless banking, 25% were willing to adopt and 62% were unwilling to adopt. The percentage of unwilling males was more than double that of the unwilling female participants. This finding contradicts Das and Das (2019), which found that women were much less likely than men to use Fintech products and services.

The 30 to 40 and 40 to 50 age groups in this study had the highest willingness to adopt branchless banking. This finding supports a study by Das and Das (2019) which found that 62.3% of the respondents in the 29–39 age group repeatedly used Fintech services compared to 40–50 and over 50 years who constituted 34.4% and 26.9% respectively. Consequently, the use Fintech services is mainly slanted towards the younger generation. According to figure 4-8, the ICT services sector in this study had the lowest adoption of branchless banking services. ICT services are professional services and are implementers of technology systems. This finding contradicts Das and Das (2019) who found that 80% professionals in their study regularly used Fintech services.

This study shows that all the SMME participants were aware of branchless banking services, but the adoption was very low at 8% as shown in figure 4-5. The data further shows that the adoption of branchless banking by SMMEs was below South Africa's SMMEs Fintech adoption rate of 16%. According to Ernst & Young (2019b), the SMME adoption of Fintech services in South Africa is 16%

against a global average of 23% in 2019. However, SMEs in emerging markets are particularly heavy users of banking and payments services, with 63% using services in that category.

5.3 Influence of Temperaments on Adoption

In terms of temperaments, all the melancholies were positive towards branchless banking, which includes one participant who had already adopted. Sixty percent (60%) of the phlegmatic and all the sanguine and choleric participants were unwilling to adopt. This study shows that SMME owners of melancholy temperament are the most likely to adopt branchless banking services. A possible explanation on why participants of melancholy temperament were willing to adopt could be traced to their strengths. Some of the strengths in people of melancholy temperament include being gifted, talented, creative, genius-prone, analytical, deep-thinking and using extremely high standards (Mol, 2017). A possible explanation on why participants of phlegmatic temperament were unwilling to adopt could be traced to their weaknesses. Some of the weaknesses in people of phlegmatic temperament include being slow, lethargic (procrastinator and spectator to life), hesitant, reluctant to take risks and leaving decisions to others (Mol, 2017). Based on the findings, it can be deduced that temperaments and particularly melancholy and phlegmatic temperaments, influence adoption of branchless banking.

5.4 Factors that inhibit SMME owners from adopting branchless banking services

The four inhibitors to adopting branchless banking found in this study are explained in the following section.

5.4.1 Preference to engage with physical customer service representatives.

This finding supports a report by Deloitte Centre for Financial Services⁸ that found that branches remain the dominant channels for account opening. Customer satisfaction with branches was a stronger determinant of overall satisfaction than either online or mobile channels.

5.4.2 Requirement of internet access

Majority of the respondents were concerned about the requirement to always have an internet connection for access to branchless banking services as this will be a challenge especially for poor and rural communities. As noted by Aruleba and Jere (2022), one of the major reasons why rural communities struggle to maintain the pace of digital connectivity is because internet and broadband infrastructures are hard to penetrate in those areas. Secondly, most people in those communities are ill-educated and find it hard to acquire skills which would make it easier to navigate the branchless banking systems.

5.4.3 Limited channels to cash out or deposit money.

Majority of the respondents were concerned about the branchless banks not having ATMs of their own, therefore limiting the channels where to withdraw or deposit money. This finding is aligned with the Deloitte Center for Financial Services report where respondents who were likely to switch to a new bank cited proximity to branches and ATMs as an important reason for making the change.

5.4.4 Loyalty, trust and satisfaction in the conventional bank services

In this study, 50% of the participants were unwilling to adopt branchless banking and one of the inhibitors was that the respondents were loyal and trusted the conventional banks more than the Fintechs. This finding supports

⁸ Recognizing the value of bank branches in a digital world. Deloitte Insights. Deloitte Center for Financial Services. <https://www2.deloitte.com/us/en/insights/industry/financial-services/bank-branch-transformation-digital-banking.html>

the report by Financial Brand (2022)⁹ which found that consumers trusted the conventional banks more than Fintechs, with 55% of the respondents trusting conventional banks compared to 32% for Fintechs as shown in Figure 5-1. In terms of strong distrust, the Financial Brand report also shows that 6% of consumers distrusted conventional banks, versus 20% who distrusted Fintechs. The finding on trust in this study also aligns with Setiyono, Shihab, and Azzahro (2019), who found that initial trust in a branchless banking application positively influences the users' intention to use the service and perceptions of its usefulness. The finding further supports Ernst & Young (2019a) report, that found that in Chile, France and Japan, trust is the sole determining factor in a consumer's decision to move from a conventional financial services provider to a Fintech provider. In terms of temperaments, the participants who opted to continue with the conventional banking providers were of phlegmatic temperament. Phlegmatic individuals' traits of being extremely faithful, hesitation and reluctance to take risks could explain this finding in the study.

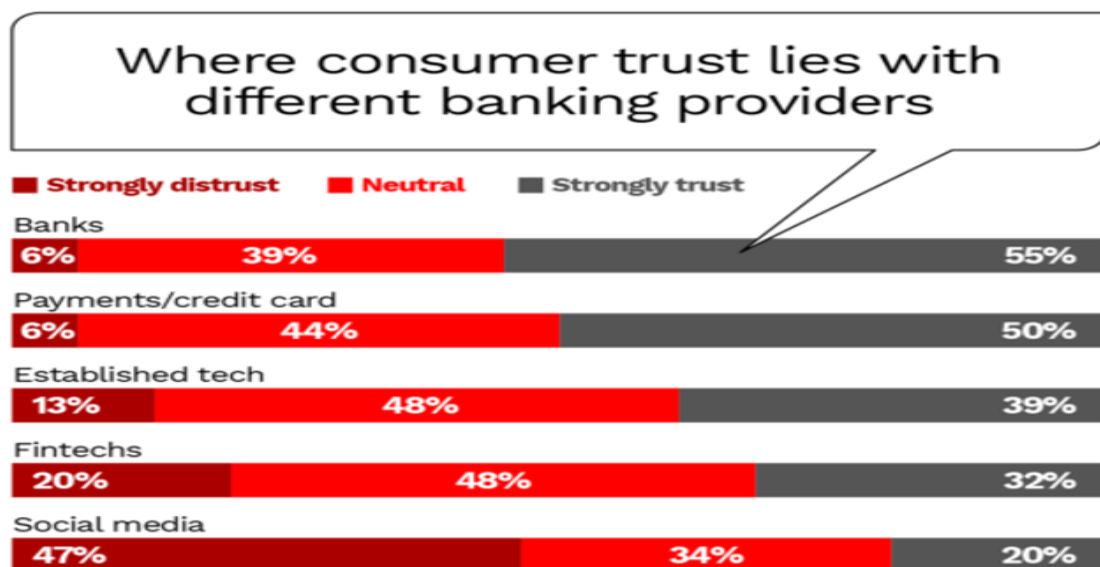


Figure 5-1: Consumer Trust

Source: Financial Brand (2022)

⁹ <https://thefinancialbrand.com/news/open-banking/new-data-people-dont-trust-open-banking-or-fintechs-but-use-both-127722/>

5.5 Incentives for SMME owners to switch from conventional to branchless banks.

Lower bank charges were identified in this study as the key incentive for SMME owners to switch to branchless banking. This finding supports a report by MYBROADDBAND (Trusted in Tech) published in January 2023¹⁰ which found that for most South Africans, bank charges are a key factor in deciding which digital banks suit their needs. However, in terms of ranking this study is not aligned to Ernst & Young (2019b) which ranked lower bank charges in the fourth position for factors which determine adoption of Fintech services by SMMEs. In addition, SMMEs are more concerned with features and functionality unlike individual consumers, who often pick a Fintech service based on attractive rates or fees. The finding from this study is that lower bank charges were the most important incentives for the SMME owners to switch from conventional to branchless banking.

5.6 Choice of Fintech services

The top two Fintech applications in use or being considered for use by SMMEs were Easy Equities and Hello Paisa. Easy Equities is an application used to manage shares and it therefore belongs to the investments category. As shown in figure 5-2, 10% of Fintechs in South Africa are in the investments segment. Hello Paisa is an application used for remittances and falls under the payments category. According to South African National treasury on Fintech Scoping in South Africa (2019)¹¹, 30% of the Fintechs in South Africa are in the payment segment, which is aligned to international Fintech trends, where payment solutions dominate the Fintech landscape. Secondly, according to Ernst & Young

¹⁰ South African digital banking battle

<https://mybroadband.co.za/news/banking/476201-south-african-digital-banking-battle.html>

¹¹[https://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Scoping%20in%20SA_20191127_final%20\(002\).pdf](https://www.treasury.gov.za/comm_media/press/2020/WB081_Fintech%20Scoping%20in%20SA_20191127_final%20(002).pdf)

(2019a), the most used Fintech category is money transfer and payments. The finding from this study therefore supports Ernst & Young (2019a) on money transfer and payments services being dominant as current or potential services for adoption.

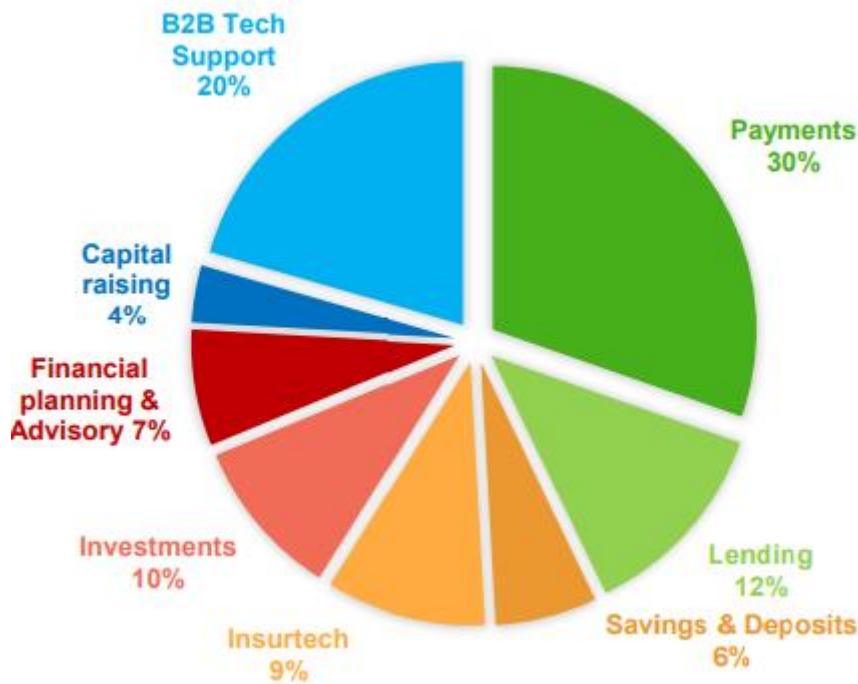


Figure 5-2: Segmentation of Fintechs

Source: Fintech Scoping in South Africa (2019)

Notably, only one participant used PayJustNow, which is a payment option in the category of Buy-now-pay-later (BNPL). Majority of the Fintechs in South Africa are in the payments segment according to figure 5-2 and BNPL products such as PayJustNow belong to that category. According to Modise (2023), South Africa's BNPL market had a revenue cumulative annual growth rate (CAGR) of 64% between 2019 and 2022, and a forecasted CAGR of 35% between 2022 and 2027. The volume of transactions is on an upward trend, with projections of 26% CAGR between 2022 and 2027. Despite the popularity and projected growth of BNPL products, the adoption is low based on the findings of this study. Therefore, it will be interesting to understand why SMMEs are not adopting BNPL Fintech services despite the popularity and projected growth of the payment option.

5.7 Conclusion

In this chapter, the results of the interviews were discussed with reference to the existing literature. This study showed that the SMME participants were aware of branchless banking services, but the adoption was very low. In terms of temperaments, this study showed that SMME owners of melancholy temperament were the most likely to adopt branchless banking services. There were four inhibitors to adoption from this study namely: preference to engage with physical customer service representatives, requirement of internet access, limited channels to cash out or deposit money and loyalty, trust and satisfaction in the conventional bank services.

In terms of incentives that enable SMMEs to switch to branchless banking, the top incentive is lower bank charges. The Fintech services in use or to be considered for adoption by the participants were Easy Equities for management of shares and Hello Paisa for money transfers. Pay Just Now was also discussed and was only adopted by one participant. That adoption was considered to be very low given the projected growth of Buy-now-pay-later (BNPL) payment method.

CHAPTER 6. CONCLUSIONS & RECOMMENDATIONS

6.1 Introduction

This chapter summarizes the study's objectives and findings, as well as the conclusions, policy recommendation and recommendations for further study. The results are summarised according to the objectives of this study.

6.2 Conclusion

The first of objective of this study is to explore the influence of temperaments on adoption of branchless banking. Results from the analysis indicated that the current adoption of branchless banking among SMME owners was very low at 8% against an average of 16% for SMMEs adoption of Fintech services. The results further indicated that temperaments and particularly melancholy and phlegmatic temperaments influence adoption of branchless banking. SMME owners of melancholy temperament were more willing to adopt compared to their phlegmatic counterparts. The results further showed that females SMME owners were more willing to adopt branchless banking compared to their male counterparts. It could be argued that temperament can be added as one of the factors that influence technology adoption, as this directly affects adoption of branchless banking, which is deeply rooted in technological use. This also indicates that branchless banking service providers should incorporate temperaments when marketing their services.

Secondly, this study examined the inhibitors for adoption of branchless banking. Results from the analysis indicated that there were four key inhibitors to adoption, preference to engage with physical customer service representatives, requirement of internet access, limited channels to cash out or deposit money and loyalty, trust and satisfaction in the conventional bank services.

The last objective was to identify incentives for that enable SMME owners to switch from conventional banks to branchless banks. Results from the analysis

indicated that the top incentive for switching to branchless banking was lower bank charges. This study went further to find out which Fintech services are most preferred (should be preferred, it considered) by the SMMEs, it was found that Hello Paisa and Easy Equities are most preferred by the research respondents. The analysis also found that the adoption of Buy-now-pay-later (BNPL) payment method by SMMEs was very low even though it is popular and is projected to grow locally and globally. Policy Recommendations

This study provided insights on the influence of temperaments on adoption of branchless banking services. This study found that respondents of Melancholic temperament were the most willing to adopt branchless banking. Based on the above insights branchless banking service providers should tailor their marketing approaches and messages differently to address different potential customers who have different temperaments. Secondly, this study identified four inhibitors to adoption of branchless banking and the service providers should therefore address the inhibitors to increase adoption. Finally, the study identified lower bank charges as the top incentive for customers to switch from conventional to branchless banks. Consequently, branchless banking service providers should lower their bank charges as an incentive to attract customers to the branchless banks.

6.3 Recommendation for further research

This research was carried out on twelve SMME owners and majority of them turned out to be of melancholy and phlegmatic temperaments. The participants of Sanguine and Choleric temperaments were very few, therefore further research can be carried out on a bigger sample of Sanguine and Choleric participants. Secondly, research can be carried out to investigate the low adoption of BNPL among the SMMEs, despite the popularity and projected growth of that payment method locally and globally.

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APPENDIX A: Semi Structured Questions

1. Demographics of the SMME representative
 - (a) Gender
 - (b) Age group i.e. (30 – 40)
 - (c) Position in the company
 - (d) Any other details
2. In which sector is the SMME business?
3. How many employees are employed by the organization?
4. How long has the business been operational?
5. Do you currently use branchless banks instead of the conventional banks?
6. If yes to Q5, what inspired you to use the branchless banking services?
 - a. Which other Fintech services do you use?
7. If the answer to Q5 is No
 - a. Which are the inhibitors to adopting branchless banking services?
 - b. What would motivate you to switch from conventional to branchless banks?
8. Which other Fintech services would you consider for adoption?
 - a) What would motivate you to consider using the other Fintech services?

APPENDIX B: Temperament Questions

The questions in this section are adopted from Mol (2017) and were used to determine the temperament of each participant.

SECTION A

Number	Question	Answer (Y, N, ?)
1	Do you normally eat faster than other people even when there is no reason to hurry?	
2	When catching a train or a bus, do you often arrive at the last minute?	
3	Do you often gestulate with your hands when you talk?	
4	When driving a car, do you often get frustrated on slow-moving traffic?	
5	Do people who drive very cautiously often get on your nerves?	
6	Do other people usually know what you are thinking and feeling?	
7	Do you usually show your impatience when someone has kept you waiting?	
8	Do you often find yourself crossing a busy street, leaving your more careful companions on the other side?	
9	Do you think it's pointless to analyse your own thoughts and feelings regularly?	
10	Are you usually very talkative when you are with people whom you know?	
11	Do you often say and do things at the spur of the moment?	
12	Do you often tell jokes and funny stories to your friends?	

SECTION B

Number	Question	Answer (Y, N, ?)
1	Would you generally prefer to stay at home and do your own thing, rather than go out visiting friends?	
2	Do you usually think very carefully before deciding on anything?	
3	Are you often suspicious of other people's motives?	
4	Do you normally find it difficult to go up to strangers at a social gathering and introduce yourself?	
5	When you want to buy an expensive article, can you normally save up for it patiently?	
6	Do you plan most of your activities well ahead of time?	
7	Would you generally prefer to watch a documentary rather than a comedy on TV?	
8	Would you generally keep your opinions to yourself if you thought you might upset someone who was present?	
9	If someone in a social group expresses a point of view that differs from yours, would you normally keep quiet rather than tell them that you disagree?	
10	When buying an electrical appliance, do you usually read the guarantee before making the purchase?	
11	Are you generally inclined to be deliberate and unhurried in your actions?	
12	Do you frequently think about your past and the course that life is taking?	

SECTION C

Number	Question	Answer (Y, N, ?)
1	When people compliment you, do you generally believe them?	
2	Are you usually easy-going – not easily agitated?	
3	Do you find it relatively easy to keep your emotions under control?	
4	Are you on the whole satisfied with your physical appearance?	
5	Do you usually make up your mind regardless of what other people might think of your decision?	
6	Would you say that on the whole you are satisfied with your life up to now?	
7	When you feel downhearted do you normally try to find someone to cheer you up?	
8	When you have made a social blunder can you normally forget about it quite easily?	
9	Do you usually have specified goals and a definite sense of direction in your life?	
10	Do you generally feel that your life is very useful and contributes to society?	
11	When something goes wrong, can you normally forget about it quickly and focus on the future?	
12	Does your future on the whole seem promising and bright to you?	

SECTION D

Number	Question	Answer (Y, N, ?)
1	Do you sometimes feel that you do not care what happens to you?	
2	Do you become irritated quickly when things are not in their proper places?	
3	Do you frequently feel that people frown upon the things that you say and do?	
4	Do you often feel restless as though you are looking for something but not sure what?	
5	Do you have some bad habits that you sometimes feel you ought to have discarded long ago?	
6	Do you generally spend a good deal of time worrying over financial matters?	
7	Are you frequently bothered by a guilty conscience?	
8	When you see a picture on the wall hanging obliquely, do you often have difficulty in concentrating until it has been put up straight?	
9	Do you often feel that there isn't much in your life that you can be proud of?	
10	Do you frequently prefer to do a task yourself rather than to delegate it to someone else – for fear that they might not be doing as well as you would?	
11	Do you at times keep quiet for fear that people might criticize or laugh at your point of view?	
12	After you have completed the task do you feel that you should have done it better?	

Appendix C - Revised Schedule 1 of the National Definition of Small Enterprise in South Africa

SCHEDULE 1

The new National Small Enterprise Act thresholds for defining enterprise size classes by sector, using two proxies

Column 1	Column 2	Column 3	Column 4
Sectors or sub-sectors in accordance with the Standard Industrial Classification	Size or class of enterprise	Total full-time equivalent of paid employees	Total annual turnover
Agriculture	Medium	51 - 250	≤ 35,0 million
	Small	11 - 50	≤ 17,0 million
	Micro	0 - 10	≤ 7,0 million
Mining and Quarrying	Medium	51 - 250	≤ 210,0 million
	Small	11 - 50	≤ 50,0 million
	Micro	0 - 10	≤ 15,0 million
Manufacturing	Medium	51 - 250	≤ 170,0 million
	Small	11 - 50	≤ 50,0 million
	Micro	0 - 10	≤ 10,0 million
Electricity, Gas and Water	Medium	51 - 250	≤ 180,0 million
	Small	11 - 50	≤ 60,0 million
	Micro	0 - 10	≤ 10,0 million
Construction	Medium	51 - 250	≤ 170,0 million
	Small	11 - 50	≤ 75,0 million
	Micro	0 - 10	≤ 10,0 million
Retail, motor trade and repair services	Medium	51 - 250	≤ 80,0 million
	Small	11 - 50	≤ 25,0 million
	Micro	0 - 10	≤ 7,5 million
Wholesale	Medium	51 - 250	≤ 220,0 million
	Small	11 - 50	≤ 80,0 million
	Micro	0 - 10	≤ 20,0 million
Catering, Accommodation and other Trade	Medium	51 - 250	≤ 40,0 million
	Small	11 - 50	≤ 15,0 million
	Micro	0 - 10	≤ 5,0 million
Transport, Storage and Communications	Medium	51 - 250	≤ 140,0 million
	Small	11 - 50	≤ 45,0 million
	Micro	0 - 10	≤ 7,5 million
Finance and Business Services	Medium	51 - 250	≤ 85,0 million
	Small	11 - 50	≤ 35,0 million
	Micro	0 - 10	≤ 7,5 million
Community, Social and Personal Services	Medium	51 - 250	≤ 70,0 million
	Small	11 - 50	≤ 22,0 million
	Micro	0 - 10	≤ 5,0 million


 Lindiwe D Zulu, MP
 Minister of Small Business Development
 Date: 27/02/2019

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