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Chat banking adoption by retail banking clients in South Africa

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Chat banking adoption by retail banking clients in South Africa

Applied Research Project

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Mrs Ndamase

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Abstract

Digital banking has been growing rapidly and many institutions are introducing different convenient option to process financial transactions. Retail banking clients have a number of banking channels offered by banks. Chat Banking is one of the ‘new’ channels in retail banking and is an effective and convenient way to conduct banking transactions.

This study helps discover why clients are slow in adopting to Chat banking and also analyses customer behaviour in order to understand how banks can grow the channel and the clients perception to the channel.

Research method used is qualitative and results were gathered using an online survey. 342 respondents replied to the survey which resulted in receiving great insight on the study.

Insights highlight how clients use multiple channels and are more aligned to use one of the traditional digital channels rather than recently introduced channels like chat banking. Clients who completed the survey seem to be satisfied with mobile application.

One important benefit about Chat Banking is that it uses low bandwidth which is cost effective for most South Africans, as a high percentage live in poverty. Respondents who completed the survey are not impacted by infrastructure and do not live in areas like townships or rural. Chat Banking will work best with the low LSM and unbanked market.

Keywords: Digital Adoption, Chat Banking, Banking, Mobile Banking

INTRODUCTION

This research evaluates the adoption to new digital channels by retails banking clients in South Africa.

1.1 Context and Background

South Africa has dominating banks in the industry, the five big organisations control the South African banking sector and are namely: Absa group, FirstRand Bank, Standard Bank, Nedcor and Investec (African et al., 2004). SARB confirms that South Africa's banking sector is still dominated by the five largest banks, together held 89.4% of the total banking sector assets at the end of March 2020
Haralayya (2021:1) defines retail banking as "… the delivery of financial services by a bank to individual customers rather than to corporate clients, companies, or other banks ". The retail banking industry serves individuals who want to manage their money, acquire credit, and deposit monies in a safe and secure environment. Retail banks provide services such as checking and savings accounts, credit card, debit card as well as mortgages (Majaski, 2021). Electronic channels are namely automated teller machine (ATM), unstructured supplementary service machine (USSD), internet banking, mobile application and chat banking.(Carranza et al., 2021)

According to Coetzee et al. (2013), many organizations are realising the importance of addressing client needs and expectations to improve service quality. Changing the narrative towards clients is driving banks to focus on building tailor made client-solutions(Coetzee et al., 2013).

In South Africa, most incumbent banks allow customers to obtain financial services through the following digital platforms. (i) ATM banking; (ii) cellphone banking (typically using USSD channels for older devices); (iii) mobile banking (via apps on smartphones and tablets); and (iv) internet banking Some banks are pursuing new channels, such as banking via social media platforms (Goga, 2017). Despite other societal and regulatory problems, banks recognize the relevance of digital advances and are actively working on potential solutions and strategies. Many (digital) innovations can be felt primarily at the client interface.(Jenkin & Naude, 2019)Chat banking is a secure banking channel/service to process easy and quick banking transactions using chat

apps like WeChat, WhatsApp and Facebook Messenger (Fiaschi, 2020). The convenience of chat banking is that clients can perform core banking services without leaving their favourite chat app. They can get account information like card limit and loan approval, perform balance enquiry, transfer funds, obtain information on home loans, personal loans and other financial products.

Messaging has surpassed social media in popularity, WhatsApp reports that users 65 million messages per day (Garg, 2018).

It is argued in this study that the dearth of literature on chat banking could imply that as an emerging subject, it is yet to attract much scholarly attention.

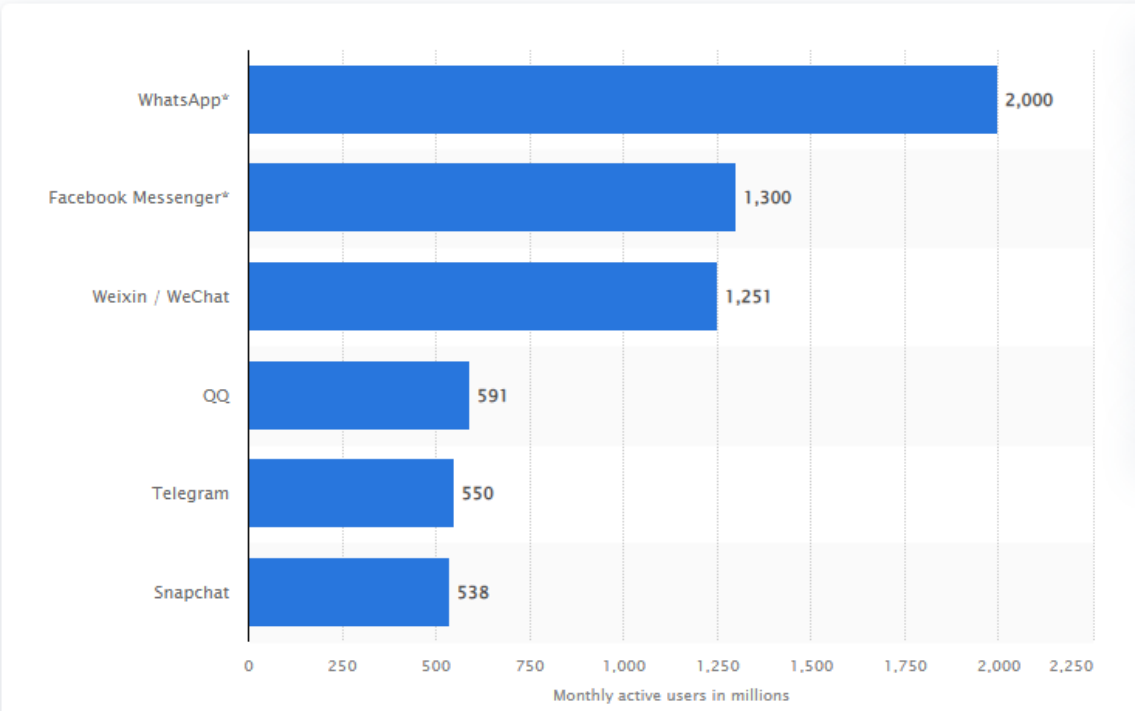
1.2 Research conceptualisation

1.2.1 The research problem statement

Banks in South Africa struggle to reach expected adoption levels of implemented innovative digital solutions. Banks therefore do not realise return on investment as many digital platforms remain optimized. It is mentioned that there is about 66% of the banked population have online banking profiles and only 23% use digital banking(Jenkin & Naude, 2019). This means clients still use 'other' channels for banking, which impacts the drive of banking digital footprint and cost-saving of less branches. Clients are not comfortable or easily persuaded when it comes to newly introduced channels.

A lot of literature covers client behaviour towards internet banking and mobile application and not on chat banking. There is minimal literature describing chat banking and not much insight on how this channel can impact clients and the bank.

Chat banking is a convenient and efficient way to conduct banking transactions. Chat apps are available are the world and easily transfer information (Infobip, 2019). Below is the subscribers of the chat apps world wide (Statista Research Department, 2022).



This paper unpacks what Chat Banking is, how it impacts clients and why there is slow adoption specifically for this channel.

1.2.2 The research purpose statement

The aim of this research is to analyse the different factors impacting the slow adoption rate of chat banking within South Africa. It is to understand the consumer behaviour and discover underlying reasons to why clients are not adapting to chat banking and evaluating if the newly built solutions meet client expectations.

1.2.3 The research questions

How can banks in South Africa improve adoption rate of chat banking by their retail clients?

- What are the available online banking channels available to retail clients in South Africa?
- What perception do retail banking clients have of chat banking?
- What is the impact of transaction activity to use of Chat banking?

1.3 Delimitations and assumptions

Delimitations

- Sample will be based retail clients in Johannesburg
- Focus will be on retail banking clients only

Assumptions

- Retail banking consumers are also referred to as clients and customers
- Culture- Culture displays banking services as a formal act, and retail clients feel more comfortable using banking apps for banking
- Consumer behaviours are also impacted by the experience or attitudes suffered by South African consumers in this sector.

- Electronic channel refers to ATM, internet banking, mobile banking, USSD and electronic wallet
- Online security is easily compromised which makes it a bit uneasy for a consumer to conduct all banking activities online, especially chat banking
- Alternative channels- Most retail clients are multi banked and have too many alternative options to conduct transactions.

1.4 Significance of research study

This study evaluates what are the causes on low to no adoption to on new digital channels and focus is on chat banking. This evaluation is done from a consumer perspective to understand their needs are met. However, while the rapid development in digitization in the banking industry is essential, the rate at which its client base (and access to the unbanked) may have an impact on the rate of growth must also be taken into consideration A reliable and consistent system will be required to overcome issues such as poor reception, expensive data charges, and technical illiteracy that will prevent more people from taking advantage of the technology. (Jenkin & Naude, 2019)

1.5 Clarification of terms

ATM- Automated teller machine

USSD- Unstructured Supplementary Service Data

Electronic channels- Any telecommunication or electronic transmission method which may be used in connection with the service for example ATM, USSD, Mobile app, internet banking and chat banking.

Digital Channels- the communications path and platforms that promote, market, or sell products and Services for example ATM, USSD, Mobile app, internet banking and chat banking.

FinTech- Financial Technology

LITERATURE REVIEW

The banking sector and digital transformation

Traditional banking relied heavily on scale and infrastructure build-out including brick and mortar branch infrastructure and ATM machines, which required a lot of capital (Goga, 2017).

The banking industry has matured and invested on different ways to service clients, most incumbent banks in South Africa allow customers to access financial services using the following digital channels (i) ATM banking (ii) cellphone banking (usually using USSD channels, for older generation devices) (iii) Mobile banking (through apps on smartphones and tablets) and (iv) internet banking. Some banks are experimenting further with channels such as banking through social media platforms(Goga, 2017).

The growth of digitisation is evident and impacting different industry, Jenkin & Naude (2019) highlights the maturity of African digitization and how it is implemented South Africa, Kenya, Nigeria, and Ethiopia are the countries with the greatest potential to achieve digital maturity, with South Africa being the most advanced. As can be seen, the South African banking system has embraced and implemented digital technology such as blockchain, digital wallets, cryptocurrencies, the internet, and mobile banking - all of which are widely used in other areas of the world - into their operations. Furthermore while banks are embracing digital transformation and working towards implementing viable solutions, traditional banks are being more disrupted and challenged by the emergence of Fintech start-ups, leading in a more competitive and intense digital transformation (Jenkin & Naude, 2019).

The introduction of the Internet triggered a new information technology-based revolution in the financial services sector, which has had an impact on the way banking services are delivered (Hanafizadeh et al., 2014).

Fintech stands for financial technology and is advanced technology firms that transform the provision of financial services.

South Africa has a tiny but rapidly expanding Fintech business, which offers both significant benefits and significant concerns. For this, regulators in South Africa require a thorough awareness of the Fintech ecosystem in order to manage risks in a way that does not hinder innovative thinking. These small companies specialise in certain financial services namely; Payments, Lending, Saving and deposits, Investment, Insuretech, Financial Planning, B2B tech providers and capital raising (National Treasury, 2019).

The below Figure displays the different Fintech segments operating in South Africa and the largest segment is payments.

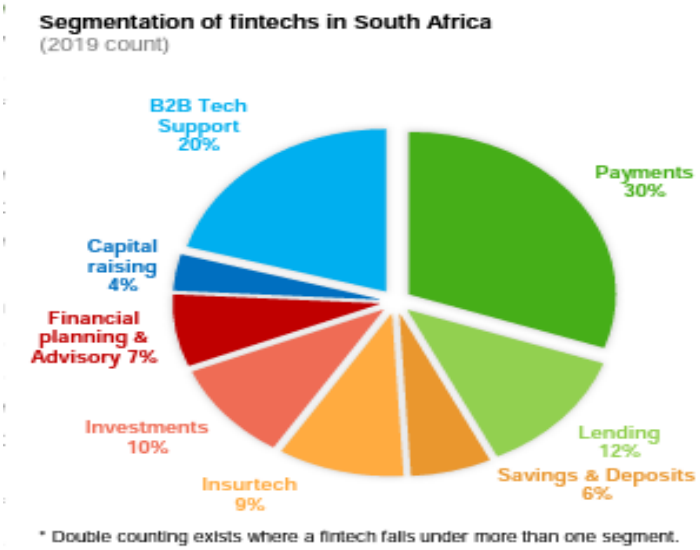


Figure 2.1: Segmentation of Fintechs in South Africa (Jenkin & Naude, 2019)

Social Media

Advancement of digital availability have eliminated the previously significant barrier to communication that was geographical distance. People use the internet on a daily basis, and that they are increasingly using the World Wide Web to contact with others through chats, messengers, and emails (Udenze et al., 2020). Social media is utilized by millions of people all over the world. It is a web-based service that has evolved beyond the ability to connect, network, or blog, and now includes many other features (Kuchciak, 2013). It is reported that about 2.4 billion people utilise smartphones and WhatsApp has 850 million active users monthly. Facebook Messenger has about 689 million users and WeChat 559 million subscribers (Udenze et al., 2020). This displays

those individuals constantly have handsets on their phones and are subscribed to at least one messenger app. The rapid growth of instant mobile messengers can be accompanying factors can be attributed to the enormous expansion of instant mobile messengers. Smartphones are gaining popularity due to their ability to connect to the Internet quickly and at affordable costs (Udenze et al., 2020).

The advent of information and communication technology which allows for easy access to information in a convenient form, social media and social network services such as Facebook, Twitter, WhatsApp enable easier accessibility and retrieval of information from anywhere and at any time (Mefolere, 2016).

This creates an opportunity for banks to build relationships with customers on a platform they are familiar to. Kuchciak (2013), highlights that customers build relationships on social media rather than to buy products or services.

WhatsApp is the most widely used social networking platform in South Africa. As of the third quarter of 2020, around 93 percent of the country's internet users were using the messaging app. YouTube and Facebook were close behind, with 92 percent and 87 percent penetration rates, respectively(Varrella, 2021).

Social media is a great way for businesses to get their name out there and connect with customers. It also allows businesses and customers to come up with new and real ways to connect, and it has a lot of potential for businesses, including financial institutions. Furthermore, social media is said to be a cheap and easy way to communicate with a lot of people in a short amount of time.(Okkie, 2019).

Customers are the most essential stakeholders for financial institutions. Given that social media has such a significant impact on today's business environment, E-banking management must develop strategies to make profitable use of social media apps such as Facebook, Twitter, Google+, YouTube, and others (Dănăiaţă et al., 2015).

Digital Banking

Certainly, there is a dire need to positively influence customers about the usability of modern banking channels and persuade them to migrate to digital channels (Kaur et al., 2021)

Vyas (2012), emphasizes the e-banking is simply banking delivered through a new channel. It just provides clients with an additional service.

Digital banking refers to a variety of financial services that can be accessed and delivered using digital channels such as computers, mobile phones, the Internet, or cards linked to a secure digital payment system. (Ukoh, 2019).

(Chukwu & Molokwu, 2022), Additionally, digital banking is a broad phrase that refers to the online delivery of all standard banking activities and services that were previously only available in person at a bank branch.

Many payment technologies make use of the internet, smartphones, and unstructured supplementary service device (USSD) platforms to make electronic payments faster and more convenient while consuming lower bandwidth (Centre Of Excelence Financial Services, 2015). The era of digital payments did not come to an end with POS, mobile, ATM, or Internet banking. Additionally, it infects banking via unstructured supplemental service data (USSD) and quick response (QR). USSD banking enabled bank customers without access to the internet to make and receive payments using their phones via codes.(Chukwu & Molokwu, 2022). Alternatives that are less expensive and more convenient have become increasingly popular in locations with a low uptake of banking products and a limited financial infrastructure (Centre Of Excelence Financial Services, 2015). The extent to which established items are embraced also has an effect on the adoption of new products and services. Alternatives such as mobile money have exploded in popularity in regions with a low penetration of banking products and a restricted financial infrastructure(Agwanyanjaba, 2018).

The ATM is another method of electronic banking. Customers can access banking services without the use of a debit or credit card by using an ATM, which is described

as an automated telecommunications equipment that provides 24-hour access, seven-day availability(Nazaritehrani & Mashali, 2020).

As the mobile industry has grown tremendously over the world, so has the availability of financial services via mobile phones. Apps for mobile banking (m-banking) have become more popular since they were first introduced to the banking industry. It is the latest in a long line of new mobile technology marvels, including mobile banking (Esmaeili et al., 2021). Money transfers, bill payments, and financial management are all available to clients at any time and from any location.(Esmaeili et al., 2021).

Mobile banking is a service given by financial institutions that allows clients to benefit by doing banking operations such as transferring funds, saving money, and paying bills using their mobile phone devices. There are numerous advantages to using mobile banking. For example, because of these types of practical and cost-effective services, the problem of inaccessibility to physical branches has evaporated. As a result, the majority of people have access to financial services (Nazaritehrani & Mashali, 2020).

Banking over the internet The term "internet banking" refers to the process of acquiring banking services via the internet. It offers a plethora of possible benefits as a result of the technology's approachable and user-friendly implementation. It facilitates banking transactions over the internet through the use of websites. Using an internet connection, customers can access the bank's information system from anywhere in the world (Nazaritehrani & Mashali, 2020).

Online banking is defined as the practice of customers performing financial transactions via the internet via a bank's website. (Hamakhan, 2019)

As a result of electronic banking (e-banking) services, banks have been able to cut transaction costs while providing 24-hour services and increasing overall efficiency in the banking process. (Esmaeili et al., 2021).

Chat banking

The goal of chat banking is to save customers time and give them information in the most convenient way, for some downloading an app isn't sufficient due to space, data.(Fiaschi, 2020). It is efficient for clients as while they are chatting they can go to another contact and start banking transactions. Client can contact agents or chatbots over one channel and history of the conversation is saved and can be referred to it later (Fiaschi, 2020). Chat banking provides a new channel for reaching and retaining mobile-first customers (Van Rensburg, 2021). Benefits of Chat banking is it can be accessed anywhere in the world unlike mobile app. It works on any device and just needs is very light on bandwidth (Wizzit International, 2019).

Through WhatsApp and Facebook Messenger, the bank offers chat banking. Customers start a chat interaction by using their favourite app. Customers are guided through standard banking actions using automated menus, which include paying bills, moving funds, locating branches, and viewing a full or small statement (Van Rensburg, 2021).

Chat banking provides simplicity and security within the familiar atmosphere of a preferred chat program, which the majority of consumers now use. While the majority of contacts are automated, users can also engage in live chat with a contact center employee (Van Rensburg, 2021).

Chat Banking: The Global context

Chat banking has been used for in-depth support in Europe such as loan pre-approval notification in addition to using mobile apps for fund transfers and account balance (Fiaschi, 2020). WeChat in Wechat is the mostl used application for social media and an increase in banking by students using the application has been seen, influence was largely due to Covid-19 pandemic(Dr. A. W. V Athukorala, 2021). In China WeChat Wallet is mostly used for online purchases and payments.(Anwar et al., 2021)

The US banks have introduced chat functionality (Fiaschi, 2020). The US mostly use chat banking for customer service functionality

As Pakistan is a developing country people are less experienced in online shopping, buying ticketing, and sending money. But the main thing is that currently Pakistani nations have experienced sending money through Mobile Payment Systems (MPS) to other people but don't buy anything from shops by bar code or by another online method. Some classes of Pakistan can have been adopting to WeChat Wallet. .(Anwar et al., 2021)

Fiaschi (2020), the use of chat banking for in-depth help, such as loan pre-approval alerts and the use of mobile banking apps for cash transfers and account balance inquiries have become more popular in Europe, according to the article.

Whatsapp banking is growing to be one of the most important ways to contact clients in Brazil and customers are responding well (Llanos-Small, 2020).

Clients of Blanco Bradesco used Whatsapp to consults with the bank and there was about 88.5 million enquires in 2020, and 3.5million clients have interacted with the bank on WhatsApp (Llanos-Small, 2020).

UAE, Emirates NBD has launched WhatsApp Banking services comparable to Absa's, and Icici Bank of India has stated that they're doing the same. Icici's business is expected to leverage on the fact that over 400 million Indians already use the app(Koun, 2020).

Chat Banking: The African context

There are approximately 185 million unique mobile customers in West Africa alone, with the fast-growing consumer market driving future growth. This small market is more likely to use data-centric, non-core communications services like online gaming and video streaming than voice (MyRaid Connect, 2019).

Africa is the market leader in WhatsApp banking for a variety of reasons. Historically, the continent lacked formal banking services, resulting in a higher rate of financial exclusion. According to the World Bank, 66% of African adults do not have bank accounts(Koun, 2020).

Mobile broadband connection in Africa is set to grow by nearly 50% by year 2025,meaning the increasing chat banking usage is being paved.(Infobip, 2019)

United Bank Africa of Nigeria, which features an artificial intelligence chatbot called "Leo" that communicates with customers via Facebook Messenger (Koun, 2020).

The combination of a banking chatbot and the WhatsApp Business API, first introduced by South Africa's Absa Group in 2018, is referred to as "WhatsApp Banking."(Koun, 2020)

Chat Banking on WhatsApp is available in six distinct South African languages and may be accessed through keyboard or voice (Chetty, 2018).

The future chat banking relies on services that can help banks authenticate their chat contact similar how PINs are used to authenticate mobile app users (Infobip, 2019). In all digital channels security is an important aspect and is continuously improved.

Client Trust

In banking trust is often dependent on risk (Gundlach and Cannon, 2010; Kantsberger and Kunz, 2010; Zhao et al., 2010). Kantsberger and Kunz (2010) imply that loss of confidence is caused by events in the environment that cannot be altered by banks or consumers, and that some of these incidents are caused by bank behavior and activities. According to their results, a bank may lack the necessary capacities or quality for the consumer, or it may have selfish reasons or motivations for not acting optimally in the consumer's best interests. Kumra and Mittal (2004) have said if customers feel confident and secure that the company will take care of them. This is what trust in the banking sector is all about, according to the people who have talked about it. Chat banking provides simplicity and security within the familiar atmosphere of a preferred chat program, to gain client trust (Rasconi et al., 2020).

Digital adoption and consumer behaviour

Banks and financial institutions are rapidly adopting digital technology and have made significant investments in transaction migration, as well as enhanced web and mobile technologies (Broeders & Khanna, 2015).

As the market becomes more exposed to disruptive digital services, it is attempting to shift customer preferences away from traditional banking and toward digitalization (Joshi et al., 2019). There are still many customers who are still drawn to traditional banking, and there are customers who are satisfied with the old electronic channels. Hoong (2013), highlights that companies have competed for supremacy by developing channel or product-specific support models. However, in the eyes of the client, it is a single company, and as a result, the customer experience diminishes. Introducing too many channels to a client by one organisation tends to make clients uneasy or confused.

Research also has displayed that majority of South Africa's retail consumers earn a low income, which is also a factor that hinders the digital and Fintech uptake(Centre Of Excelence Financial Services, 2015).Furthermore the rapid expansion of information and communication technologies has had a tremendous impact on all areas of human life (Wang et al., 2020). Adoption of new technology and systems is frequently linked to an employee's expertise, experience, and personality (Stankovska et al., 2016). Compared to expectations, the consumer industry in South Africa has risen at a slower rate. In addition to volatile economic conditions and a loss of client confidence, deteriorating infrastructure and higher supply chain costs are variables to consider. Moreover, customers' expectations are higher in an increasingly digital and connected environment, and they are better able to quickly identify better and more cost-effective things (Accenture, 2020). Though an estimated 60% of South Africa's population has smartphones, there are still glaring issues like high data costs, poor reception and technical literacy play a huge role in the low uptake. 66% of the banked population have online accounts and sadly only 23 % are active (Jenkin & Naude, 2019).

In addition, it is important to note that by implementing digital technologies, businesses in the consumer industry can address many of the challenges they are currently facing, including expanding their businesses by entering new markets, improving the efficiency of their operations, and increasing their competitiveness (Accenture, 2020). Because of the emergence of Fintech startups, which further disrupt and threaten traditional banks, a competitive and intensified digital transformation is the result (Jenkin & Naude, 2019),

It has been highlighted that adoption of new technology and systems is frequently linked to an employee's expertise, experience, and personality (Stankovska et al., 2016). This displays that employee contribute to influencing clients to use new technology.

To elaborate on the foregoing, Accenture (2020) stated that businesses in the consumer industry can address many of the challenges they face by adopting digital technologies, growing their businesses by entering new markets, and improving the efficiency and competitiveness of their operations and value chain. Furthermore it is highlighted by (Jenkin & Naude, 2019) that poor reception, high data costs and technical illiteracy will hinder the drive of increasing adoption, meaning there is a lot of room for growth. Rapid development of information and communication technologies has had a tremendous impact on all areas of human life (Wang et al., 2020). Clients are truly exhausted. There is a growth impediment for mobile channels. That is the sensation of being overwhelmed by an excessive number of apps. Consumers may be averse to downloading or learning how to use your app, yet many individuals experiencing app fatigue actually prefer well-designed mobile experiences over other digital channels (Van Rensburg, 2021).

Customers' attitudes regarding technology are among the elements that influence their willingness to accept and use online banking products and services. By analysing the expectations and desires of customers, as well as their reasons for adopting new technologies, banks can develop strategies to increase the uptake of new technologies. (Hanafizadeh et al., 2014).

People can use their phones to search for products of interest, compare prices, get offers from retailers, negotiate discounts, pay for goods, and track the delivery of goods. Businesses and banks are changing because of digital technology, which is making it easier for people to do business as well as easier for people to get money (Marous, 2019).

Gap in the Literature

Chat Banking in South Africa does not have many scholarly reviews, one of the biggest gaps online is interpreting the impact chat banking brings to the South African economy and industry.
Chat banking literature still does not position the channel in order to understand who the target is and how it is different from other channels and why there is a need for it.

Theoretical Frameworks: Technology Adoption

Technology acceptance theories and models have been established to provide a framework for investigating how users comprehend and accept new technologies, how they may choose to use them, and what the consequences of continuing to use them may be. Certain factors, such as utility, ease of use, complexity, and social influence, can influence a user's decision to use or avoid a technology (Momani, 2020)

The study adopted the Technology Acceptance Model (TAM) as the underpinning framework. However, the study recognises other diverse technology adoption frameworks as explained in the following sub-sections.

Unified Theory of Acceptance and Use of Technology 2

UTAUT aids in explaining users' intentions to use information systems and has four constructs: performance expectancy, which is the level of ease with which the system is perceived by the user, effort expectancy, which is how the user perceives ease in using the system, social influence, which is how the user perceives them as more important than other systems, and facilitating conditions, which is when the user believes that the infrastructures as well as the behavior against the system exist to aid in the use of the system. The user's impression of their likely to engage in a particular behavior is referred to as behavior intention (Venkatesh et al., 2012).

Rogers Diffusion of Innovation Model

It is a process by which innovation is transmitted from the source of discovery or production to the user or adaptor, and it occurs communally throughout society. According to Rogers' theory, the transmission of an idea, a behaviour, or an item

consists of four components: It must satisfy the following criteria: a) it must be classified as an invention; b) it must be disseminated via certain channels; c) it must be adopted by members of a social system; and d) it must take length or the time component into account (Roger, 2003).

Technology Acceptance Model (TAM)

ICT adoption and spread have been extensively examined in recent years by scholars in the field of information systems. It can be examined on two levels: organizational and individual (Masrom & Teknologi, 2007).

TAM is an intention-based model developed specifically for explaining and/or predicting user acceptance of computer technology(Hu et al., 1999) cited by (Masrom & Teknologi, 2007). This model will assist the study in highlighting whether clients have adapted to digital channels and more specifically chat banking.

This model was used in order to conduct the research.

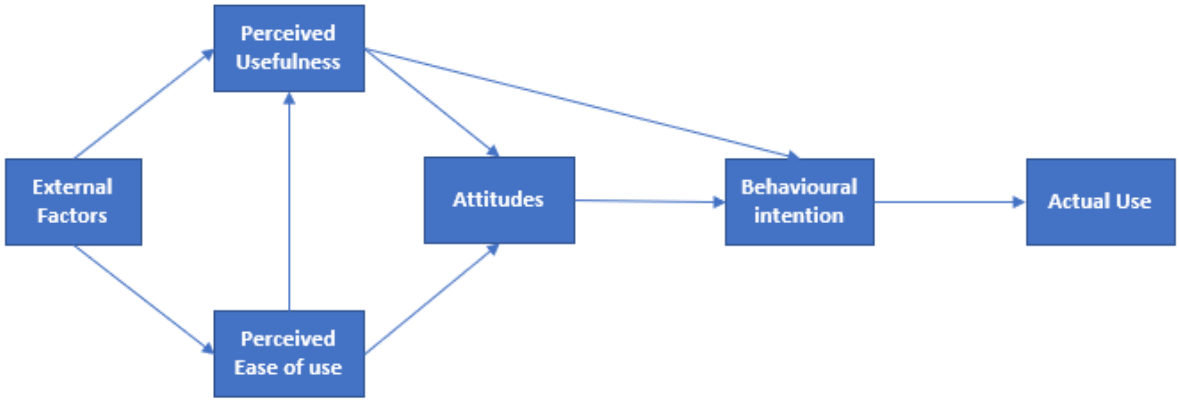


Figure 2.2: Technology Acceptance Model (Hu et al., 1999) cited by (Masrom & Teknologi, 2007)

TAM is considered the most robust and influential model in describing acceptance of information technology by users and is limited to the fact that the model assumes usage on ones will, that is there are no barriers that would prevent an individual from choosing an application (Masrom & Teknologi, 2007).

On the one hand, perceived ease of use is how easy a person thinks it is to use a certain system both physically and mentally. On the other hand, perceived utility is how much people think that using a system will help them do better at their jobs.(Carranza et al., 2021)

Masrom & Teknologi (2007), Perceived usefulness refers to how much the user believes that using the technology will assist in her/his performance, while perceived ease of us refers to technology how effortless he/she perceives using the application will be and both impact user's attitude towards using the technology.

This study has been informed by TAM and the following TAM concepts have been adopted:

- Perceived Usefulness of Chat banking
- Perceived Ease of use of Chat Banking
- Behavioural intentions towards chat banking
- Actual use of Chat Banking

The following Conceptual Framework has been developed to guide the study. The Conceptual Framework consists of the above TAM concepts, and they have been applied to Chat Banking. This model guided the development of the research instrument, which in this case is made up of survey questions completed by respondents. As shown in Appendix B, the survey questions were grouped into the concepts as depicted by the Chat Banking Conceptual Model.

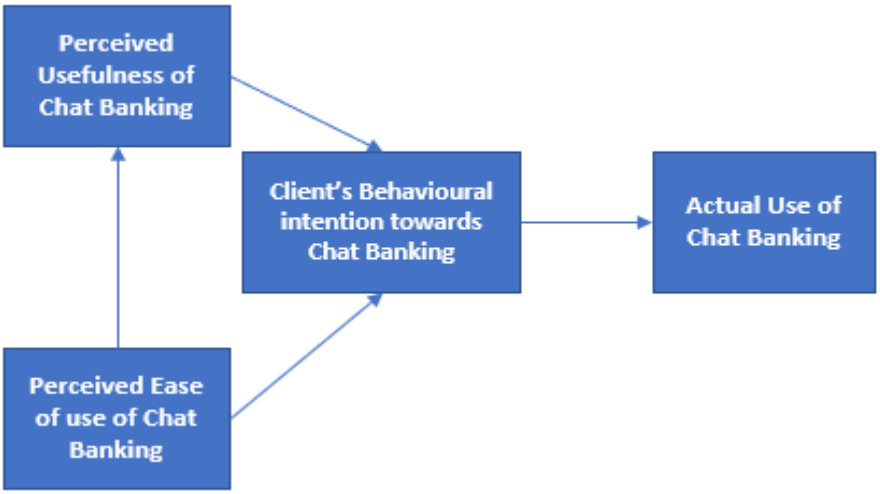


Figure 2.3: Chat Banking Conceptual Diagram

RESEARCH METHODOLOGY

This section analyses and summarizes the research methods used to accomplish the research objective. The chapter discusses the research population, the tools and processes used to gather data, the method of data analysis, the validity and dependability of the data, and concludes with ethical considerations.

Research strategy and design

The research strategy refers to a systematic method in which data is gathered, analysed and interpreted in a variety of ways of to understand a dimension of relationships, variables or to investigate phenomenon (Mackenzie & Knipe, 2006). Black (2006), states that the interpretivist paradigm is a subjective paradigm. In this paradigm the researcher must make detailed interpretations of data as it can have different meanings depending on people's observations and beliefs.

In this paper the research design is a descriptive method and aims to describe the current status of the problem and objective by providing answers to the questions what, when, how and where.

There is a quantitative and qualitative approach, and each have different ways of quantifying research. This research will be conducted using quantitative research methods to analyse further the uptake of chat banking. Quantitative research is defined as a distinct research approach that involves the collection of numerical data, views the relationship between theory and research as deductive, leans toward more a natural science approach in general (and positivism in particular), and holds an objectivist view of social reality. The term "quantitative research" does not mean that the measurement of components of social life is the only thing that sets it apart from a qualitative research technique(Bryman et al., 2014).

Quantitative research methods generally starts as being qualitative collecting data like age, numbers and gender and becomes more structured associated with as the data collection techniques becomes focused (Saunders, M, Lewis, P & Thornhill, 2016). Quantitative is more suitable for the objective of this paper.

Bryman et al.(2014), explains that quantitative researchers are more concerned with quantification in their data gathering and analysis, qualitative researchers prefer induction, informed by constructionism and interpretive, but qualitative researchers do not always agree to all these perspectives.

Research design is a plan specifically to answer the research questions and the objective. The research design is divided into five generic strategies: longitudinal, comparative, cross-sectional, case study, and experimental, each with its own set of characteristics to meet the research topic (Bryman et al., 2014). This method basically provides a natural view of the research questions as there is no influence for the researcher.

Broadhurst et al., (2012), explains that the descriptive research method is one that is used to gather information on the research subject and his or her behaviour during a specified period. Meanwhile, a quantitative descriptive method is one that displays facts or figures in a format that enables readers to understand and grasp the meaning of the data or numbers exhibited more effectively.

Based on the literature analysis, it was decided that the research would be cross-sectional for this study due to the time constraints. In research that uses a survey

design or a questionnaire type method at a single point in time, a cross-sectional research design is used as it gives an unbiased view.

Research Procedure and methods

Data Collection

There are different instruments used to collect data, for this paper the this will be done using questionnaires.

Questionnaires are a type of data collection research in which respondents answer to a standard series of questions. It is most usually applied in descriptive and explanatory research (Saunders, M, Lewis, P & Thornhill, 2016).

The method has been criticized in terms of being solely relied upon. It is advised that it should be combined with another method in order to increase the effectiveness of the data collection process. Saunders et al (2016), advise researchers to be thorough of their resources, particularly time available for data collection, the availability of fieldworkers and interviewees, and an online survey tool. Questionnaire was deemed suitable based on the time constraints of this research project and the availability of multiple online survey tools at one's disposal. Questionnaire was distributed via Qualtrics to the public.

Target Market and Sample Selection

The target market is a group of individuals, events or objects with some common observable characteristics (Saunders et al. 2016). The target market is retail banking clients with an active bank account and online profile in the Gauteng region. Market can be segmented as per the population in subsets, which gives a better focus.

Snowball sampling is a popular nonprobability survey sample selection approach that is frequently used to find hidden populations. This strategy is based on referrals from initially sampled respondents to other people who are thought to exhibit the desired feature. Non-random selection techniques, connections between network size and

selection probability, reliance on subjective evaluations of informants, and worries about confidentiality are all limitations of this strategy. Cost and efficiency are two advantages (Johnson, 2014).

Sample selection was done using snowball selection of 500 retail banking clients with online profiles and active accounts. Survey was distributed to people the researcher knows via whatsapp and was also share on whatsapp status and whatsapp groups. Friends and family of the researcher then distributed the survey to their circles and also share it on their statuses.

Survey was also distributed on Linkedin, Instagram post and Facebook and shared on the groups (i.e. business groups, community groups, career groups) the researcher is affiliated to on Facebook, this assisted in managing to distribute to 500 respondents. The decision to use snowballing is based on not having much access on the banking community, but through referral to others network we can reach 500 participants. 341 respondents completed the survey.

Quantitative research is more likely to use probability sampling procedures to ensure some degree of generalizability than qualitative research, which is more likely to use non-probability sampling (Saunders et al, 2016). Probability sampling is frequently associated with questionnaires and survey strategies, and it entails the process of defining the sample frame in relation to the research questions, determining the sample size that is appropriate, selecting appropriate techniques, and finally assessing the sample for representativeness(Saunders et al, 2016).

Reliability

Specifically, according to Saunders et al (2016), the reliability of a research instrument is defined as the degree to which a research instrument produces consistent outcomes or data after repeated trials. Other researchers should replicate these findings while undertaking similar study with the same measuring equipment and under the same settings. It is hard to confirm the reliability of a research study to a hundred percent; however, the reliability of a study can be estimated using approximations. The study's reliability was determined using a survey using the complete enumeration approach. Thus, reliability was determined by the consistency of the respondents' responses. The responses were consistent across the majority of the questionnaire parts, and the

researcher concludes that the study is reliable as a result of those findings. It is usually expected that if other researchers used the same measuring technique under the same conditions, they would acquire the same results.

Validity

According to Kothari (2004),validity refers to a measuring instrument's capacity to accurately measure what it was designed to measure. (Angen (2000), contends that because quantitative approaches follow strictly to methodological standards and guidelines, their validity can be accepted, whereas qualitative approaches produce diverse findings.

The quantitative technique is deemed too subjective by the experimental procedures used to assess validity. This is one of the reasons the researcher adopted a quantitative technique in order to assure the study's validity.

The data for this study were gathered using a comprehensive enumeration survey method. The frequency of responses was utilized to determine the validity of the responses. The research findings were derived from the number of times each question was asked.

Data analyses

The data was analysed using the quantitative data analyses and was collected using an online survey. Survey was sent to 500 respondents and received participation of 341 respondents. The data was analysed using SPSS (Statistical Package for the Social Sciences) a Windows-based tool that may be used to enter and analyse data as well as create tables and graphs. SPSS can handle massive volumes of data. SPSS is widely used in the social sciences and industry, thus being familiar with it will benefit you in the future(Sawyers & Sawyers, 2016).

As quantitative methodology employs numerical data to measure social trends, selecting the appropriate methodologies allows social scientists to accurately analyse the study's findings. In the social sciences, quantitative data analysis provides an additional tool for examining the environment. It allows researchers to quantify, analyse, and comprehend social reality (Puteh & Azman Ong, 2017).

SPSS is sufficient if you can limit complex data administration and will not do cutting-edge statistical analysis. SPSS provides evident advantages if you only use statistical software once or twice each month because it is so similar to Excel.(Sawyers & Sawyers, 2016).

SPSS is mostly used in the academic research and is sold as a set of modules, and if your university can't afford the whole set, you won't have access to some important features. There is a Base module, SPSS Advanced Models, SPSS Regression Models, SPSS Tables, SPSS Missing Value Analysis, Sample Power, SPSS Complex Sample Module, and more than a dozen others (Sawyers & Sawyers, 2016).

Ethical Considerations when collecting Research Data

Codes of Ethical Conduct serve an important regulatory function of ensuring that the conduct of researchers adhere to set standards. As part of the implementation of Codes of Ethical Conduct, research institutions perform an oversight function by providing clearance to all research projects conducted under their auspices. To this effect, an ethical clearance certificate from the WBS Ethics committee will be obtained prior to data collection. This will require ethical issues related to the following principles to be clarified.

Informed consent

Participants who give informed consent are completely aware of the research's purpose. A covering letter with research details will be issued to participants to ensure that they are aware about the study. This will include information such as why the study is being conducted, how participants were chosen, what they require, the length of the questionnaire, any potential harm, whether their anonymity and confidentiality will be protected, what happens to their data and report, and how they will be informed of the results.

Right of privacy

Right to privacy implies that all respondents will have the right to protect their names and other personal details, as well as their responses. No identifying data such as

participants' names and identity numbers will be required, this is also to align with the POPI act. Given the nature of quantitative study, the data will be reported in aggregate terms and individual responses will not be provided. The research report will be communicated in a manner that maintains their anonymity. When collecting personal information of SA citizens (for example through interviews, or surveys that collect identifiers such as names, contact information, etc.), ensure compliance with the POPI Act.

CHAPTER FOUR

PRESENTATION OF RESEARCH RESULTS

4.1 Introduction

This chapter presents the results of the research which are aimed answering the research questions as identified in Chapter 1.

The main research question will be answered by the sub-questions below.

The first sub-question analyses on the various digital channels and test for an equal distribution between these channels through the use of a Chi-Square goodness of fitness test. Descriptive analyses are also used to further analyse and emphasize the results.

The second sub-question is analysed using simple descriptive analysis. The third sub-question analyses the impact that Transaction Activity on Chat Banking Use through the use of simple linear regression analysis.

4.2 Results Overview

The survey was completed by 342 respondents 42.55% are between 25-34 years old and 41.03% are between 35-44 years old. The results indicate that 298 of the respondents reside in the suburb.

77% of the respondents go online and do instant messaging. 291 of the respondents use digital channels which indicates that they are comfortable with conducting digital banking. The results also revealed that 159 know about chat banking and also displays that that only 57 respondents use Chat banking.

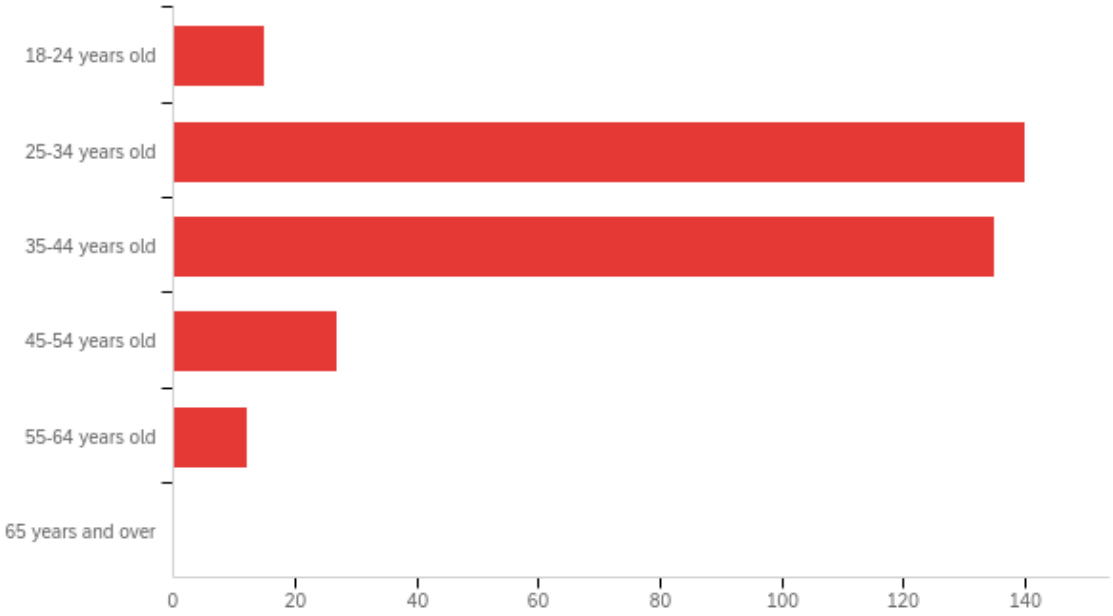


Figure 3.1: What is your age

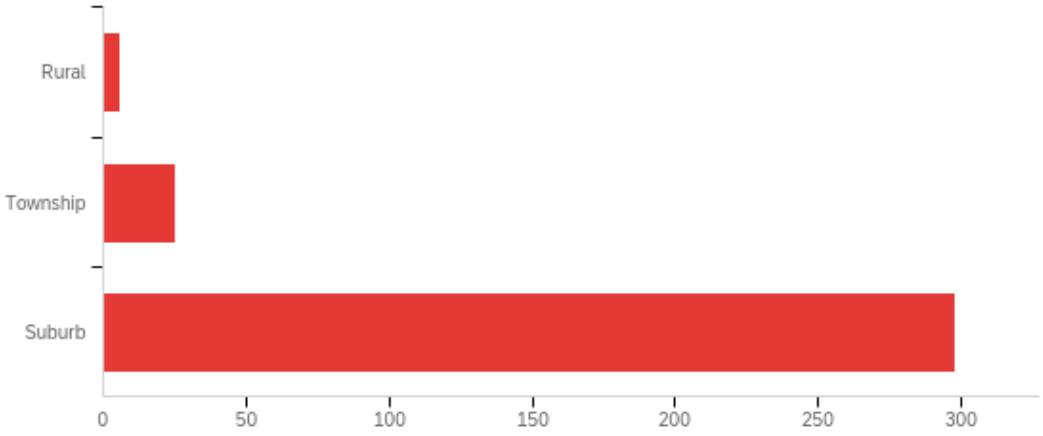


Figure 3.2: Where do you reside

4.3 Analysing the representatives of digital banking channels.

This section evaluated the frequencies of digital banking channels and if it is a true reflection of the population regarding the context of the study. The analysis is to evaluate if digital banking channels is equal across all categories. The results are as follows:

Which application do you use to do digital transactions?

	N	%
Mobile App	250	74.0%
USSD	3	0.9%
Chat Banking	2	0.6%
Internet Banking	35	10.4%
Missing System	48	14.2%
Total	338	100%

Table 1: Which application do you use to do digital transactions

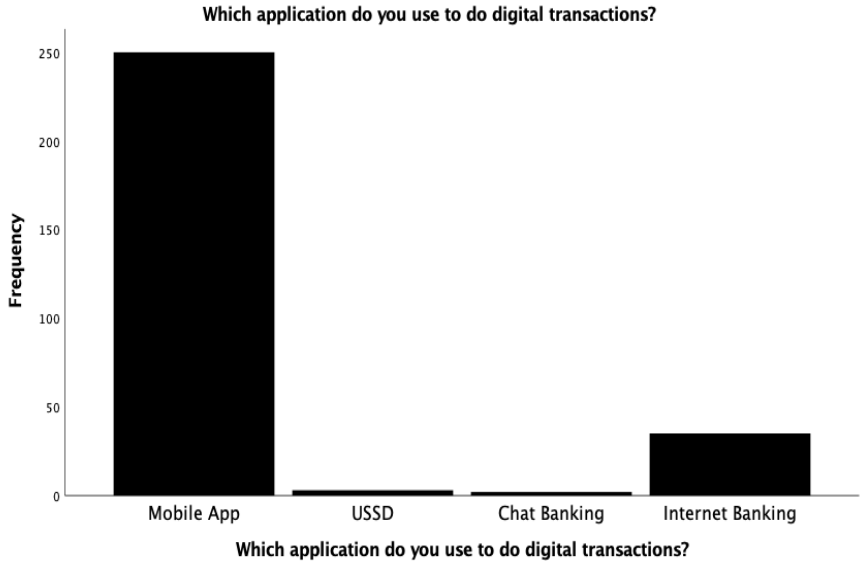


Figure 3.3: Which application do you use to do digital transactions

The table above indicates that the Mobile app category was the is dominant (250). The chat banking category showed the least number of responses. It is therefore expected that the observed values to be very different from the expected values.

4.3.1 Chi -Squared Goodness of fit test concerning Digital Banking Channels

Which application do you use to do digital transactions?

	Observed N	Expected N	Residual
Mobile App	250	72.5	177.5
USSD	3	72.5	-69.5
Chat Banking	2	72.5	-70.5
Internet Banking	35	72.5	-37.5
Total	290		

Table 2: Which application do you use to do digital transactions

The Chi-square test of homogeneity is used to detect whether or not two or more independent samples differ in their distributions on a single variable. This test is commonly used to compare two or more groups or conditions on a categorical outcome(Nihan, 2020). For the Chi Squared goodness of fit test, All values are vastly different from the expected values. The differences are shown in the Residual column.

Test Statistics

	Which application do you use to do digital transactions?
Chi-Square	589.145[a]
df	3
Asymp. Sig.	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 72.5.

Table 3: Chi- Squared Goodness Test- Which application do you use to do digital transactions

The Table above shows the results from Chi-Squared Goodness of Fit test. A statistically significant result ($\chi^2(3)=589.145$, $p<.01$)> was obtained. It is based on this that all categories within digital channels category are not distributed equally,

4.3.1 *Further analysis of available digital channels*

The table below depicts that 86.25% of respondents use mobile application rather than other channels. Only 0.69% of clients use chat banking, this clearly shows that they are more comfortable with using traditional digital channels. Most of the clients (77%) process payments on digital channels.

#	Answer	%	Count
1	Mobile App	86.25%	251
2	USSD	1.03%	3
3	Chat Banking	0.69%	2
4	Internet Banking	12.03%	35
	Total	100%	291

Table 4: Which digital channel do you use

Most respondents feel safe using the selected digital channel and 54.3% have strongly agreed that the channel has most features they use. 74% of respondents strongly agree that the channel is efficient and convenient, this once again indicates how most retail banking clients are satisfied with traditional digital channels.

4.4 What is the perception of Chat banking by retail banking clients?

Chat banking is not used by a lot of respondents, the bar Figure below displays that only 60 use Chat Banking and 99 respondents do not use the channel. The survey was completed by 341 respondents and only 60 use Chat banking, this shows how the uptake of Chat banking is very low compared to other digital channels.

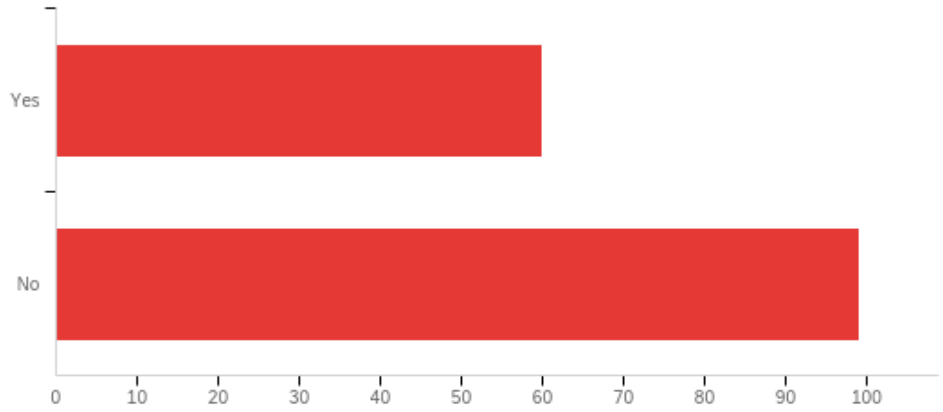


Figure 3.2: Do you use Chat Banking

The table below displays how 49.49% of the retail clients that don't use Chat banking is because they use another channel. Furthermore 51% believe that Chat banking is not marketed enough, this is why they use other channels.

#	Answer	%	Count
1	I have never heard of it from MY bank	11.11%	11
2	I do not have enough information about it to use it	15.15%	15
3	I use other channels to do banking transactions	49.49%	49
4	I do not feel safe using chat banking	10.10%	10
5	Chat banking does not have functionality I use	14.14%	14
	Total	100%	99

Table 5: I do not use Chat banking because

#	Answer	%	Count
1	Strongly disagree	5.65%	13
2	Somewhat disagree	3.04%	7
3	Neither agree nor disagree	16.09%	37
4	Somewhat agree	23.91%	55
5	Strongly agree	51.30%	118
	Total	100%	230

Table 6: Do you believe Chat banking is not marketing

Clients that do not use Chat banking 40% neither agree nor disagree on whether they will use Chat banking in the future. This emphasizes how the clients not using the channel have no interest in trying it out.

4.4.1 Perception of clients that use Chat banking

Clients that use chat banking have rated 5 on the statements on the below table. All the statements are below 30%, which is slightly low. The highest percentage is chat banking is efficient, it is perceived quick and easy to use. Only 24.56% of clients believe it is secure which is much lower than clients using digital platforms 52.58% feel secure using the digital channels. This really indicates lack of confidence on Chat banking.

Statement	**% of clients that rated 5 (Most)**	**Standard deviation**
I feel secure using Chat banking	24.56%	1.17
Chat banking is efficient	28.07%	1.21
Chat banking is very convenient	22.81%	1.26

Chat banking saves me a lot of time	22.81%	1.38

Table 7: Chat banking perception

The perception of chat banking by the clients using the platform shows low confidence and trust of the platform. Clients that know of chat banking but do not use it, are very happy with alternative channels.

4.5 Reliability and Validity Analysis

Analysing the Reliability and Validity concerning Chat Banking and Transaction Activity Scales.

Table 8: Reliability Statistics

Scale	Cronbach's Alpha	N of Items
Chat Banking Use	.891	4
Transaction Activity	.874	3

Table 8 above shows the reliability statistics concerning the use of Chat Banking and Transaction activity scales. According to Salkind (2017) , for an item to comply with internal consistency reliability, we would require a Cronbach's Alpha value that is greater than .70.

(Cronbach & Shavelson, 2004) defines reliability as the ability of measures to be accurate or consistent. The degree to which items measure the same thing is referred to as homogeneity or internal consistency. According to Cronbach, a test is interpretable if the items have a high first principal factor saturation, but the common factor structure accounting for the item covariances does not have to be unidimensional. This indicates that the scales have satisfied the requirement for construct reliability. The descriptive statistic for each scale is depicted below:

Item Statistics - Chat Banking Use

Mean	Std. Deviation	N

CBP1	3.58	1.179	57
CBP2	3.58	1.224	57
CBP3	3.44	1.268	57
CBP4	3.23	1.389	57

Table 9: Item Statistics - Chat Banking Use

Item Statistics – Transaction Activity

	Mean	Std. Deviation	N
TA1	2.54	1.571	57
TA2	2.60	1.624	57
TA3	2.56	1.637	57

Table 10: Item Statistics – Transaction Activity

According to Table 9 above, The Item with the highest mean and variance was CBP1 (*M* = 3.58*, SD* = 1.179). Furthermore, while evaluating Table 10, TA2 showed the highest mean (*M* = 2.60*, SD* = 1.624) while TA3 showed the highest amount of variance (*M* = 2.56*, SD* = 1.637).

Based on the above statistics we can conclude that enough internal consistency reliability is present for both scales. Pearson's Correlation Analysis was used to test for construct validity. Pearson's correlation coefficient (r) is a measure that indicates the linear relationship between two variables. Correlation analysis is typically initiated by visualizing the relationship between data pairs using a scatter diagram (Kirch, 2008).

The results are depicted in the tables below:

Correlations

		CBP1	**CBP2**	**CBP3**	**CBP4**
CBP1	Pearson Correlation	1	.667**	.675**	.507**
	Sig. (2-tailed)		.000	.000	.000
	N	57	57	57	57
CBP2	Pearson Correlation	.667**	1	.754**	.667**
	Sig. (2-tailed)	.000		.000	.000
	N	57	57	57	57

CBP3	Pearson Correlation	.675**	.754**	1	.774**
	Sig. (2-tailed)	.000	.000		.000
	N	57	57	57	57
CBP4	Pearson Correlation	.507**	.667**	.774**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	57	57	57	57

** Correlation is significant at the 0.01 level (2-tailed).

Table 11: Correlations Part 1

Correlations

		TA1	**TA2**	**TA3**
TA1	Pearson Correlation	1	.620**	.761**
	Sig. (2-tailed)		.000	.000
	N	57	57	57
TA2	Pearson Correlation	.620**	1	.711**
	Sig. (2-tailed)	.000		.000
	N	57	57	57
TA3	Pearson Correlation	.761**	.711**	1
	Sig. (2-tailed)	.000	.000	
	N	57	57	57

** Correlation is significant at the 0.01 level (2-tailed).

Table 12: Correlation Part 2

According to Salkind (2017), For construct validity to be present, we would need significant correlations that would be considered moderate to strong in terms of magnitude. According to the tables above, these requirements have been met. In terms of our chat banking scale, The highest correlation recorded was between CBP3 and CBP4 ($r(57)=.774$, $p<.01$). Moreover, regarding our Transaction Activity Scale, the highest correlation was between TA1 and TA3 ($r(57)=.761$, $p<.01$).

Based on the above results concerning our validity and reliability analysis. Respective variables were computed by taking the mean of the relevant responses for each scale.

4.6 Analysing the impact that transaction activity has on use of Chat banking

A simple linear regression analysis was used to test for a possible influence that transaction activity might have on chat banking uses.

Linear regression is a statistical technique that attempts to model the relationship between two variables by fitting a linear equation to observed data, with one variable acting as an explanatory variable and the other as a dependent variable (Shobha & Rangaswamy, 2018). The analysis of whether Transaction Activity has no influence on Chat Banking Uses.

The results are as follows:

4.6.1 Descriptive Statistics – Digital Banking Channels

Table 13: Descriptive Statistics – Chat Banking Use and Transaction Activity

Descriptive Statistics

	Mean	Std. Deviation	N
Chatbanking_ Perception	3.4561	1.10004	57
Transaction_A ctivity	2.5673	1.43920	57

Table 13: Descriptive analyses on Chat Baking Use

Analysing Table 13 Above, it is observed that chat banking use had the highest Mean (*M* = 3.4561, *SD* = 1.10004) while Transaction Activity demonstrated the highest variance (*M* = 2.56731, *SD* = 1.43920).

4.6.2 Simple Linear Regression with Chat Banking Use as the dependent variable

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.680[a]	.462	.452	.81428	2.283

a. Predictors: (Constant), Transaction_Activity

b. Dependent Variable: Chatbanking_Perception

Tables 14: Linear Regression with Chat Banking use

Table 14 shows the results from our simple linear regression analysis. Based on the model summary, Transaction Activity accounts for 46.2% of the variance in chat banking use. Furthermore, our model is not suspect to autocorrelation as the Durbin-Watson statistic lies within the acceptable range of 1.5 and 2.5. Durbin-Watson has been used imprudently to test for serial correlation in the residuals of relationships with lagged regressors calculated using single or simultaneous equation methods(Nerlove & Wallis, 1966),(Uyanto, 2020)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.297	1	31.297	47.202	.000[b]
	Residual	36.468	55	.663		
	Total	67.765	56			

a. Dependent Variable: Chatbanking_Perception

b. Predictors: (Constant), Transaction_Activity

Table 15: Anova Chat Banking Perception

The goodness of fit concerning the model in Table 15 was analysed. The results show that our model is a good fit and satisfies the conditions concerning linearity ($F(1,55) = 47.202$, $p < .01$, $R^2 = .462$).

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.123	.222		9.559	.000
	Transaction_Activity	.519	.076	.680	6.870	.000

a. Dependent Variable: Chatbanking_Perception

Table 16: Coefficients Chat Banking perception

As seen in Table 16 above, transaction activity is a positive predictor on the use of chat banking. Moreover, for every one-unit change in Transaction Activity, chat banking uses would increase by 51.9% on average (β=.519, t = 6.870, p<.01).

Based on the above results there is sufficient evidence for us to conclude that transaction activity does have a positive effect on Chat banking.

CHAPTER 5

Introduction

This study sought to establish the different factors impacting the slow adoption rate of chat banking within South Africa. Main purpose of the conducted research is to discover the underlying reasons to why clients are not adapting to the channel.

The technology acceptance model was used to conduct the study, to help assess the channel and why clients are not adopting.

Findings and Insights

The findings will be addressed categorized in the questions that are formulated on chapter 1.

How can banks in South Africa improve adoption rate of chat banking by their retail clients?

This is the main question of the research conducted and is supported by the sub-questions below. There are many ways to improve the adoption rate, it all depends on how the bank stakeholders prioritise according to the findings. Banks can improve Chat banking adoption rates by understanding which clients would use this channel. From my results most people use the mobile application and keep in mind my respondents mostly stay in the suburbs as per Appendix C and are working. This clearly depicts that chat banking should be marketed to clients most likely to use USSD and target clients in previously disadvantaged areas with very weak connections. Chat banking uses a very low bandwidth compared to mobile or internet banking and should be targeted to clients that take that factor seriously.

Research also has displayed that majority of South Africa's retail consumers earn a low income, which is also a factor that hinders the digital and Fintech uptake(Centre Of Excelence Financial Services, 2015).

Research also has displayed that majority of South Africa's retail consumers earn a low income, which is also a factor that hinders the digital and Fintech uptake(Centre Of Excelence Financial Services, 2015).

Banks must use this opportunity to reposition this channel to clients that need a solution with low bandwidth use and be deliberate in marketing the solution on all digital platforms, voice overs when clients call the contact centre and lastly train branch staff so they can make clients comfortable with the channel.

- **What are the available digital banking channels available to retail clients in South Africa?**

  Retail Banking clients have a number of digital or electronic channels available. The channels we focused on are USSD, Internet Banking, Mobile application and /chat banking. The results (Appendix C) depict that 86.25% of clients use mobile application and only 0.69% use chat banking. This clearly shows how the 291 respondents who use digital channels prefer using mobile. Furthermore, of those respondents 57 use chat banking yet most of them in a question before chose mobile application as the preferred channel, only 2 respondents selected chat banking.

  This is a clear indication that the respondents that completed the survey do not prefer chat banking, they prefer other channels. This finding leans on the concept of client's behavioural intention towards Chat Banking and shows most respondents intend on continuing with the other preferred channel. In other words, the respondents have no intentions to change their preference and use Chat Banking.

  These findings also are supported by inferential statistics conducted and prove that digital channels are not equal across all categories.

Statistic methods conducted in chapter 4 indeed proved that digital channels are not equal across all categories, mobile app is the mostly used channel among respondents. This is one of the main reasons Chat Banking has slow adoption, the current target market is satisfied with available channels. These clients in the results show us that the perceived usefulness is very low when it comes to Chat Banking as they continue or prefer to use the other channel.

As the market becomes more exposed to disruptive digital services, it is attempting to shift customer preferences away from traditional banking and toward digitalization (Joshi et al., 2019). This statement by Joshi et al, clearly shows how we are introduced digital channels and as clients have adopted the banks introduced chat banking as that is where the market was expanding to. Clients hold on to a way of work or to a channel once they have adopted. Therefore, the respondents have indicated that they prefer using mobile application.

Furthermore, clients are overwhelmed and being introduced to all these different ways to ban because the digital world is evolving rapidly. As Van Rensburg (2021) mentions that clients are truly exhausted and are being overwhelmed by an excessive number of apps. Consumers may be averse to downloading or learning how to use your app, yet many individuals experiencing app fatigue actually prefer well-designed mobile experiences over other digital channels (Van Rensburg, 2021). Banking clients are being introduced to too many ways to process financial payments.

The results clearly display that clients stick to a channel they are familiar with and are slow to transitioning to new channels, especially when they are satisfied with the channel and 74.57% of respondents strongly agreed that the chosen digital channel is convenient and efficient. Most respondents selected that the use the mobile application.

- **What perception do retail banking clients have of chat banking?**
  This question is covered by different personas, clients that know about chat banking and do not use it have indicated that they prefer using other channels.

These clients also believe chat banking is not marketed enough by financial institutions. The marketing aspect plays a huge role as that is where institutions teach clients about the channel and how to use it, the lack of it plays a huge role in adoption and the perception of the channel. Furthermore as stated in chapter 2 there is a huge gap in literacy about chat banking in south Africa and its impact, and also very minimal marketing articles on the channel. Chat banking content related to south Africa is when Absa, African Bank, FNB and Standard Bank launched their service.

Clients that use chat banking when asked questions relating to perception as per the Table 4.7 display percentages lower than 30% which is very low to the respondents that are using mobile applications 52% feel secure using the channel, this supports that perceived usefulness of Chat Banking for these clients is very low which leads to low adoption because client perception is key in driving adoption. 74.57% strongly agree that the digital channel is efficient.
These numbers are very high and yet for chat banking clients that strongly agree that they feel secure and that the channel is efficient is less than 30%. This is one metric that in the Chat Banking conceptual model links to the concept of perceived ease of use. The easier to navigate or the quicker to transact the channel is deemed efficient by clients. This concept is normally high when there is great processing times and easy user interface. In the findings less than 30% of respondents believe Chat Banking has ease of use.
Kantsberger and Kunz (2010) suggest that lack of trust arises from incidents within the environment and cannot be influenced neither by the banks or the consumers, and some of them originate from the behaviour and actions of banks.
The low percentage of chat banking could be related to when the channel was launched there could have been technical issues or not a solid support model to field clients' queries which caused clients to revert to internet banking or mobile application. Furthermore, Kumra and Mittal (2004) have defined trust in banking sector as feelings of confidence and security on the part of customers that they can have some assurance that the company will look after them. This goes back to the marketing and client support or training on the channel during the launch as that is the most crucial time for adoption.

This chat banking perception is emphasised on the question would you recommend chat banking to others, 29.82% respondents said definitely yes. This again displays a low confidence in the channel as clients still use other alternatives rather than Chat banking. As mentioned earlier 49% of respondents do not use chat banking because they use other channels.

The perception of chat banking among respondents impacts the adoption rate of the channel. The perception is due to lack of information of the channel, lack of support information by bank employees, trust issues from the clients and minimal use of the channel. All these factors contribute to why the chat banking perception is low.

- **What is the impact of transaction activity to use of Chat banking?**
    - H0: Transaction activity has no influence on chat banking perceptions-chat banking use
    - H1: Transaction activity has an influence on chat banking uses.

    The analysis conducted using linear regression and Cronbach alpha has indicated that transaction activity has an influence on the use of chat banking. If more transactions are processed by clients on the channel this builds habit and clients will continually use the platform even as they would be more familiar and comfortable with it. The channel being easy to use in terms of navigation and processing will also play a large role. Actual use of Chat Banking concept in these results clearly shows that Chat Banking does not have a lot of transaction activity which results in low actual use from the respondents. The perception concept mentioned in the model feeds into client behaviour and client actual use. These results displayed in Chapter 4 and Appendix C, show client actual use is very low, which is why the adoption is slow.

Though an estimated 60% of South Africa's population has smartphones, there are still glaring issues like high data costs, poor reception and technical literacy play a huge role in the low uptake. 66% of the banked population have online accounts and sadly only 23 % are active (Jenkin & Naude, 2019). This impacts the use of digital channel, one factor is SA has a large unbanked and low LSM population which gives an opportunity to position this channel to that target and also make sure the type of transaction those clients do are seamless on the channel.

Product owners of Chat banking need to invest in ideas on how to increase activity on the channel as the more clients transact it builds a client habit and will increase channel adoption.

Conclusion

The results of the research have highlighted many facets the bank can investigate in order to drive adoption. The important part is to evaluate the options and determine what will work for chat banking clients and prospective clients. One of the biggest findings is the survey respondent prefer other channels and chat banking needs to be targeted to the low LSM and to clients actively using USSD channels.

CHAPTER 6

Chapter 1 we introduced the topic, the problem identified and the purpose of the study, to analyse the different factors impacting the slow adoption rate of chat banking within South Africa and to understand the consumer behaviour and discover underlying reasons to why clients are not adapting to chat banking.

The literature review displayed insights in understanding digital adoption, how social media has evolved and chat banking view. Chapter 3 gives an overview of the research methodology used and Chapter 4 shows a presentation of results that have been analysed using statistical methods.

In chapter 5 we discuss the findings of the results and also see how these link to the literature review. In this chapter we will review the study findings and share recommendations, limitations and what could be done on future studies.

Conclusion

Chat Banking is a channel that uses low bandwidth which is needed in South Africa as a developing country. There is still a lot of development from an infrastructure perspective and also a high percentage of the population still lives in poverty which means saving on banking is important.
The respondents that completed the survey are not the correct market for Chat banking they are not impacted by infrastructure and are not living in disadvantaged areas like townships and rural. These clients are satisfied with the channels they are currently using and are not data sensitive as many responded that they use Wi-Fi or fibre (as per Appendix C).

This channel is key in order to unlock the unbanked market and also with many branches that the banks have closed especially in rural areas, can assist clients in doing the simple transactions on a platform they are familiar with.
Clients are also overwhelmed with being introduced to too many ways to process financials and also are very careful where they effect transactions due to security issues that institutions may experience. This is why new channels introduced have slow uptake, clients that have digital profiles are happy with using existing channels.

Recommendations

Banks should reposition this channel and market it to the low LSM clients within retail banking. The target can start by marketing to USSD clients and also to clients with bank accounts and no digital profile or have minimal to no use on their digital profile. Chat should also be positioned with student accounts and target students who will not have accessed to wi-fi all the time. Students will need a low bandwidth solution and are very familiar with social media.

Chat banking needs a rebranding campaign for clients and internal stakeholders (bank employees) so they can sell the channel more to clients. This campaign would involve re-training employees and equipping them with sales information in order to market the channel ant a minimal cost.

Recommendations for future studies

- Can consider conducting a qualitative study to get more in-depth information on why chat banking adoption is slow.
- The study could focus on rural and township areas where there is lack of infrastructure
- Study was based on the TAM framework other researchers can consider using UTUAT framework and Rogers Diffusion model.

Appendices

Appendix A- Survey

	Demographics	
1	What is your age range?	18-24 years old 25-34 years old 35-44 years old 45-54 years old 55-64 years old 65 and over
2	How do you describe your gender?	Male Female Prefer not to say
3	Type of area you reside?	Suburb, Township, Rural
4	I am currently	Employed- Permanently Employed- Contract Student Unemployed
	Banking overview and Digital Channels	
5	How do you connect to the internet? Rate according to the one you use the most	Data Wifi Fibre
6	How often do you go online?	none, seldomly, neither nor, often, very often
7	Below are listed some activities that people DO ONLINE. Indicate on a scale of 1-5 how often YOU do each activity. 1 being not often and 5 being extremely often.	Online banking Instant messaging (sms, whatsapp, telegram etc) Email Social media apps (Facebook, Instagram, Twitter, Linkedin and TicToc) Shop Online Browse the web to pass time Download Music
8	Do you have a bank account?	Yes No
9	How do you communicate with the bank? Indicate on a scale of 1-5 which communication channel YOU use the most. 1 being not often and 5 being extremely often.	Face to face Call SMS Email Mobile App Internet Banking
10	Do you do online banking?	Yes No

11	I do not transact online because	I do not know how to use banking applications I do not feel secure using online banking I have experienced fraud on my account due to online I do not understand the application
12	How often do you do online banking?	Daily Weekly Biweekly Monthly very seldomly
13	What type of transactions do you on online banking? Indicate on a scale of 1-5 which transaction YOU do the most. 1 being not often and 5 being extremely often.	View Balance Payments Buy airitme/electricity Transfers manage Beneficiary Get statement
14	Which application do you use to do online transactions?	Mobile App Chatbanking USSD Internet banking
15	Rate this statement on a scale of 1-5 . Online channel is efficient and convenient.	agree disagree
16	Rate this statement on a scale of 1-5 . I have all the functionality I need on this channel	Scale 1-5
17	Rate this statement on a scale of 1-5. I feel safe using online channels	Scale 1-5
	Chat Banking	
20	Do you know about chat banking?	yes/no
21	Do you use chat banking?	yes/no
22	I do not use chat banking because	I have never heard of it from MY bank I do not have enough information about it to use it I use other channels to do banking transations I do not feel safe using chatbanking Does not have functionality I use
23	Rate this statement on a scale of 1-5. I feel chatbanking is not marketed enough	scale 1-5
24	I will use chatbanking in the future	(1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.
25	Rate this statement on a scale of 1-5. Chatbanking is easy to understand and navigate	Scale 1-5
26	Rate this statement on a scale of 1-5. I feel chatbanking is easy to access	Scale 1-5

27	Which transactions do you do on chatbanking	View Balance Payments Buy airtme/electricity Transfers Get statement
28	Rate this statement on a scale of 1-5. I feel secure using chat banking	Scale 1-5
29	Rate this statement on a scale of 1-5. Chatbanking is efficient	Scale 1-5
30	Rate this statement on a scale of 1-5. Chatbanking is very convenient for me	Scale 1-6
31	Chatbanking saves alot of time compared to other banking online channels?	Scale 1-5
32	Will you recommend chatbanking to others?	(1) Strongly disagree; (2) Disagree; (3) Neither agree nor disagree; (4) Agree; (5) Strongly agree.

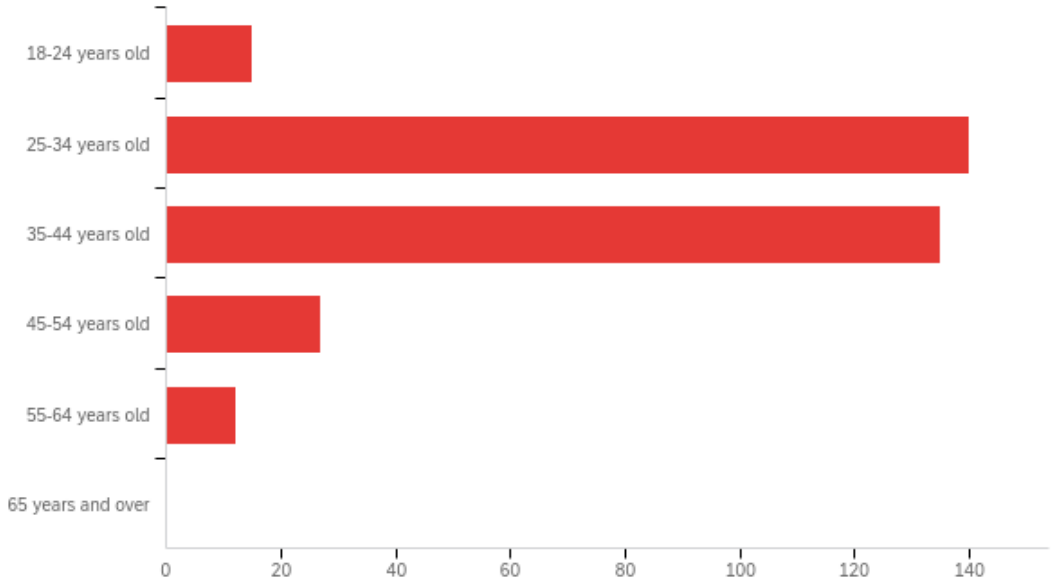
Appendix B- Survey Questions Grouped a per Chat Banking Conceptual Model

Perceived Usefulness of Chat Banking
Do you know about chat banking?
Rate this statement on a scale of 1-5. I feel chat banking is not marketed enough
Rate this statement on a scale of 1-5. I feel secure using chat banking
Rate this statement on a scale of 1-5. Chat banking is very convenient for me
Chatbanking saves alot of time compared to other banking online channels?
Perceived Ease of use of Chat Banking
Rate this statement on a scale of 1-5. Chatbanking is easy to understand and navigate
Rate this statement on a scale of 1-5. I feel chatbanking is easy to access
Rate this statement on a scale of 1-5. Chatbanking is efficient
Chatbanking saves alot of time compared to other banking online channels?
Clients behavioural intention towards Chat Banking
Which application do you use to do online transactions? MobileApp Chatbanking USSD Internet banking
Rate this statement on a scale of 1-5 . Online channel is efficient and convenient.
Rate this statement on a scale of 1-5 . I have all the functionality I need on this channel
Rate this statement on a scale of 1-5. I feel safe using online channels
I will use chatbanking in the future
Will you recommend chatbanking to others?
Actual use of Chat Banking
Do you use chat banking?
I do not use chat banking because
Which transactions do you do on chat banking

Do you use chat banking?

Appendix C- Survey Results

Q2 - What is your age?

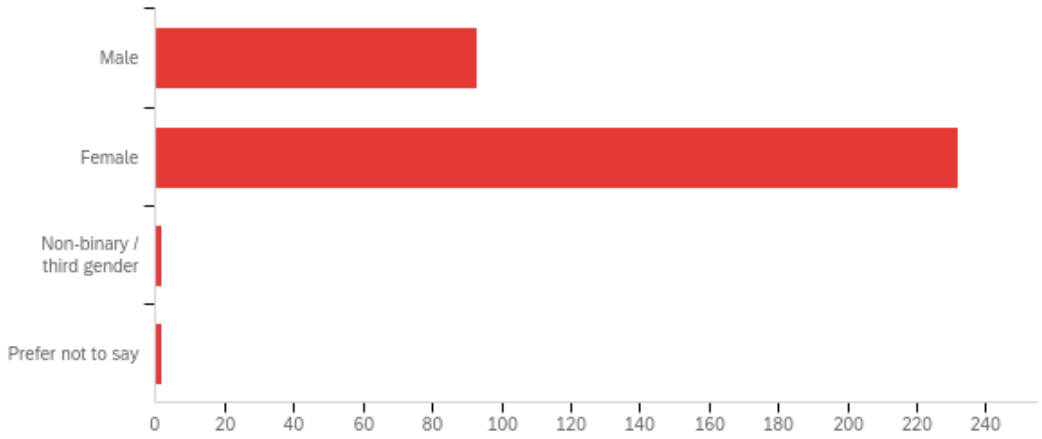


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your age?	1.00	5.00	2.64	0.84	0.71	329

#	Answer	%	Count
1	18-24 years old	4.56%	15
2	25-34 years old	42.55%	140

3	35-44 years old	41.03%	135
4	45-54 years old	8.21%	27
5	55-64 years old	3.65%	12
6	65 years and over	0.00%	0
	Total	100%	329

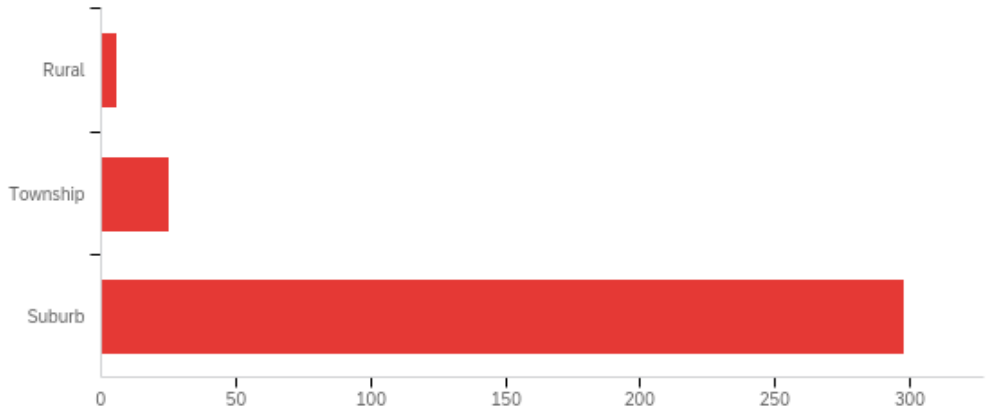
Q3 - What is your gender?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your gender?	1.00	4.00	1.74	0.49	0.24	329

#	Answer	%	Count
1	Male	28.27%	93
2	Female	70.52%	232
3	Non-binary / third gender	0.61%	2
4	Prefer not to say	0.61%	2
	Total	100%	329

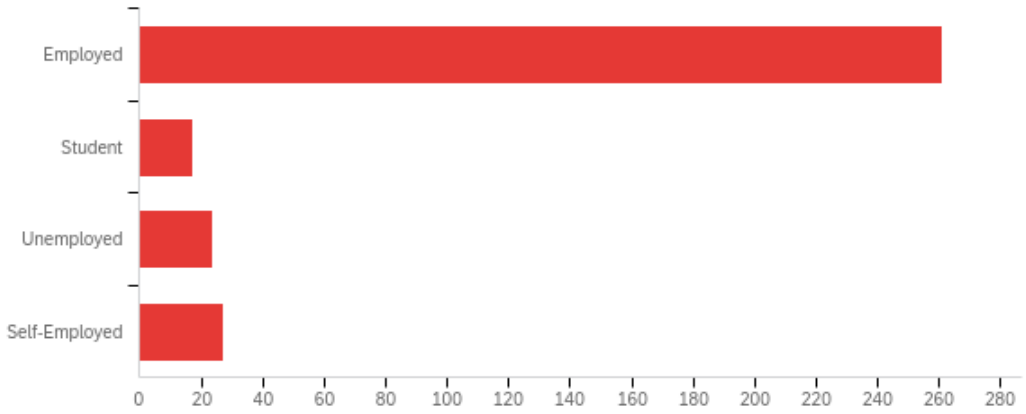
Q4 - Where do you reside?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Where do you reside?	1.00	3.00	2.89	0.37	0.14	329

#	Answer	%	Count
1	Rural	1.82%	6
2	Township	7.60%	25
3	Suburb	90.58%	298
	Total	100%	329

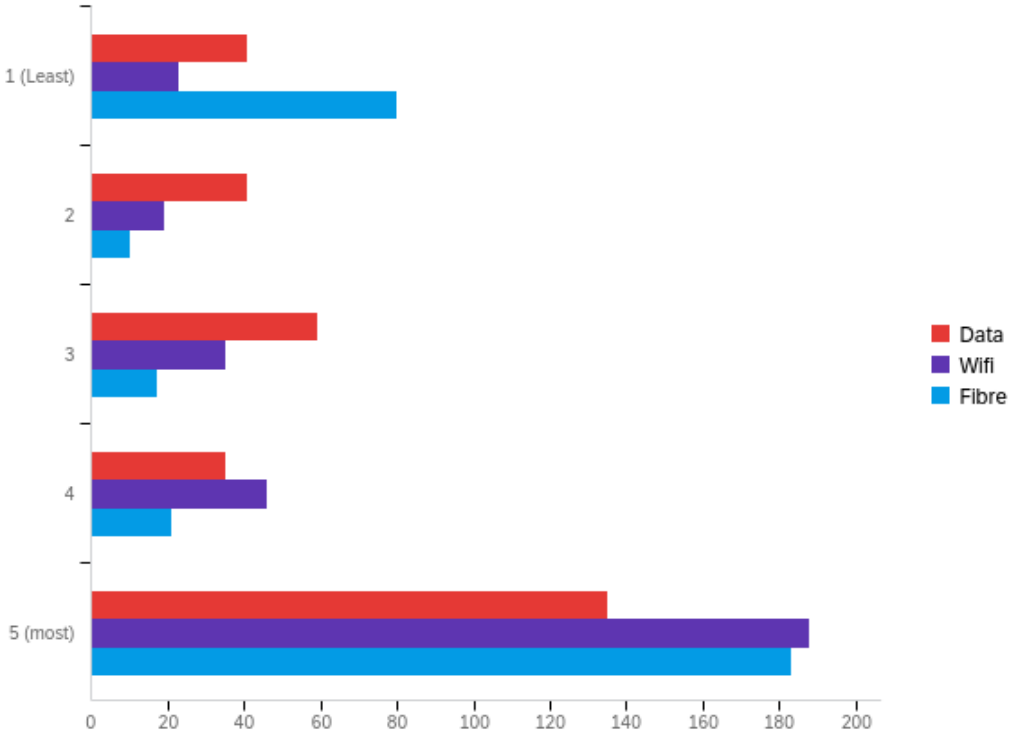
Q5 - What best describes your current status?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What best describes your current status?	1.00	4.00	1.44	0.94	0.89	329

#	Answer	%	Count
1	Employed	79.33%	261
2	Student	5.17%	17
3	Unemployed	7.29%	24
4	Self-Employed	8.21%	27
	Total	100%	329

Q6 - How do you connect to the internet? Rate according to the one you use the most. 1 - least and 5 -most often.

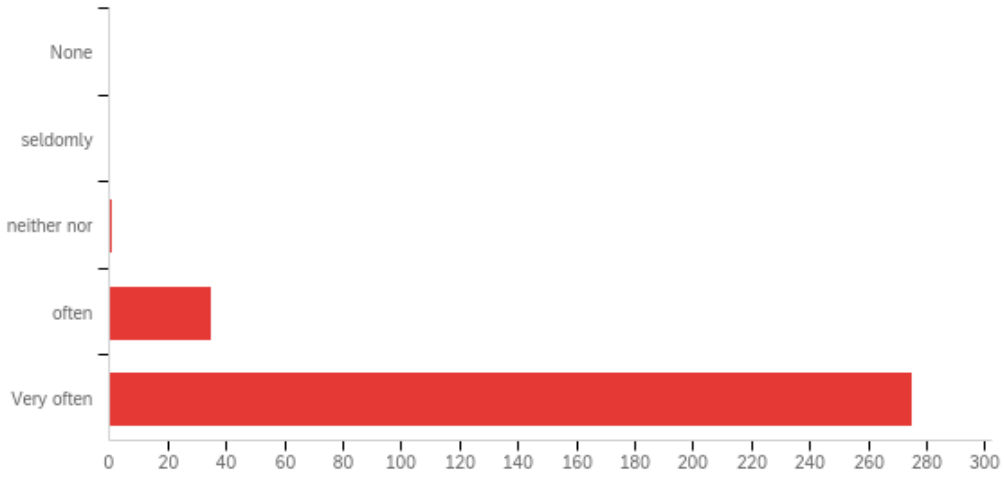


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Data	1.00	5.00	3.59	1.47	2.17	311
2	Wifi	1.00	5.00	4.15	1.27	1.61	311
3	Fibre	1.00	5.00	3.70	1.73	3.00	311

#	Question	1 (Least)		2		3		4		5 (most)		Total
1	Data	13.18 %	41	13.18 %	41	18.97 %	59	11.25 %	35	43.41 %	135	311

2	Wifi	7.40%	23	6.11%	19	11.25%	35	14.79%	46	60.45%	188	311
3	Fibre	25.72%	80	3.22%	10	5.47%	17	6.75%	21	58.84%	183	311

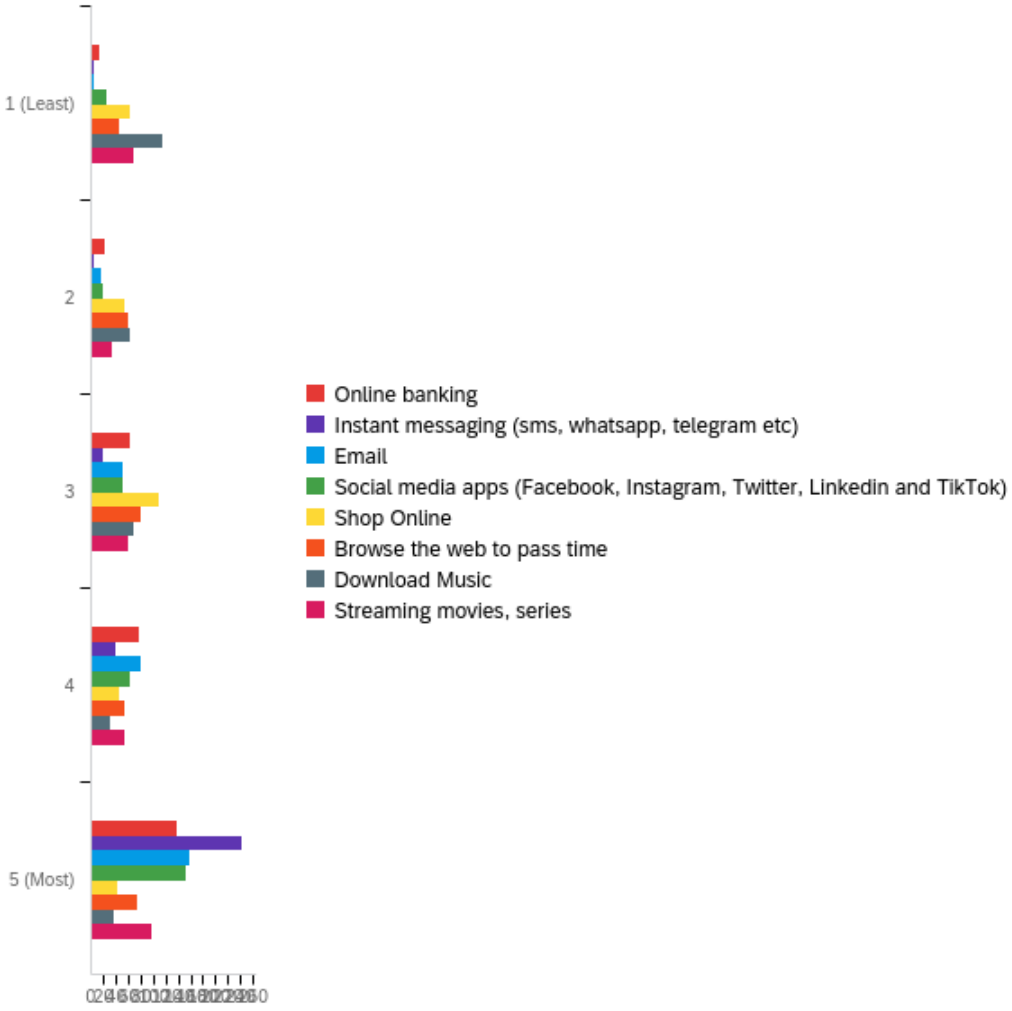
Q7 - How often do you go online?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How often do you go online?	3.00	5.00	4.88	0.33	0.11	311

#	Answer	%	Count
1	None	0.00%	0
2	seldomly	0.00%	0
3	neither nor	0.32%	1
4	often	11.25%	35
5	Very often	88.42%	275
	Total	100%	311

Q8 - Below are listed some activities that people DO ONLINE. Indicate on a scale of 1-5 how often YOU do each activity. 1- least and 5 - most often.



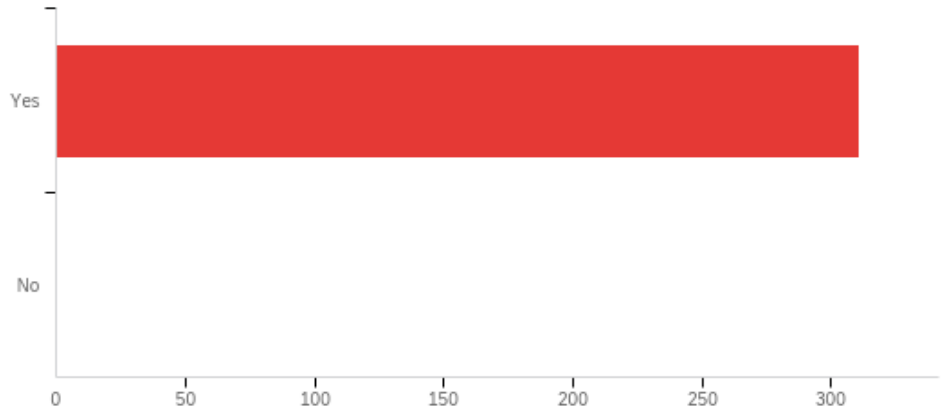
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Online banking	1.00	5.00	3.99	1.13	1.27	311
2	Instant messaging (sms, whatsapp, telegram etc)	1.00	5.00	4.63	0.81	0.65	311
3	Email	1.00	5.00	4.20	0.98	0.97	311

4	Social media apps (Facebook, Instagram, Twitter, Linkedin and TikTok)	1.00	5.00	3.95	1.29	1.66	311
5	Shop Online	1.00	5.00	2.86	1.28	1.64	311
6	Browse the web to pass time	1.00	5.00	3.17	1.36	1.84	311
7	Download Music	1.00	5.00	2.41	1.37	1.89	311
8	Streaming movies, series	1.00	5.00	3.25	1.53	2.33	310

#	Question	1 (Least)		2		3		4		5 (Most)		Total
1	Online banking	3.86 %	12	7.07 %	22	19.94 %	62	24.76 %	77	44.37 %	138	311
2	Instant messaging (sms, whatsapp, telegram etc)	1.61 %	5	1.61 %	5	6.43 %	20	12.54 %	39	77.81 %	242	311
3	Email	1.29 %	4	5.47 %	17	16.40 %	51	25.72 %	80	51.13 %	159	311
4	Social media apps (Facebook, Instagram, Twitter, Linkedin	8.36 %	26	6.43 %	20	16.08 %	50	19.94 %	62	49.20 %	153	311

	and TikTok)											
5	Shop Online	19.61 %	61	17.04 %	53	34.73 %	108	14.79 %	46	13.83 %	43	311
6	Browse the web to pass time	14.15 %	44	19.29 %	60	25.72 %	80	17.36 %	54	23.47 %	73	311
7	Download Music	36.66 %	114	19.94 %	62	21.54 %	67	9.97 %	31	11.90 %	37	311
8	Streaming movies, series	21.94 %	68	10.32 %	32	19.35 %	60	17.42 %	54	30.97 %	96	310

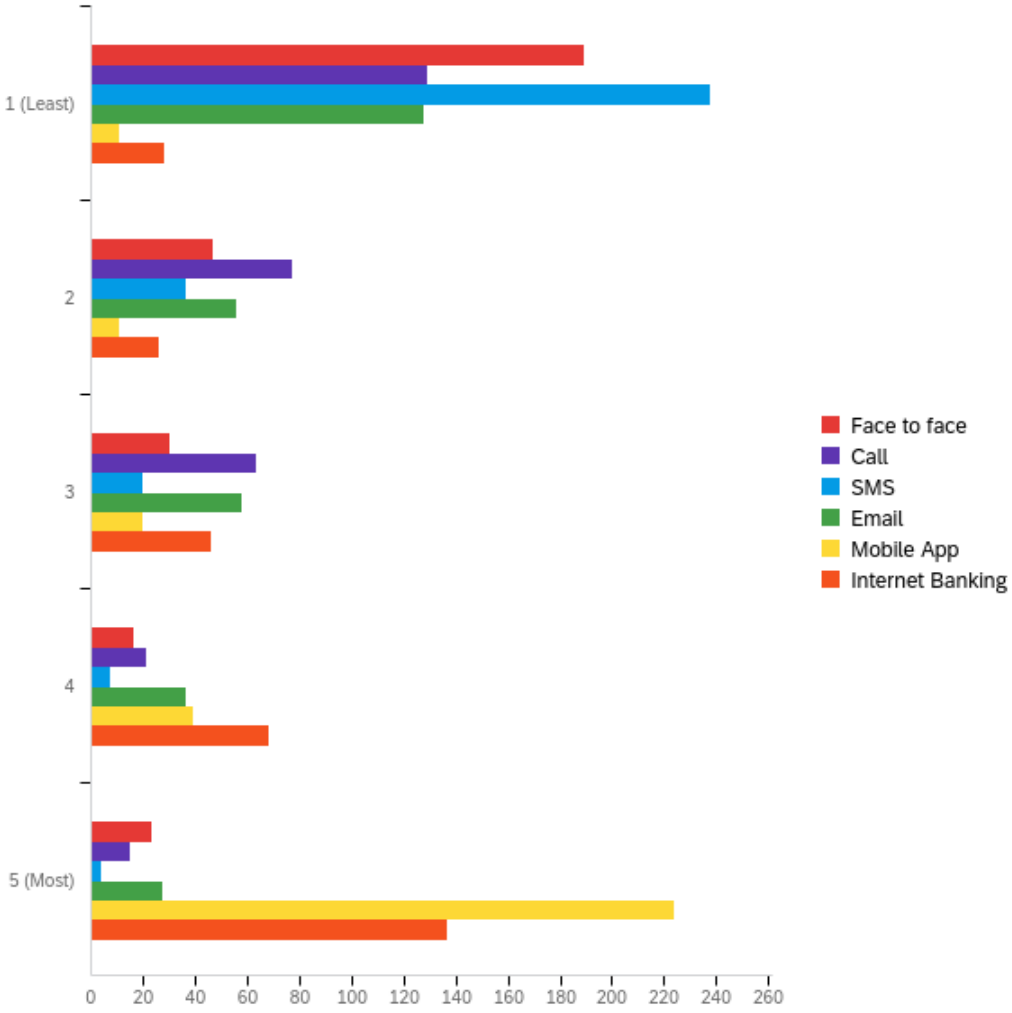
Q9 - Do you have a bank account?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you have a bank account?	1.00	1.00	1.00	0.00	0.00	311

#	Answer	%	Count
1	Yes	100.00%	311
2	No	0.00%	0
	Total	100%	311

Q10 - How do you communicate with the bank? Indicate on a scale of 1-5 which communication channel YOU use the most.

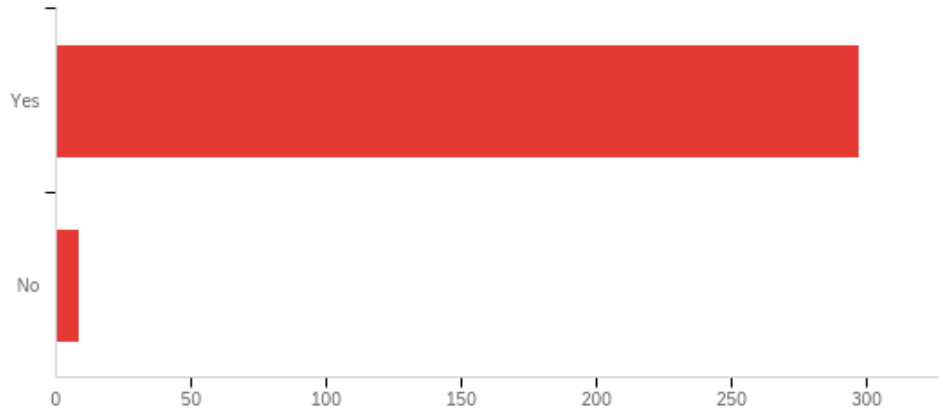


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Face to face	1.00	5.00	1.81	1.25	1.57	305
2	Call	1.00	5.00	2.07	1.16	1.34	305
3	SMS	1.00	5.00	1.37	0.81	0.66	305
4	Email	1.00	5.00	2.27	1.34	1.80	305
5	Mobile App	1.00	5.00	4.49	1.01	1.03	305

6	Internet Banking	1.00	5.00	3.85	1.32	1.75	305

#	Question	1 (Least)		2		3		4		5 (Most)		Total
1	Face to face	61.97%	189	15.41%	47	9.84%	30	5.25%	16	7.54%	23	305
2	Call	42.30%	129	25.25%	77	20.66%	63	6.89%	21	4.92%	15	305
3	SMS	78.03%	238	11.80%	36	6.56%	20	2.30%	7	1.31%	4	305
4	Email	41.97%	128	18.36%	56	19.02%	58	11.80%	36	8.85%	27	305
5	Mobile App	3.61%	11	3.61%	11	6.56%	20	12.79%	39	73.44%	224	305
6	Internet Banking	9.18%	28	8.52%	26	15.08%	46	22.30%	68	44.92%	137	305

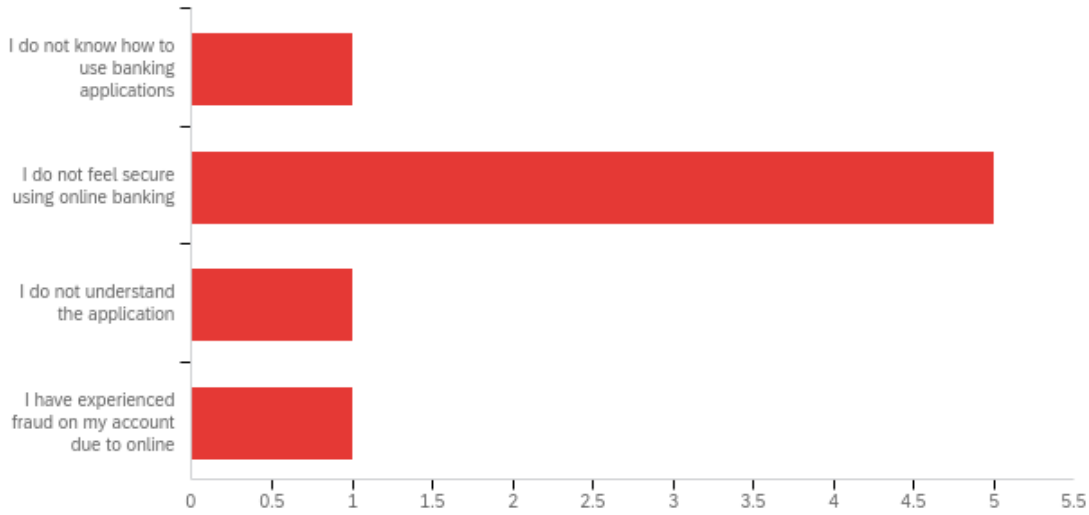
Q11 - Do you do digital banking?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you do digital banking?	1.00	2.00	1.03	0.16	0.03	305

#	Answer	%	Count
1	Yes	97.38%	297
2	No	2.62%	8
	Total	100%	305

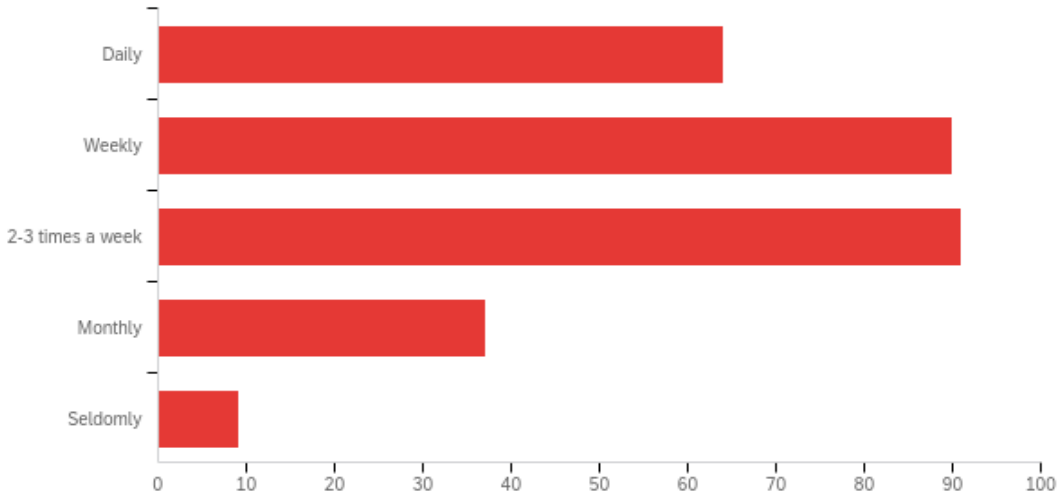
Q12 - I do not transact digital platforms because



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I do not transact digital platforms because	1.00	4.00	2.25	0.83	0.69	8

#	Answer	%	Count
1	I do not know how to use banking applications	12.50%	1
2	I do not feel secure using online banking	62.50%	5
3	I do not understand the application	12.50%	1
4	I have experienced fraud on my account due to online	12.50%	1
	Total	100%	8

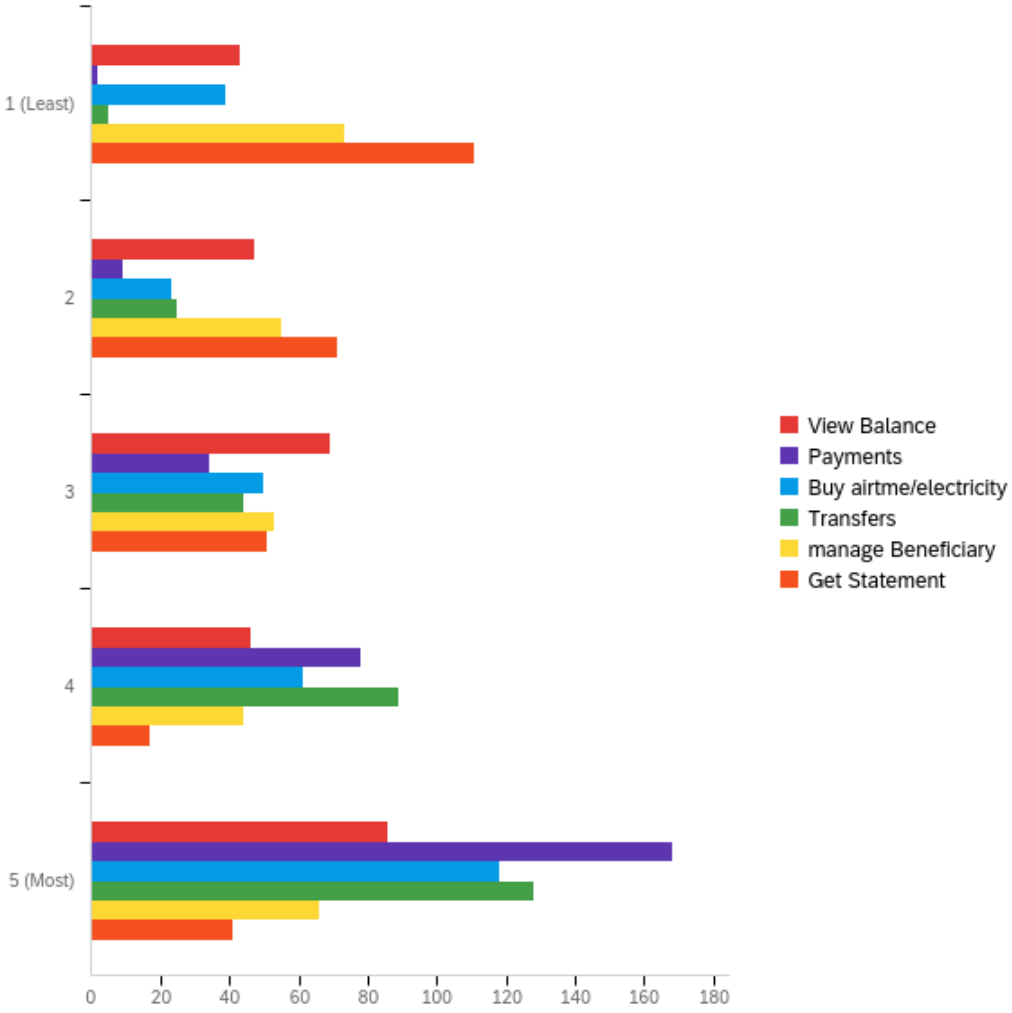
Q13 - How often do you do digital banking?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	How often do you do digital banking?	1.00	5.00	2.44	1.06	1.13	291

#	Answer	%	Count
1	Daily	21.99%	64
2	Weekly	30.93%	90
3	2-3 times a week	31.27%	91
4	Monthly	12.71%	37
5	Seldomly	3.09%	9
	Total	100%	291

Q14 - What type of transactions do you process on digital banking? Indicate on a scale of 1-5 which transaction YOU do the most.

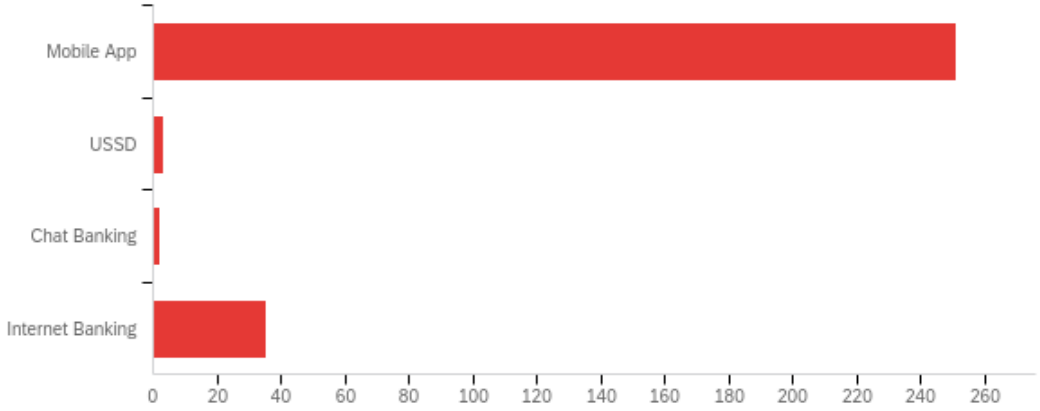


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
5	manage Beneficiary	1.00	5.00	2.91	1.50	2.24	291
1	View Balance	1.00	5.00	3.29	1.42	2.01	291
4	Transfers	1.00	5.00	4.07	1.04	1.09	291
2	Payments	1.00	5.00	4.38	0.86	0.74	291
6	Get Statement	1.00	5.00	2.33	1.40	1.95	291

3	Buy airtme/electricity	1.00	5.00	3.67	1.41	1.99	291

#	Question	1 (Least)		2		3		4		5 (Most)		Total
1	View Balance	14.78 %	43	16.15 %	47	23.71 %	69	15.81 %	46	29.55 %	86	291
2	Payments	0.69 %	2	3.09 %	9	11.68 %	34	26.80 %	78	57.73 %	168	291
3	Buy airtme/electricity	13.40 %	39	7.90 %	23	17.18 %	50	20.96 %	61	40.55 %	118	291
4	Transfers	1.72 %	5	8.59 %	25	15.12 %	44	30.58 %	89	43.99 %	128	291
5	manage Beneficiary	25.09 %	73	18.90 %	55	18.21 %	53	15.12 %	44	22.68 %	66	291
6	Get Statement	38.14 %	111	24.40 %	71	17.53 %	51	5.84 %	17	14.09 %	41	291

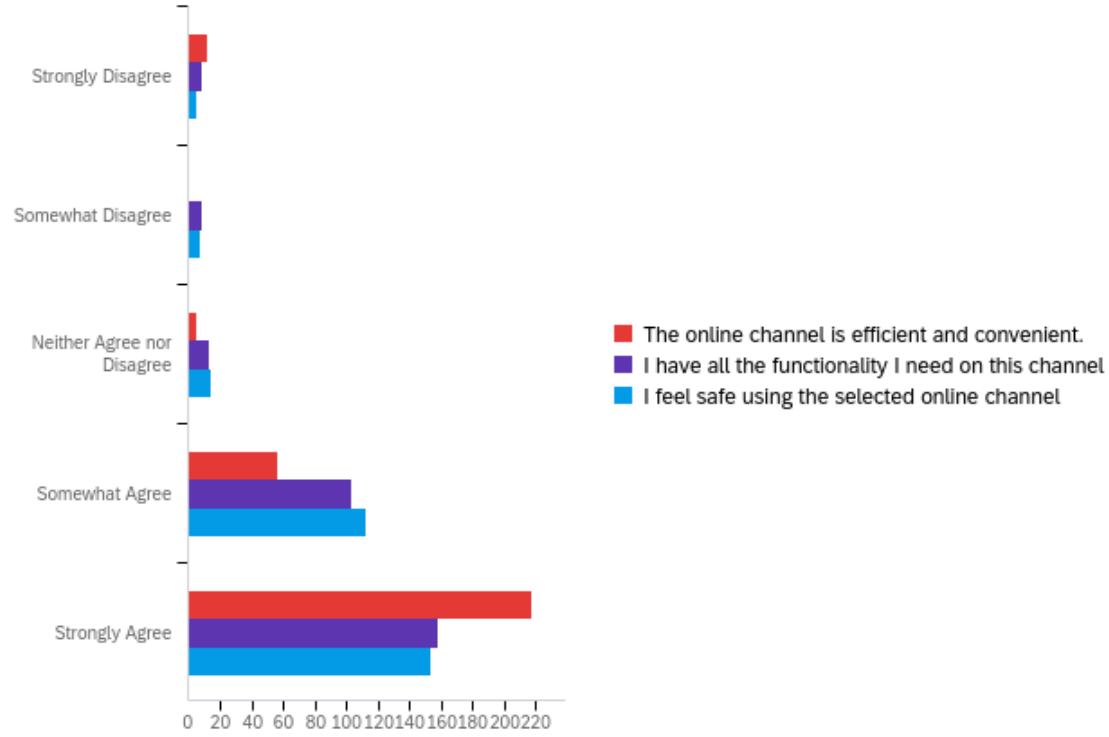
Q15 - Which application do you use to do digital transactions?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Which application do you use to do digital transactions?	1.00	4.00	1.38	0.99	0.97	291

#	Answer	%	Count
1	Mobile App	86.25%	251
2	USSD	1.03%	3
3	Chat Banking	0.69%	2
4	Internet Banking	12.03%	35
	Total	100%	291

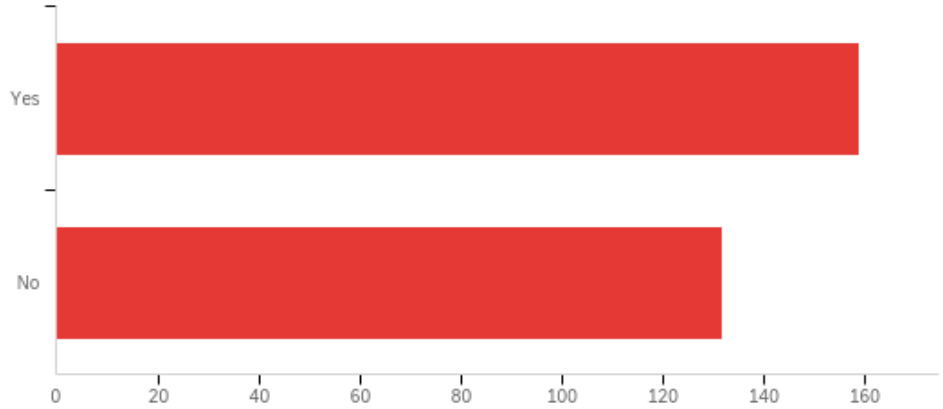
Q16 - Rate the statements below on the digital channel YOU selected on the previous question.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	The online channel is efficient and convenient.	1.00	5.00	4.60	0.89	0.79	291
2	I have all the functionality I need on this channel	1.00	5.00	4.35	0.92	0.85	291
3	I feel safe using the selected online channel	1.00	5.00	4.38	0.83	0.68	291

#	Question	Strongly Disagree		Somewhat Disagree		Neither Agree nor Disagree		Somewhat Agree		Strongly Agree		Total
1	The online channel is efficient and convenient.	4.12%	12	0.34%	1	1.72%	5	19.24%	56	74.57%	217	291
2	I have all the functionality I need on this channel	3.09%	9	2.75%	8	4.47%	13	35.40%	103	54.30%	158	291
3	I feel safe using the selected online channel	1.72%	5	2.41%	7	4.81%	14	38.49%	112	52.58%	153	291

Q17 - Do you KNOW about Chat banking? (Chat banking is performing banking services such as: payments, account balance and purchasing airtime, using chat apps like Whatsapp, WeChat).

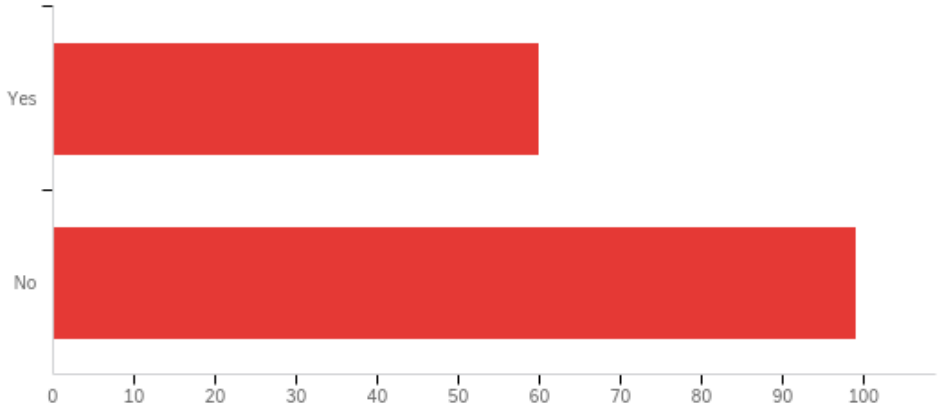


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you KNOW about Chat banking? (Chat banking is performing banking services such as: payments, account balance and purchasing airtime, using chat apps like Whatsapp, WeChat).	1.00	2.00	1.45	0.50	0.25	291

#	Answer	%	Count
1	Yes	54.64%	159

2	No	45.36%	132
	Total	100%	291

Q18 - Do you use Chat banking?(Chat banking is performing banking services such as: payments, account balance and purchasing airtime, using chat apps like Whatsapp, WeChat).

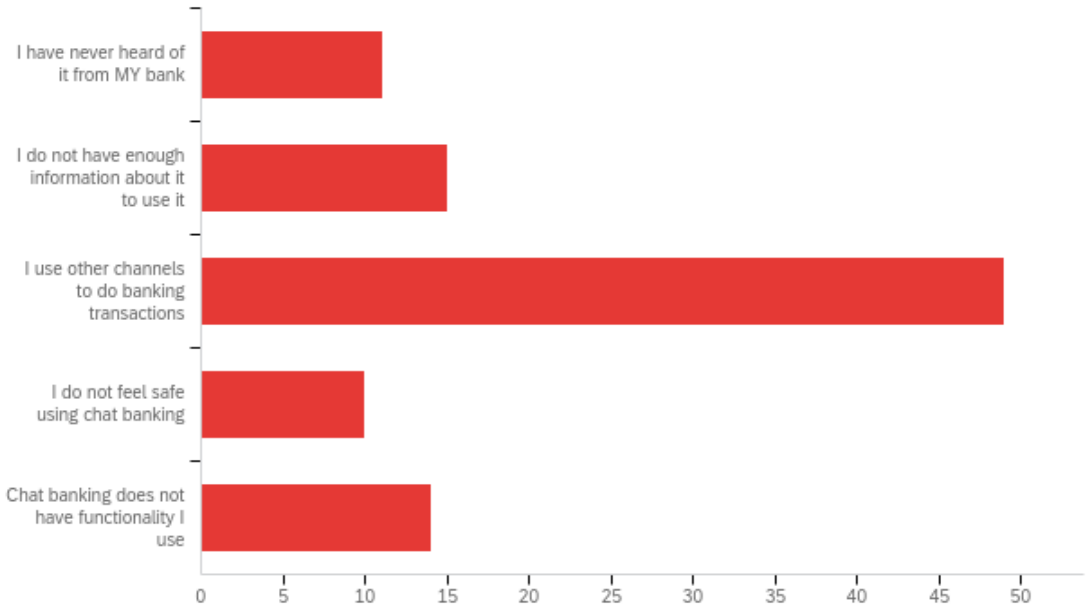


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you use Chat banking?(Chat banking is performing banking services such as: payments, account balance and purchasing airtime, using chat apps like Whatsapp, WeChat).	1.00	2.00	1.62	0.48	0.23	159

#	Answer	%	Count
1	Yes	37.74%	60

2	No	62.26%	99
	Total	100%	159

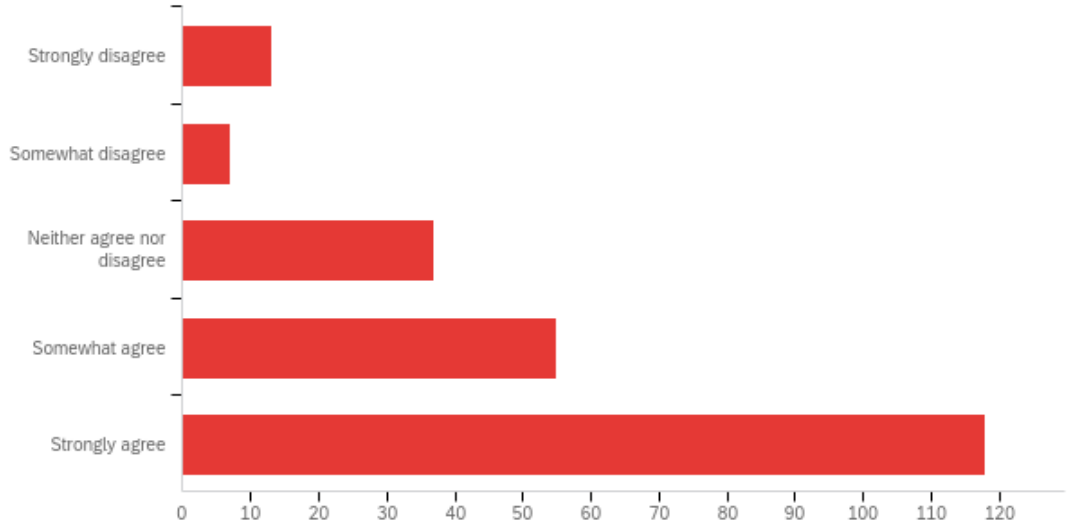
Q19 - I do not use chat banking because



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I do not use chat banking because	1.00	5.00	3.01	1.12	1.26	99

#	Answer	%	Count
1	I have never heard of it from MY bank	11.11%	11
2	I do not have enough information about it to use it	15.15%	15
3	I use other channels to do banking transactions	49.49%	49
4	I do not feel safe using chat banking	10.10%	10
5	Chat banking does not have functionality I use	14.14%	14
	Total	100%	99

Q20 - I feel Chat banking is not marketed enough by financial instituions.

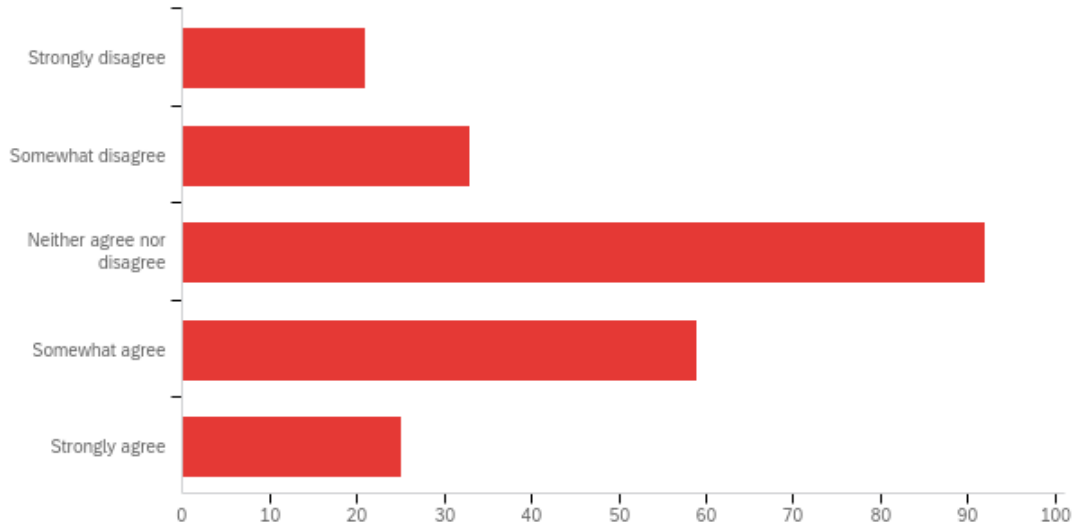


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I feel Chat banking is not marketed enough by financial instituions.	1.00	5.00	4.12	1.14	1.29	230

#	Answer	%	Count
1	Strongly disagree	5.65%	13
2	Somewhat disagree	3.04%	7
3	Neither agree nor disagree	16.09%	37
4	Somewhat agree	23.91%	55
5	Strongly agree	51.30%	118

	Total	100%	230

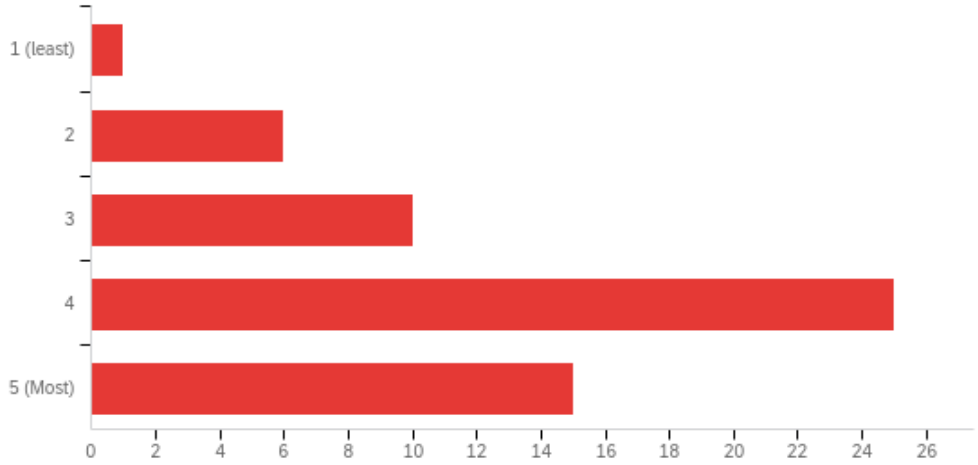
Q21 - I will use Chat banking in the future.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I will use Chat banking in the future.	1.00	5.00	3.15	1.09	1.18	230

#	Answer	%	Count
1	Strongly disagree	9.13%	21
2	Somewhat disagree	14.35%	33
3	Neither agree nor disagree	40.00%	92
4	Somewhat agree	25.65%	59
5	Strongly agree	10.87%	25
	Total	100%	230

Q22 - Chat banking is easy to understand and navigate. Rate this statement on a scale of 1-5.

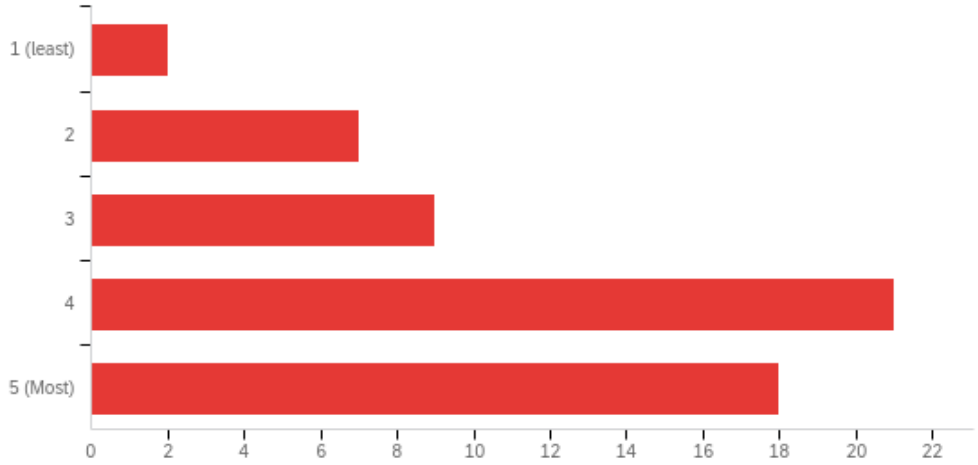


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Chat banking is easy to understand and navigate. Rate this statement on a scale of 1-5.	1.00	5.00	3.82	0.99	0.99	57

#	Answer	%	Count
1	1 (least)	1.75%	1
2	2	10.53%	6
3	3	17.54%	10
4	4	43.86%	25
5	5 (Most)	26.32%	15

	Total	100%	57

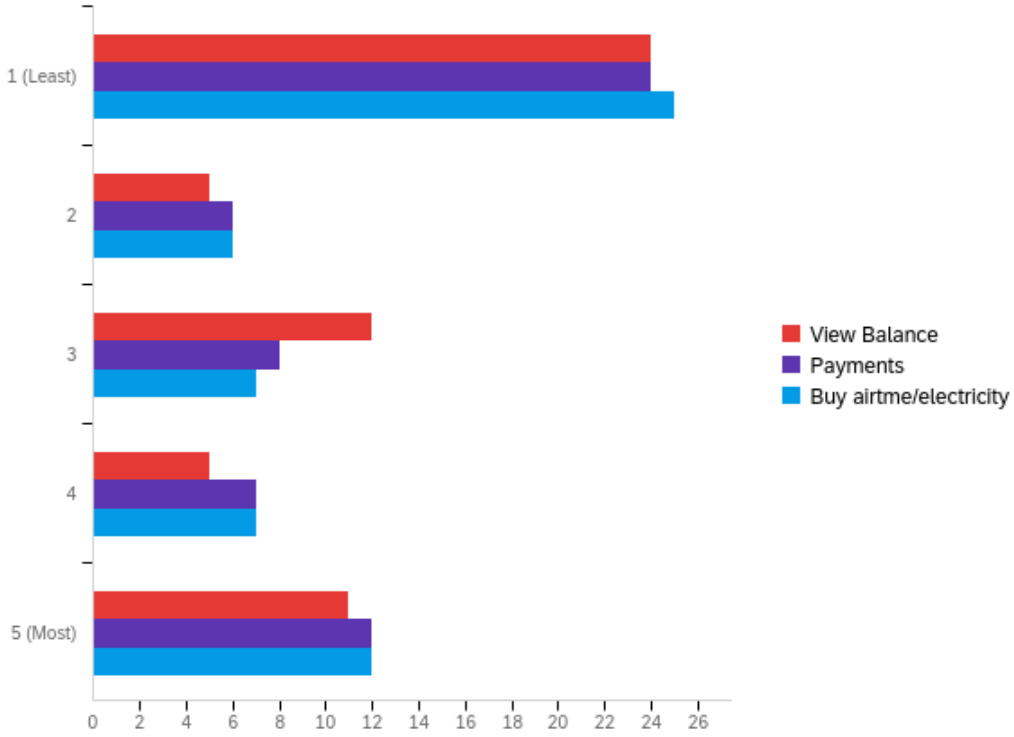
Q23 - I feel Chat banking is easy to access. Rate this statement on a scale of 1-5.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I feel Chat banking is easy to access. Rate this statement on a scale of 1-5.	1.00	5.00	3.81	1.12	1.24	57

#	Answer	%	Count
1	1 (least)	3.51%	2
2	2	12.28%	7
3	3	15.79%	9
4	4	36.84%	21
5	5 (Most)	31.58%	18
	Total	100%	57

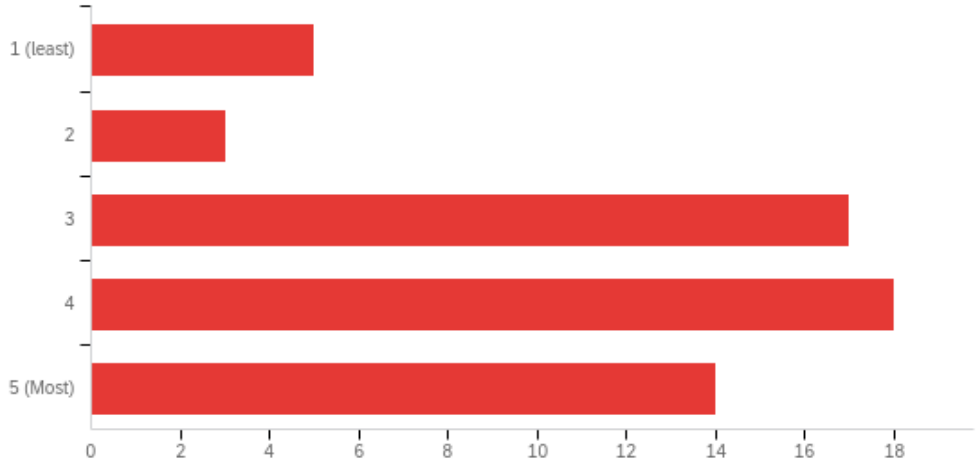
Q24 - What type of transactions do you process on Chat banking? Indicate on a scale of 1-5 which transaction YOU do the most.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	View Balance	1.00	5.00	2.54	1.56	2.42	57
2	Payments	1.00	5.00	2.60	1.61	2.59	57
3	Buy airtme/electricity	1.00	5.00	2.56	1.62	2.63	57

#	Question	1 (Least)		2		3		4		5 (Most)		Total
1	View Balance	42.11 %	24	8.77 %	5	21.05 %	12	8.77 %	5	19.30 %	11	57
2	Payments	42.11 %	24	10.53 %	6	14.04 %	8	12.28 %	7	21.05 %	12	57
3	Buy airtme/electricity	43.86 %	25	10.53 %	6	12.28 %	7	12.28 %	7	21.05 %	12	57

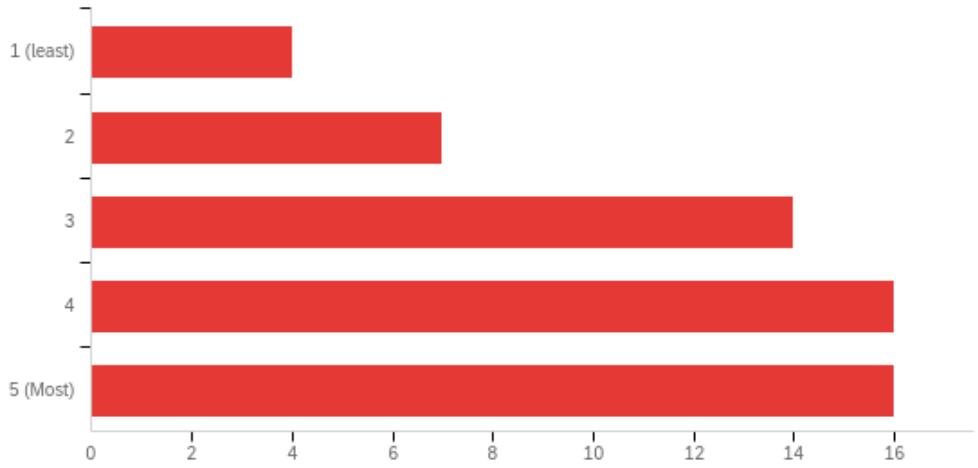
Q25 - I feel secure using Chat banking. Rate this statement on a scale of 1-5.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I feel secure using Chat banking. Rate this statement on a scale of 1-5.	1.00	5.00	3.58	1.17	1.37	57

#	Answer	%	Count
1	1 (least)	8.77%	5
2	2	5.26%	3
3	3	29.82%	17
4	4	31.58%	18
5	5 (Most)	24.56%	14
	Total	100%	57

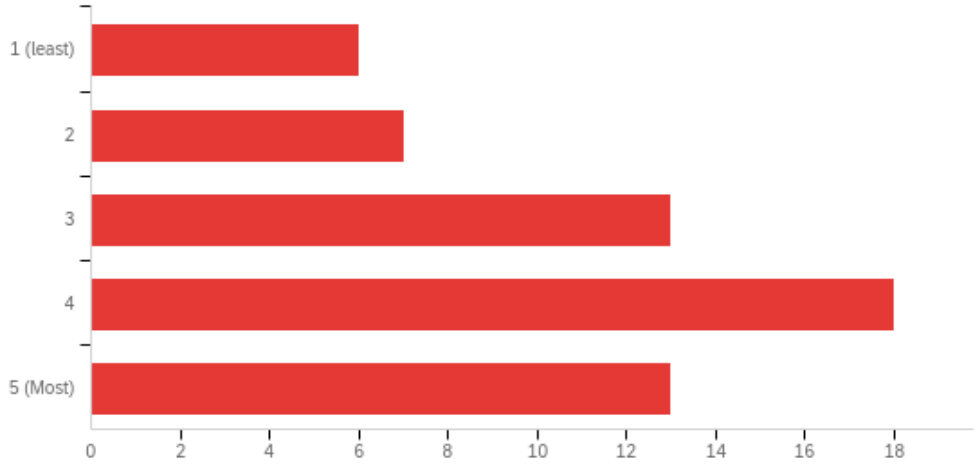
Q26 - Chat banking is efficient. Rate this statement on a scale of 1-5.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Chat banking is efficient. Rate this statement on a scale of 1-5.	1.00	5.00	3.58	1.21	1.47	57

#	Answer	%	Count
1	1 (least)	7.02%	4
2	2	12.28%	7
3	3	24.56%	14
4	4	28.07%	16
5	5 (Most)	28.07%	16
	Total	100%	57

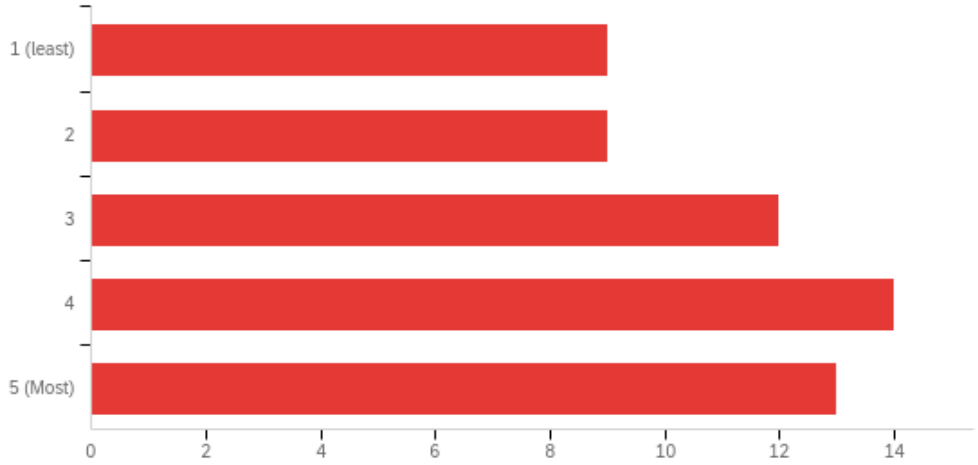
Q27 - Chat banking is very convenient for me. Rate this statement on a scale of 1-5.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Chat banking is very convenient for me. Rate this statement on a scale of 1-5.	1.00	5.00	3.44	1.26	1.58	57

#	Answer	%	Count
1	1 (least)	10.53%	6
2	2	12.28%	7
3	3	22.81%	13
4	4	31.58%	18
5	5 (Most)	22.81%	13
	Total	100%	57

Q28 - Chat banking saves me alot of time compared to other banking online channels? Rate this statement on a scale of 1-5.

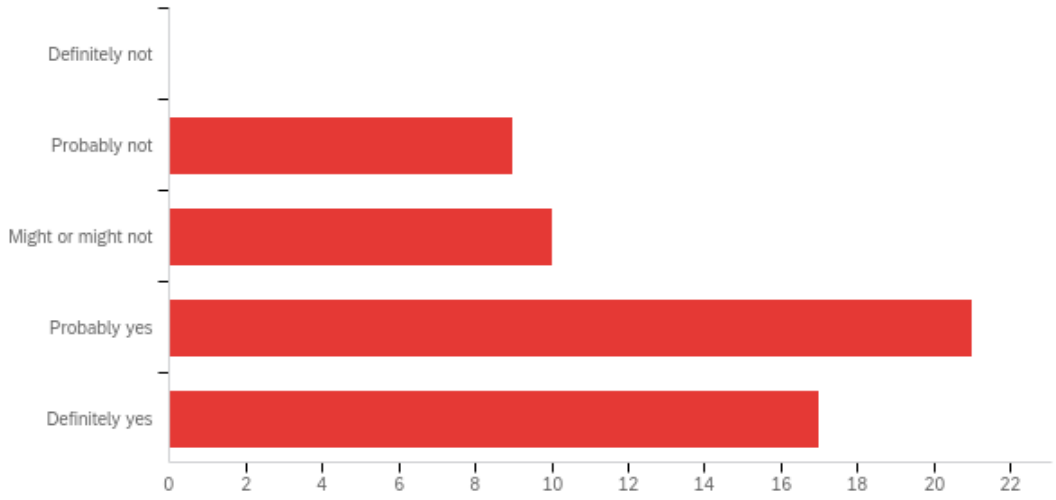


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Chat banking saves me alot of time compared to other banking online channels? Rate this statement on a scale of 1-5.	1.00	5.00	3.23	1.38	1.90	57

#	Answer	%	Count
1	1 (least)	15.79%	9
2	2	15.79%	9
3	3	21.05%	12
4	4	24.56%	14

5	5 (Most)	22.81%	13
	Total	100%	57

Q29 - Will you recommend Chat banking to others?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Will you recommend Chat banking to others?	2.00	5.00	3.81	1.03	1.07	57

#	Answer	%	Count
1	Definitely not	0.00%	0
2	Probably not	15.79%	9
3	Might or might not	17.54%	10
4	Probably yes	36.84%	21
5	Definitely yes	29.82%	17
	Total	100%	57

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