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An Evaluation of the Effectiveness of Namibian Banks' Competitive Strategies in Response to Technological Advancements: A Case Study

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Abstract

Purpose*:* The Namibian banking industry faces serious competition, making competitive strategy design a critical agenda. The banks must adjust their banking models, and strategies and align them to technological advancements in the industry. This study explores the impact of technology on the banking industry using Porter's Five Forces model. The five forces are customers' bargaining power, suppliers' availability of substitute products, rivalry in the industry, and new entrants in the industry. The study examined how advancing technologies influence competition and employee performance, particularly when the model is applied effectively.

Methodology*:* Using a quantitative, descriptive explanatory approach, data was collected via a 5-point Likert scale questionnaire from 269 randomly selected respondents, spanning various hierarchical levels. The data was analysed using SPSS and the results were presented in the form of frequencies percentages and tables and figures.

Findings*:* The study found that banks in Namibia have a stronger link between technology and the bargaining power of customers and a weaker relationship between technology and the bargaining power of suppliers. The study further found a likely awareness of technological usage by the bank's staff resulting in a demand for upskilling in digital banking solutions.

Unique contribution to theory, practice and policy: The study concluded that while Porter's Five Forces model remains relevant, its application must adapt to technological advancements to sustain competitive performance. Recommendations include training programs, strategic refinements, and proactive measures to mitigate competitive threats.

Keywords: *Porter's Five Forces Model, Bank, Competitive Advantage, Technology, Threat*

1. Introduction

Over the last decade, mobile devices have displaced desktops, with an expected 3 billion people using cell phones by 2010 (Lui, 2021). He goes on to state that by 2015, tablet computers and smartphones outpaced personal PCs in terms of internet usage. This broad use, along with global network advantages, has resulted in an explosion of mobile-based inventions that touch every part of human existence (Lui, 2021). Furthermore, the Fourth Industrial Revolution (4IR) transformed worldwide information and service delivery, resulting in quick revolutionary advances. Technology will have a significant influence on bank dynamics by increasing demand for value-driven products and services, and banks should be prepared to implement coping strategies (Rahman et al., 2021).

The Western world has seen technological giants' entrants into the banking and financial intermediary sector, such as Amazon, Apple Pay, and Google Pay, among the market leaders. With agility, these firms have embraced technological innovation and have built a broad customer base to their advantage (Bresciani et al., 2021; Poongodi et al., 2021). They have gained a competitive advantage in an industry that is slow in technological evolution adaptation (Bresciani et al., 2021; Potapova et al., 2022). According to Ndung'u (2022), Sub-Saharan African countries are among Africa's fastest financial technology (FinTech) innovators.

This influence in technology has introduced FinTech companies which are companies that seek to improve and automate the delivery and use of financial services (Lui, 2021). FinTech has been growing tremendously with a growth rate of 600 billion USD (Arslanian et al., 2019) with an anticipated financial transaction of 75 billion USD through wearable gadgets by 2025. FinTech offers innovative financial transaction and banking services systems through modern computer communication, data science, networking, and artificial intelligence. The financial service industry has concentrated on embracing FinTech as a strategic approach. This is the reason why the financial industry aims to identify the most appropriate skills in the potential of human resources which can lead to the adoption of FinTech (Bhutto et al., 2023). Bhutto et al., (2023) further say that it is worth noting that financial organisations need to maximise human resources competencies by fostering a positive attitude towards FinTech by embracing it.

The banking industry has experienced technological advancements, such as mobile banking products, digital wallets, and electronic platforms, namely, Apple Pay, Alibaba, Amazon Pay, and Mpesa, which are seen as a positive development (Mostafa., 2020; Ndung'u et al., 2021). Other disruptive innovations include Artificial Intelligence (AI), Robotics, Augmented reality (AR), and Big Data Analytics (BDA) (Hassoun et al., 2022). This has created a competitive environment for organisations to remain relevant and appealing to their target audience (Murinde et al., 2022). Based on this, organisations must develop competitive strategies to remain appealing, and competitive in the industry. The banks should be able to expand their range of business opportunities, move beyond products to data-driven services, and identify new markets (Subramaniam, 2022).

In Namibia, banks are struggling to capitalise on disruptive technological advancements, transforming the banking industry from traditional models to digitalisation (Thomas et al., 2019). These technological advancements have impacted banks and their competitive strategies (Unengu et al., 2022). However, most banks are not as agile as they could be, failing to create a competitive advantage and being left behind by more agile competitors (Nautwima et al., 2022). Agility is an organisation's ability to see and analyse changes and, to quickly make sound business decisions in an uncertain environment (Setiawati et al., 2022). Namibia's four major commercial banks, First National Bank, Standard Bank Namibia, Bank Windhoek, and Nedbank, face a threat from FinTech companies. To maintain market dominance, Namibian banks must adopt sustainable strategies, drive technological innovation, and evaluate their competitive strategies using Porter's Five Forces model (Asa et al.,2021). This study will be conducted on banks in Namibia.

1.1 Statement of the Problem

Regardless of the nature of impact of technology in the financial sector, its advancements are expected to continuously evolve thus impacting the employees (Qi, 2021). Technological advancement has replaced repetitive and monotonous tasks of human resources in the banking sector, allowing the work to be done faster and with great accuracy through automation and robotic interventions. This has spared time for employees to focus on new tasks such as relationship banking (Garg et al., 2022). Furthermore, more employees can use their creative skills in service innovation. These employees should assess the industry and create workable solutions for themselves and their customers (Bhutto et al., 2023). There are identified significant gaps of study in the preparedness of the commercial banking sector to confront technological advancement, highlighting the most significant risks and managerial insight (Rahman et al, 2021). Several authors and academics have complimented and criticised Porter’s Five Forces model by providing context for its application and execution in the banking industry (Indiatsy et al., 2014). In light of this, a shift in the industrial environment, industry structure, and the emergence of newer methodologies may have influenced how technology is applied and how Porter's Five Forces model affects the modern Namibian banking industry.

1.2 Research Objectives

1.2.1 To profile technological usage among employees in Namibian banks.

1.2.2 To determine the current competitive strategies in Namibian banks through the lens of Porter’s Five Forces.

1.2.3 To assess the effectiveness of Namibian banks' competitive strategies through the lens of Porter's Five Forces.

1.2.4 To assess the relationship between the competitive strategies and technology advancements of Namibian banks.

1.3 Scope of the Study

The study focuses on the assessment of the effectiveness of Namibian banks' competitive strategies focusing on Porter’s five forces in response to technological advancements.

1.4 Conceptual Framework

Figure 1 below presents the conceptual framework of the study:

Figure 1 Conceptual Framework

2.0 Literature Review

2.1 Theoretical Review

The study hinged on Porter five forces (P5F) theory, Michael Porter (1980) based on his book titled 'Techniques for Analysing Industries and Competitors where he defines competitive strategy as the long-term goal of an organisation to establish a sustainable competitive edge over other industry participants. P5F offers a framework for analysing the impact of the competition on the profitability of an industry and helps the business comprehend the industry's competitive landscape and make informed decisions. P5F framework focuses on analysing the industry and its position within the market, and effective competitive strategies demand a thorough understanding of the competitive dynamics that impact an industry's attractiveness. According to Vassileva (2017), the changing consumer behavior and purchase decision-making patterns could direct the banking industry to re-invent its competitive strategies.

2.2 Empirical Review

Seema (2016) emphasises that Porter's Five Forces influence the industry structure, regardless of whether the organisation takes them into account in its plans. Peter (2020 and Seema (2016) state that Porter's Five Forces influence the performance of an organisation. Erlindawati et al., (2023) argue that banks require the correct strategy to retain their survival in the rapid growth of fintech. Competitive strategies are important as they enable the bank to overcome the competitive hurdles it faces in the industry and be more appealing. Banks must also be agile in implementing new

technology (Amini et al., 2023; Thomas, 2019*)*. Advancement in digital innovation has been ushered in by the Fourth (4IR) and Fifth (5IR) Industrial Revolutions. According to Isabelle et al., (2020), due to technological advancements, theories might have shifted from competing in an existing competitive environment to seeking chances in new markets. Son et al., (2020) agree with the paradigm shift in the banking industry caused by technological advancement. He argues that the paradigm shift has affected the nature of businesses including banking and has changed the conventional financial services operating systems which offline employed-oriented services had dominated. However, according to Mutuku et al., (2015), Kitsios et al., (2021), and Mazurchenk et al., (2022) training is needed on the usage and application of new technology for bank employees. The authors further agree that the employees need guidance on the new technology to smoothly transition to the new era. Providing training and guidance will help employees adopt a positive attitude towards the organisation. Li (2022) alludes to employees using digital technologies such as Augmented Reality to provide realistic simulations to help them upskill and master new tasks.

2.3 THEORETICAL FRAMEWORK

2.3.1 Michael Porter Competitive Analysis Model

The competitive forces in an industry can be identified and analysed using Porter's Five Forces as a strategic decision-making tool (Shvindina et al., 2015; Porter, 1980). P5F elements are; 1) the threat of new entrants; 2) the Availability of substitutes; 3) the bargaining power of the customers; 4) the bargaining power of the suppliers; 5) Rivalry among existing rivals within the industry and how they relate to technological advancements. The model can help an organisation to understand its current competitive position in the market, its strength, the position it wants to move into, and for management to make strategic decisions. Moreover, P5F can evaluate how appealing the industry is, with industry competitiveness and profitability being influenced by all five competitive forces. From the strategy development perspective, the dominant force becomes crucial (Dag et al., 2022; Porter, 1980). Porter advises the strategist that the objective is to identify and manage the competitive landscape by taking a closer look at the rivals (Porter, 1979).

Using the P5F model to estimate the level of competition and potential profitability can help organisations better understand who holds power in the industry. However, Diane et al., (2020) argue that Porter's Five Forces are deeply rooted in the past, and static and cannot be utilised in a dynamic agile environment. However, Porter's Five Forces are not static but rather dynamic and the failure to use them could lead to poor profits for an organization (Gerard et al., 2019). Mateja, (2019) and Nana et al., (2018) pointed out the effectiveness of Porter's Five Forces claiming that each industry will use strategies that best suit that industry. However, the concept of porters five forces does not speak to the advantages or problems of specific organizations, lacks collaborative business concepts does not work well in the rapidly evolving business environments,

However, Mugo (2020 and Seema (2016) state that Porter's Five Forces influence the performance of an organisation. Dag et al. (2022) also agree that Porter's Five Forces model are still a powerful tool for thoroughly examining the market structure and environmental factors. Dag et al., (2022)

further express that the model also determines the organisation's profitability and appeal in the industry and that the flexibility of the framework helps to describe and assess competitive pressure. Seema (2016) emphasises that Porter's Five Forces influence the industry structure, regardless of whether or not the organisation takes them into account in its plans. The well-known model provides organisations with a tactical framework to better position themselves to gain a competitive advantage (Renata et al., 2014; Somayeh et al., 2020,). Lastly, Porter's framework explains how an organisation could erect barriers in the market and choose the most practical course of action to gain a competitive advantage.

According to Diane et al., (2020), due to technological advancements, theories might have shifted from competing in an existing competitive environment to seeking chances in new markets. New approaches to strategic modelling, such as anticipating the future, communicating with customers, and producing long-term value through innovative techniques. These forces will help the bank to evaluate the effect of technology on the bank's profitability.

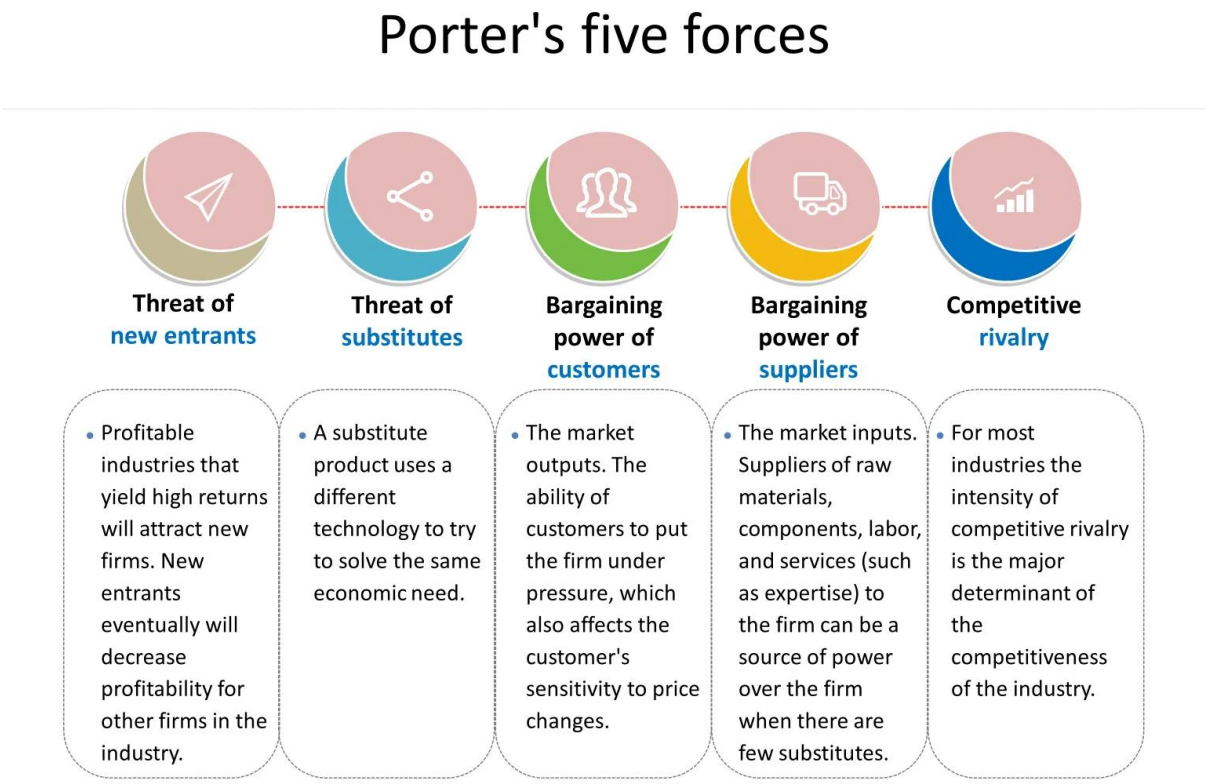

Figure 2 Porter's Five Forces

Source: https://jarthur.co/increase-prof 1

2.3.1.1 Threat of New Entrants

The threat of New Entrants, also known as the danger of new competitors, is the first force that affects the banking industry. The New Entrants refer to the potential of new competitors or rivals joining the sector and intensifying the competition in the industry (Resa., 2024). Since there is a

pattern of new arrivals becoming more popular in the financial market, banks and financial service providers are experiencing more direct competition from FinTech companies. According to Isabelle et al., (2020), organisations can compete globally without being physically present in the market and are much less capital-intensive and more easily scalable. Organiations are motivated to increase their market share when new players enter the market because they have more capabilities Boafo et al., (2018). In the financial industry, new players such as FinTech and Big-tech companies are considered new entrants. These organisations provide the same services as traditional banks (Broby, 2021; Ismayilov et al., 2023). However, FinTech companies operate with lower costs and are gradually taking customers away from traditional banks. The New Entrants force looks at cost advantage, switching cost, capital requirements, industry regulations, and capital requirements.

According to Porter (1990) and Isabelle et al., (2020), because of the new capacity, the desire to gain market share, low entry costs, and flexible licensing regulations, while the risk seems low and the profits promising, more players are joining the industry. Because of the industry's low entry hurdles, insurance companies, retail enterprises, and stock-broking organisations are making major inroads into what was once recognised as traditional banking sectors (Worthington, 2015). These potential challengers pose a considerable threat to the established banks.

Another factor affecting New Entrants in the industry is the switching cost of products and services. According to Heinsalu (2021), the switching cost is the cost involved when a customer switches from one organisation to another. He adds that during the switching process, clients may incur switching expenses in terms of money, effort, and time. In the banking industry, switching expenses might include the cost of opening a new account, transferring funds, or even registering for digital banking services. These can make it difficult for customers to switch to other service providers. Aanchal et al., (2022) state that this would be challenging for customers to switch to competing financial products or services.

However, due to commercial pressure in the industry, organisations are also sharing the drive for cost efficiency due to technological advancements. Some banks have shut down certain branches and are now utilising alternative customer contact points, such as supermarkets, installing more ATMs for deposits, and enhancing the capabilities of online and mobile banking. (Tiwari et al., 2022; NAGORNY, 2020; Cho et al., 2023)

According to Xhavit et al., (2019) and Shvindina, (2015), incumbent organisations in the industry must erect significant barriers to prevent new entries. When the market entry costs are low, New Entrants present a significant threat because existing firms are less likely to retaliate. In cases when existing firms lack patents, trademarks, or established brand reputation, customer switching costs are cheap, customer loyalty is low since products are practically identical, and economies of scale are easily produced (Porters, 2008)

Considering the above, banks must employ competitive intelligence to be a step ahead of their competitors. Utilising competitive intelligence is not only a tool to guard against competitor threats, but it is also a mechanism for unearthing new opportunities and market trends. This

intelligence can be leveraged by a bank to gain and sustain a competitive edge. With advanced technology to enhance competitive intelligence, the bank should be able to detect threats early and proactively develop appropriate strategies.

2.3.1.2 Availability of Substitutes

The second force among Porter's Five Forces is the availability of substitute goods or services. Sardana et al., (2018) suggests substitute products or services pose a danger to the profitability of an industry since customers may choose to purchase the substitute products or services offered by competitors. The Internet has become the substitute for physical banking halls as customers now use online banking services eliminating the need to go to physical branches. Sardana et al., (2018) further indicate that many customers now prefer to use their mobile wallets over their bank accounts, which is a threat in the banking industry as bank generate their profits from service fees and accounts management fees. Mobile wallets are electronic payment platforms that let users use their smartphones to complete transactions. In comparison to conventional banking methods, mobile wallets provide traceability, cost-effectiveness, and simplicity, enhancing the sustainability of payment services (Egemen et al., 2022). Mobile wallets can change how customers make transactions, improve their shopping experience, and change how banks operate.

Several advancements have emerged in the financial industry, such as international payment systems enhancing the ease of transacting. The evolution of electronic trading (e-money) as an alternative form of payment could be a substitute for the traditional form of money (Misati et al 2014). The world is moving towards a cashless society and consistently reducing cash payments (Varga, 2017; Engert et al., 2018; John, 2020).

Technological advancement will allow banks to reach a wide range of customers through technological advancement tools. However, in Namibia, most of the population lives in rural communities making banking services unavailable or limited. Even though users who live in rural areas enjoy banking through their mobile phones or wallets, they face challenges with network and mobile device challenges (Arora et al., 2021). Addressing the network challenges requires IT tools and network infrastructure, but another challenge is that most customers will not have the literacy to use technology (Khuan, 2022). Wewege et al (2020) claim that major network-based technology companies like Facebook or Amazon, will use mobile-cloud-based platforms to provide to more than one billion adults who are underbanked or unbanked with financial inclusion. These platforms will replace traditional banks by providing essential financial services like money transfers, remittances, payments, and microfinance.

2.3.1.3 Bargaining Power of the Customers

The third force is the Bargaining Power of the Customers. This refers to how influential customers are in the industry, and the ability they have to negotiate prices and switch to competitors. The bargaining power of the buyers undoubtedly demonstrates that buyers represent a competitive force since they can demand quality, more service, bid down prices, speculate, and play competitors off not in favour of each other, this results in the negative impact on the bank's

profitability (Porter, 1998). The power of every purchaser is determined by various aspects of its market position and the significance of its customers to the industry's overall operations. Customers can put pressure on banks thus influencing their pricing strategies, the volume of business, and potential profits. Customers have many options to choose from due to the large amount of FinTech and easy access to information (Dede, 2020). According to Sardana et al., (2018), the bargaining power of the customers is the major turn-on of technology-based banking derived from the anytime, anywhere availability of banking services. IT firms are under pressure to satisfy ever-evolving customer demand and expectations for digital customer experience. As a result, the industry is under pressure to take the lead in finding business solutions. According to (Resa., 2024), the Bargaining Power of the Customers force looks at elements like bargaining leverage, buyer volume, buyer information brand identity, and product differentiation.

Customers are putting pressure on banks to provide high-quality services and better customer services at lower costs. The customers have significant power to negotiate prices and product offerings with the banks. Advancements in technology have given customers an upper hand and organisations are tailoring their prices and marketing efforts to individual preferences (Adam et al., 2021). Pavithra, (2021) urges that a new generation of customers is not willing to go into physical branches for banking services. As such, banks are continuously enhancing their technologies to increase engagement with these customers.

The extent of customer engagement with FinTech in the financial industry is anticipated to vary from that seen in advanced market economies because of differences in their levels of institutional development (Ross et al., 2016). FinTech faces institutional adversity due to challenges like a lack of market and market-supporting institutions, poor quality of communication services, a low degree of internet coverage, and poor network infrastructures and specialised intermediaries (Alemayehu et al., 2023)

According to Solomon et al., (2023), in Africa, the majority of the population has no access to banking services and products, and only 20% of African families have bank accounts. Solomon et al., (2023) say there is limited access to financial services in Africa stemming particularly from deficient ICT infrastructure, geographical isolation, or inaccessibility of financial illiteracy even those with bank accounts often face high charges for moving their cash around, due to high transactional costs.

It is due to this gap in the financial industry market that is creating a unique niche for mobile phone banking to develop on the continent enabling many people to access financial services for the first time. In this context, new technology-based financial services such as mobile phone banking, the use of smart cards, electronic wallets, and tap-n-go have the potential to substantially increase people’s access to finance. Wanof (2023) agrees that not all low-income communities have access to digital devices or adequate internet connectivity. He also contends that for digital technology innovation to be genuinely impactful in improving access to finance, governments, financial institutions, and other stakeholders need to collaborate on IT infrastructure, digital literacy, security, and privacy.

2.3.1.4 Bargaining Power of the Suppliers

The fourth force is the Bargaining Power of Suppliers in the industry. Suppliers' bargaining power refers to the supplier's negotiation strength and their influence in the market. It also includes their capacity to set prices or restrict the availability of essential resources needed to provide a service (Resa., 2024). Huang et al. (2019) define a supplier's negotiating power as their capacity to offer goods or services at a profit and under advantageous conditions. He further stresses that a supplier might exert pressure on an industry by raising the prices of the banks' services. Suppliers in the banking industry include providers of automated teller machines, cash management companies, the trade union for the provision of labour, IT consultants for software upgrades of its infrastructure maintenance, and cleaning companies, to name just a few (Mohammad et al., 2022; Isabelle et al., 2020).

Other suppliers such as data aggregators and ICT providers enjoy immense bargaining power as the main suppliers of data and mobile networks required to make financial decisions. These include TransUnion, Reserve Bank, and mobile networks. TransUnion is one of the consumer reporting organisations that offers a set of variables that provides aggregations at different levels of consumer credit evaluation (Hiller et al., 2022). This makes it possible for credit or service providers to make prompt, dependable, and impartial banking judgments. The aggregation is done by gathering data on an individual's credit lines from lenders, services, and public sources to individual credit reports (Shahidinejad et al., 2022).

The Bank of Namibia (BON), as the supplier in the industry, is mandated to support price stability, an effective banking supervisory system, an efficient payment system, reserve management, and economic research to proactively provide pertinent, trustworthy, and legitimate financial and fiscal advice to all stakeholders (Bank of Namibian Act., 2020). According to Misati et al., (2014) and BON., (2020), central banks need to closely monitor the development of financial technology as they may have significant implications for their role. Central banks might need to change their requirements and procedures from time to time to respond to the demand for financial innovation and ensure the sustainability of the financial system. Changes in regulations and reserve controls can have an impact on the banking industry. For instance, even a small increase in interest rates could make loan facilities less affordable, leading to losses and provisions for banks.

In a sharing economy, suppliers can use their bargaining power to accelerate or slow the adoption of a digitally based business model. The sharing economy or the collaborative economy is an important global trend is leading organisations beyond what they have experienced as customers, employees, owners, and communities. This is based on the ability of an organisation to share its possessions, services, and needs (Djevojić et al.,2021).

The primary force behind sharing economies has been technology. It has simplified economic operations and reduced transaction costs by making them more affordable. Diamond et al., (2019) agree that sharing economies are beneficial for the banking industry in three ways. Firstly, the global ecosystem's interconnected economy is impacted by market platforms that may serve as reliable revenues for financial and economic transactions amongst various stakeholders. FinTech's

user-friendly technology facilitates these transactions in the industry. Secondly, platforms for business processes facilitate redesigned, frequently smart applications that can address issues that may be shared by different players in the ecosystems, such as banks. Businesses that leverage open cloud-native technologies to penetrate traditional markets and transcend product and service boundaries

Lastly, technology platforms such as ICT infrastructure providers and conventional outsources providers embracing new cloud technologies offer flexible and robust infrastructure that may help banks thrive in the service economy (Davlembayeva et al., 2020; Gong et al., 2020; Khan et al., 2020). Banks may encounter issues with their suppliers, including slow transaction processing, network speed, and connectivity problems. These issues can impact banking operations if there is inadequate technology infrastructure or if servers are overburdened beyond their capacity (Ebrahim et al., 2022).

2.3.1.5 Rivalry among Existing Banks

The last competitive force is Rivalry among Existing banks in the industry. The intensity of this rivalry reflects the degree of competitiveness amongst the industry's current organisations to steal market share from one another. According to Medlin et al., (2015), when two or more organisations seek a common goal such as market share or profit, they are engaged in competition, and they are rivals. The more intense the rivalry among the competitors in the industry, the more threat it will create to profitability, and the lesser the power of rivalry in the industry, the lesser the threat will be. Porter (1985) asserts that when there is severe competition among present rivals, industry profitability drops, and organisations may turn to strategies such as price wars and new product development, marketing efforts, and service improvements. According to Amit (2018), the competitive structure, industry demand, exit obstacles, and cost structure are some of the factors that determine how fiercely banks compete in the industry.

The quantity and size of rivals within an industry are referred to as its competitive structure. The level of rivalry increases with the number of organisations in the market offering the same goods or services (Jasmina, 2015). According to Kandaswamy et al., (2018), the Namibia banking industry is anticompetitive. In Namibia, there are four major banks in the industry: Standard Bank Namibia, First National Bank, Bank Windhoek, and Nedbank Namibia. Therefore, there is a need for foreign banks to enter the industry to maintain a level playing field. According to Mbazima-lando et al., (2020) and Arora et al., (2021), the financial system in Namibia demonstrates that despite its soundness and efficiency, there is a structural weakness that must be fixed for the sector to significantly improve the nation's economy. The weakness includes limited competition, insufficient and ineffective regulations, limited access to financial services, limited skills, lack of consumer protection, law participants by Namibian-owned banks, and thus dominance of foreign ownership.

Technological advancement undoubtedly creates new rivalry in the banking industry and increases the number of competitors. According to Suzuki et al., (2022) and Polyzos et al., (2023), the banks have been in direct or indirect competition with mobile money service providers, FinTech, and

other financial platforms in terms of product quality, pricing, and convenience resulting in improved industry performance. Peer-to-peer lending, crowdfunding, and other forms of funding have further escalated the rivalry in the banking industry and conventional banks no longer ignore these advancements in technology. The banking sector now has a new competitive landscape because of the proliferation of digital banks.

The explanation provided implies that the industry demand will determine how fiercely an organisation competes in that market. This refers to the collective demand for products and services in the industry. According to Kangwa et al., (2021), technology advancement in the banking industry has a major impact on collective demand. The use of electronic banking technologies improves the productivity, product and service quality, and profitability performance of banks. He goes on to argue that the industry's rivalry between conventional banks has given place to technical competitiveness which no longer downplays the existence of digital banking. To compete and exceed customers' expectations, banks must accelerate the development of digital banking to enable them to provide simpler and faster services.

Exit barriers are another determinant of the rivals in the banking industry. These are economic, strategic, and emotional factors that create obstacles for organisations from leaving the industry thus creating competition (Resa., 2024). According to Stephanos et al., (2015), there are obstacles to exiting the industry which force organisations to stay in the industry even when the profits are low. These obstacles make it difficult for organisations to recover huge investments they made. The organisations have assets such as machinery, equipment, buildings, and operation facilities that need to be written off when an organisation exits the industry and the legal cost that comes with revoking licenses. Other fixed costs associated with leaving the industry include severance pay, health benefits, pensions, and emotional attachments to the industry (Indiatsy et al., 2014)

The final determinant of rivalry in the industry is the cost structure. This is the funding structure of the various operations in an organisation. According to Scott et al., (2017), adopting digital banking has enhanced their cost efficiency due to the cheaper availability of inputs. Technology has reduced the cost of banking. Likewise, FinTech can lead to increased profitability, reduced operating costs, strengthened risk control capabilities, and improved revenue for banks (Mugabe., 2022; Lee et al., 2021; Yu et al., 2021). These mechanisms have made the industry attractive for new players thus increasing competition.

3.0 Methodology

3.1 Research Design

This study employed a descriptive explanatory research design as alluded to by Faryadi (2019) is a predetermined path for data collection. Measurement and analysis to answer the question on the subject in the study.

3.2 Population

According to Sekaran et al., 2016, a population is a well-defined participant that is being investigated. The population of 1050 employees of Namibian banks were being investigated.

3.3 Sample

Determining the sample size is guided by numerous approaches (Hennink et al., 2022). The study sampled 267 respondents using a stratified sampling technique.

3.4 Data Collection Procedure

To establish the effectiveness of competitive strategies adopted by banks in Namibia concerning technological advancements, questionnaires were administered utilizing Google Forms. The forms were distributed via a link sent to the respondents by email. The choice of the instrument was because it makes it economical to get adequate and accurate information for the study.

3.5 Data Analysis and Presentation

Data was analysed using SPSS v 28. The data was coded and profiled to enable the responses to be grouped into various categories. Descriptive statistics such as frequency and percentages were used. Tables and figure presentation as well as multiple regression analysis were also adopted in the study.

4.0 Findings and Discussions

The questionnaires were administered to 269 respondents, and only 207 responded representing a 76% response rate. Ali et al., (2021) and Wu et al., (2022) state that a response rate of 44% is an acceptable rate to determine quality, validity, and make sense of the study and that a targeted response was reached and they answered the survey.

4.1 Technological usage among employees in Namibian banks

Table 1: Technological usage among employees in Namibian banks

Technologies	Number of respondents	Mean	Std. Deviation
Banking Apps	206	3.21	1.358
Blockchain	204	3.26	1.015
Robots	207	3.12	1.269
ATMs	207	3.19	1.144
Website	204	3.17	1.112
Digital platforms	204	3.31	1.139
Big Data Analytics	206	3.27	1.052
Fintech technologies	203	3.25	0.970
Artificial Intelligences	205	3.19	0.954
Augmented reality	207	3.20	1.339
EFTs	207	3.20	1.400
System down time	204	3.25	1.137
Tech skills	203	3.31	1.141
Total		**3.22**	**1.17**

The results revealed that respondents assessed Namibian Bank's technologies as fairly satisfactory (average mean 3.22, Std. Dev = 1.17). these results indicate that there is a fair satisfaction with the availability of technological advancements in the Namibian banking industry.

4.2 Current competitive strategies in Namibian banks

Table 2. Levene's Test of New Entrants

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Technology	Equal variances assumed	1.064	.307	-1.290	54	.101	.203	-.384	.298	-.981	.213
	Equal variances not assumed			-1.216	31.138	.117	.233	-.384	.316	-1.028	.260

Summary

1. There is no significant difference in means for both assumptions (two-tailed p = 0.203 for equal variance assumed and p 0.233 for equal variance not assumed).
2. Hypothesis 1 (H1) suggests no relationship between technology and new entrants.
3. We fail to reject the null hypothesis.

Table 3. Leven's Test of the Bargaining Power of Customers

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Technology	Equal variances assumed	.226	.636	-4.612	61	<.001	<.001	-1.006	.218	-1.442	-.570
	Equal variances not assumed			-4.623	60.017	<.001	<.001	-1.006	.218	-1.441	-.571

Summary

1. There is a significant difference in means for both assumptions (two-tailed p = <0.001 for equal variance assumed, and p = <0.001 for equal variance not assumed.
2. Hypothesis 2 (H2) suggests a relationship between technology and the bargaining power of customers.
3. We reject the null hypothesis.

Table 4. Levene's Test of the Bargaining Power of Suppliers

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Technology	Equal variances assumed	.217	.643	-.543	51	.295	.590	-.188	.347	-.886	.509
	Equal variances not assumed			-.507	18.400	.309	.618	-.188	.372	-.968	.591

Summary

1. There is no significant difference in means for both assumptions (two-tailed p = 0.590 for equal variance assumed and p = 0.618 for equal variance not assumed).

2. Hypothesis 3 (H3) suggests that no relationship exists between technology and the bargaining power of suppliers.
3. We fail to reject the null hypothesis.

Table 5. Levene's Test for the Availability of Substitute

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Technology	Equal variances assumed	1.174	.282	-.827	67	.206	.411	-.224	.271	-.764	.317
	Equal variances not assumed			-.815	60.148	.209	.418	-.224	.275	-.773	.326

Summary

1. There is no significant difference in means for both assumptions (two-tailed p = 0.411 for equal variance assumed, and p = 0.418 for equal variance not assumed.
2. Hypothesis (H4) suggests that no relationship exists between technology and the availability of substitutes.
3. We fail to reject the null hypothesis.

Table 6. Levene's Test for Rivalry in the Existing Industry

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Technology	Equal variances assumed	.244	.623	-.730	72	.234	.468	-.198	.272	-.740	.343
	Equal variances not assumed			-.722	57.600	.237	.473	-.198	.275	-.749	.352

Summary

1. There is no significant difference in the mean for both assumptions (two-tailed p = 0.468).
2. Hypothesis 5 (H5) suggests that no relationship exists between technology and the rivalry of banks.
3. We fail to reject the null hypothesis.

4.3 The effectiveness of Namibian banks' competitive strategies

Table 7. Descriptive Statistic of New Entrants

	N	Mean	Std. Deviation
New Entrants	206	3.18	1.246
New Entrants	205	3.29	1.086
New Entrants	206	3.35	1.252
New Entrants	206	3.34	1.118
New Entrants	203	3.26	1.209
New Entrants	204	3.20	1.425
New Entrants	204	3.28	1.194
New Entrants	206	3.23	1.226
New Entrants	205	3.23	1.165
New Entrants	206	3.17	1.330
Valid N (listwise)	197		
Average mean	205	3.25	1.22

Table 7. shows the results of the respondents' assessment of the new entrants in the industry which is a determinant of competitive strategy as fair and satisfactory (average mean=3.25, std=1.22). This was attributed to the fact that most respondents neither agreed nor disagreed. The employees in the industry were not fully convinced that their bank was aware of new players entering the financial sector.

Table 8. Descriptive Statistics of the Bargaining Power of Customers

	N	Mean	Std. Deviation
Bargaining Power of Customers	206	3.19	1.321
Bargaining Power of Customers	203	3.19	1.204
Bargaining Power of Customers	206	3.18	1.171
Bargaining Power of Customers	206	3.17	1.209
Bargaining Power of Customers	206	3.21	1.173
Bargaining Power of Customers	206	3.23	1.165
Bargaining Power of Customers	204	3.18	1.175
Bargaining Power of Customers	205	3.24	1.149
Bargaining Power of Customers	205	3.25	1.182
Bargaining Power of Customers	205	3.26	1.136
Bargaining Power of Customers	206	3.33	1.245
Bargaining Power of Customers	206	3.27	1.174
Bargaining Power of Customers	204	3.22	1.189
Valid N (listwise)	196		
Average mean	205	3.22	1.19

Table 8. shows the results of the respondents' assessment of the customers in the industry which is a determinant of competitive strategy as fair and satisfactory (average mean=3.22, std=1.19). This was attributed to the fact that the majority of the respondents neither agreed nor disagreed. The employees in the industry do not entirely agree that the customers hold the bargaining power in the industry.

Table 9. Descriptive Statistics for Bargaining Power of Suppliers

	N	Mean	Std. Deviation
Bargaining Power of Suppliers	206	3.18	1.065
Bargaining Power of Suppliers	205	3.26	1.097
Bargaining Power of Suppliers	204	3.32	1.052
Bargaining Power of Suppliers	204	3.37	.935
Valid N (listwise)	200		
Average mean	204	3.28	1.03

Table 9. shows the results of the respondent's assessment of the bargaining power of suppliers in the industry which is a determinant of competitive strategy as fair and satisfactory (average mean=3.28, std=1.03). This was attributed to the fact that most respondents neither agreed nor disagreed that there is rivalry in the industry. The employees in the industry do not entirely agree that the suppliers hold significant bargaining power in the industry.

Table 10. Descriptive Statistics for the Availability of Substitutes

	N	Mean	Std. Deviation
Substitutes	205	3.29	1.057
Substitutes	206	3.32	1.097
Substitutes	203	3.36	.972
Substitutes	203	3.26	1.078
Substitutes	205	3.29	1.125
Substitutes	205	3.30	1.270
Substitutes	205	3.14	1.326
Substitutes	205	3.20	1.153
Substitutes	206	3.18	1.210
Valid N (listwise)	195		
Average mean	204	3.26	1.14

Table 10. shows the results of the respondents' assessment of the availability of substitute products in the industry which is a determinant of competitive strategy as fair and satisfactory (average mean=3.26, std=1.14). This was attributed to the fact that most respondents neither agreed nor disagreed. This means employees in the industry do not fully agree that substitute products are available in the financial sector.

Table 11. Descriptive Statistics for Rivalry Among Existing Banks

	N	Mean	Std. Deviation
Rivalry of Banks	206	3.14	1.499
Rivalry of Banks	205	3.29	1.156
Rivalry of Banks	205	3.26	1.157
Rivalry of Banks	206	3.17	1.148
Rivalry of Banks	207	3.20	1.400
Rivalry of Banks	207	3.19	1.445
Rivalry of Banks	206	3.17	1.509
Rivalry of Banks	207	3.22	1.237
Valid N (listwise)	203		
Average mean	206	3.20	1.31

Table 11. shows the results of the respondents' assessment of the rivalry of banks in the industry which is an element of competitive strategy as fair and satisfactory (average mean=3.20, std=1.31). This was because most of the respondents neither agreed nor disagreed that there is rivalry in the industry. The employees in the industry do not fully agree that there is competition within the financial sector.

4.4 The relationship between the competitive strategies and technology advancements

Table 12. ANOVA

a. Dependent Variable: Technology

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	82.674	5	16.535	18.364	<.001[b]
	Residual	175.575	195	.900		
	Total	258.249	200			

b. Predictors: (Constant), Bargaining Power of Suppliers, Substitutes, New Entrants, Bargaining Power of Customers, Rivalry of Banks. The F-ratio in the following ANOVA table determines if the overall regress model is a good match to the data. The table demonstrates that the independent variable statistically substantially predicts the dependent variable with a p-value of.001, indicating that the regression model fits the data.

Table 13. Coefficient

Coefficients[a]

Model		Unstandardised Coefficients		Standardised Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	1.111	.259		4.291	<.001	.601	1.622
	Rivalry of Banks	-.002	.076	-.003	-.030	.976	-.153	.148
	Substitutes	.185	.080	.172	2.312	.022	.027	.342
	New Entrants	.052	.082	.055	.631	.529	-.110	.213
	Bargaining Power of Customers	.311	.078	.362	3.975	<.001	.157	.466
	Bargaining Power of Suppliers	.093	.080	.089	1.166	.245	-.065	.251

a. Dependent Variable: Technology

Table 14. Correlations

Correlations

		Technology	Rivalry Banks	Bargaining Power of Suppliers	Substitutes	New Entrants	Bargaining Power of Customers
Technology	Pearson Correlation	1	.424**	.353**	.437**	.431**	.568**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	205	205	204	203	204	202
Rivalry of Banks	Pearson Correlation	.424**	1	.581**	.532**	.671**	.571**
	Sig. (2-tailed)	<.001		<.001	<.001	<.001	<.001
	N	205	207	206	205	206	204
Bargaining Power of Suppliers	Pearson Correlation	.353**	.581**	1	.410**	.528**	.443**
	Sig. (2-tailed)	<.001	<.001		<.001	<.001	<.001
	N	204	206	206	204	205	203
Substitutes	Pearson Correlation	.437**	.532**	.410**	1	.491**	.501**
	Sig. (2-tailed)	<.001	<.001	<.001		<.001	<.001
	N	203	205	204	205	205	203
New Entrants	Pearson Correlation	.431**	.671**	.528**	.491**	1	.571**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001		<.001
	N	204	206	205	205	206	204
Bargaining Power of Customers	Pearson Correlation	.568**	.571**	.443**	.501**	.571**	1
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	<.001	
	N	202	204	203	203	204	204

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

Summary

The correlation matrix provided in Table 14 offers a detailed overview of the relationships between technology and various factors affecting the banking industry, such as the rivalry of banks, the bargaining power of suppliers, the bargaining power of customers, new entrants, and the availability of substitutes. The ratings are as follows:

$0 \leq |p| \leq 0.19$ = No correlation

$0.20 \leq |p| \leq 0.39$ = Very weak correlation

$0.40 \leq |p| \leq 0.59$ = Moderate correlation

$0.60 \leq |p| \leq 0.79$ = Strong correlation

$0.80 \leq |p| \leq 1.00$ = Very strong correlation

The following are the insights of the study:

1. Technology:

1.1 There is a moderate correlation with the rivalry of banks ($r = 0.424$, $p < 0.001$).
1.2 There is a very weak correlation with the bargaining power of suppliers ($r = 0.353$, $p < 0.001$).
1.3 There is a moderate correlation with substitutes ($r = 0.437$, $p < 0.001$).
1.4 There is a moderate correlation with new entrants ($r = 0.431$, $p < 0.001$).
1.5 There is a moderate correlation with the bargaining power of customers ($r = 0.568$, $p < 0.001$).

2. **New Entrants:**

2.1 There is a moderate correlation with technology ($r = 0.431$, $p < 0.001$).
2.2 There is a moderate correlation with the bargaining power of customers ($r = 0.571$, $p < 0.001$).
2.3 There is a strong correlation with the rivalry of banks in the industry ($r = 0.671$, $p < 0.001$).
2.4 There is a moderate correlation with the bargaining power of suppliers ($r = 0.528$, $p < 0.001$).
2.5 There is a moderate correlation with substitutes ($r = 0.491$, $p < 0.001$).

3. Bargaining Power of Customers:

3.1 There is a moderate correlation with technology ($r = 0.568$, $p < 0.001$).
3.2 There is a moderate correlation with new entrants ($r = 0.571$, $p < 0.001$).
3.3 There is a moderate correlation with the rivalry of banks ($r = 0.571$, $p < 0.001$).
3.4 There is a moderate correlation with the substitute ($r = 0.501$, $p < 0.001$).
3.5 There is a moderate correlation with the suppliers ($r = 0.443$, $p < 0.001$).

4. Bargaining Power of Suppliers:

4.1 There is a very weak correlation with technology ($r = 0.353$, $p < 0.001$).
4.2 There is a moderate correlation with substitutes ($r = 0.410$, $p < 0.001$).
4.3 There is a moderate correlation with new entrants ($r = 0.528$, $p < 0.001$).
4.4 There is a moderate correlation with the bargaining power of customers ($r = 0.443$, $p < 0.001$).
4.5 There is a moderate correlation with the rivalry of banks ($r = 0.532$, $p < 0.001$)

5 **Substitutes:**

5.1 There is a moderate correlation with technology ($r = 0.437$, $p < 0.001$).
5.2 There is a moderate correlation with new entrants ($r = 0.491$, $p < 0.001$).
5.3 There is a moderate correlation with the bargaining power of customers ($r = 0.501$, $p < 0.001$).
5.4 There is a moderate correlation with the rivalry of banks ($r = 0.532$, $p < 0.001$)
5.5 There is a moderate correlation with the bargaining power of suppliers ($r = 0.410$, $p < 0.001$).

6 **Rivalry of Banks:**

6.1 There is a moderate correlation with technology ($r = 0.424$, $p < 0.001$).

6.2 There is a moderate correlation with the bargaining power of suppliers ($r = 0.581$, $p < 0.001$).
6.3 There is a moderate correlation with the substitutes ($r = 0.532$, $p < 0.001$).
6.4 There is a moderate correlation between the rivalry of banks and new entrants ($r = 0.671$, $p < 0.001$).
6.5 There is a moderate correlation with the bargaining power of customers ($r = 0.571$, $p < 0.001$).

Table 15. Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.566	.320	.303	.949	2.068

a. Predictors: (Constant), Rivalry of Banks, Substitutes, Bargaining Power of Suppliers, New Entrants, Bargaining Power of Customers

b. Dependent Variable: Technology

Summary

1. The model has an (R) of 0.566 indicating a moderate relationship between the predictors (Rivalry of Banks, Substitutes, Bargaining Power of Suppliers, New Entrants, and Bargaining Power of Customers).
2. The model has an R Square value of 0.320, the model explains 32% of the variance in technology.

5.0 Conclusions

The findings indicated that technological advancements do not significantly affect the new entrants depicting (sig=0.307, two-tail p=0.203) therefore indicating no relations between the two variables. Further, the findings revealed that technology directly affects customers' bargaining power (sig=0.636, two-tail p=<0.001), indicating a relationship between these two variables. On the other hand, the study discovered no relationship between technological advancement and the bargaining power of suppliers (sig=0.643, two-tail p=0.590) therefore indicating no relationship between the two variables. Furthermore, the study revealed that technological advancements do not significantly affect the availability of substitutes (sig=0.282, two tail p=0.411) therefore indicating no relationship between the two variables, finally, the study revealed that technology does not significantly affect rivalry among the existing banks (sig=0.623, two tail p=0.468) therefore there is no relationship tween the two variables.

6.0 Recommendations

6.1 Technological usage among employees in Namibian banks

The current technological usage in the banking industry is considered significant. However, there is a notable opportunity for improvement in employee engagement and empowerment, which could positively impact the bank's overall performance and strategic positioning. It is recommended that:

- comprehensive training programs to educate the employees on the relevance and benefits of the bank's technological tools and systems.
- regular feedback mechanisms to gauge employees' perceptions and experience with technology, allowing for continuous improvement and adaptation is established.
- internal communication regarding technological initiatives and their success to build awareness and appreciation among the employees is enhanced.

6.2 current competitive strategies in Namibian banks

By implementing these recommendations, the banks can refine its competitive strategies to better align with employees' engagements, enhance market position, and effectively address the forces identified by Porter's Five Forces. This holistic approach will contribute to the bank's long-term success and sustainability. Hence, it is recommended that:

- A comprehensive review of its current competitive strategies with input from employees at all levels is conducted. This review should identify any gaps and areas for improvement and ensure that the strategies are aligned with the goals of the employees and the overall objectives of the organisation.
- Employees are involved in strategic development by creating cross-functional teams that include employees from various departments to participate in strategic planning sessions. They should encourage open communication and feedback to ensure that strategies are well-informed and comprehensive.
- Differentiation and innovation by investing in research and development to create new financial products and solutions is implemented. They should encourage a culture of continuous improvement and creativity within the organisation through innovation labs and idea-sharing platforms.
- Banks strengthen their market position against rivals in the market by analysing the competitors' strategies, market trends, and demand to identify opportunities for differentiation. The banks need to develop and implement strategies that leverage their respective strengths to leverage on competitors' weaknesses.
- Supplier relationships are improved by establishing long-term contracts and partnerships with suppliers. The bank should implement supplier relationship management (SRM) practices to enhance communication collaboration and mutual benefits.
- Threat of substitutes in the industry are mitigated by regularly reviewing and updating product offerings based on feedback demands and market trends.
- Banks should constantly innovate and invest in brand-building initiatives and enhance technological capabilities to provide superior employee experiences and operational; efficiencies that are difficult for new entrants to replicate**.**

6.3 The effectiveness of Namibian banks' competitive strategies

The below recommendations will help banks to effectively leverage on this correlation to strengthen market position, enhance customer satisfaction, and drive sustainable growth. It is recommended that:

- Banks invest in technology because there is a high correlation with Porter's Five Forces, it should invest in cutting-edge technologies to stay competitive. The technologies can include digital banking, blockchain, artificial intelligence, and cybersecurity. Also, given the strong correlations between technology and the Bargaining Power of Customers. Banks should further invest on technologies that enhance customers' experiences, such as mobile banking apps, personalised financial services, and online banking support.
- Banks to strive in differentiating themselves from competitors because there is a strong correlation between Rivalry among banks and technology. This can be achieved through unique product offerings, superior customer service, and innovative financial solutions. Banks to consider strategic alliances and partnerships with FinTech companies or other banks to share resources, reduce costs, and innovate.
- Banks should develop strong negotiation strategies to secure favorable terms and reduce dependency on single suppliers to mitigate risk. Banks to build a diversified supplier base to ensure stability and better bargaining power.
- Banks focus on product innovation. This includes developing new financial products offering competitive interest rates and creating value-added services as well as focusing on personalised banking experiences to retain customers and reduce substitute products.
- Banks are to invest in technology to establish a strong industry brand and ensure customer loyalty. Customer loyalty makes it more challenging for new entrants to enter the market and compete successfully. Furthermore, banks are to stay ahead in regulatory compliance to avoid penalties and gain a competitive edge over new entrants who might struggle with regulatory requirements.
- Banks to establish trust with customers through transparent operations, fees, and policies. They should use data analytics to monitor market trends, customer preferences, and competitor strategies for informed decision-making.

6.4 The relationship between competitive strategies and technology advancements

Banks in Namibia can strengthen its technological capabilities, enhance its competitive position, and better meet the needs of its employees and stakeholders by developing a comprehensive training program that includes workshops, online courses, and hands-on training sessions and encourages employees to attain certifications in relevant technologies. They need a dedicated team to track Key Performance Indicators (KPIs) related to technology adoption and its impact on competitive strategies. They need to involve the affected employees in the development process through surveys, and beta testing and gain feedback to shape and refine technological solutions. Hence, banks are recommended to:

- Enhance technological adoption and integration by conducting a thorough assessment of current technological gaps and implementing modern solutions such as AI-driven service tools, advanced data analytics, and robust cybersecurity measures.

- Competitively position against rivals by developing and promoting unique digital banking solutions, such as mobile banking apps with innovative features, personalised financial products, and seamless online banking experiences**.**
- Strengthen supplier relationships by investing in supply chain management software that allows real-time tracking, better forecasting, and improved communication with suppliers in the industry.
- Mitigate the threat of substitutes by regularly updating and innovating financial products and services to ensure that they meet changing market needs and preferences**.**
- Prepare for new entrants in the industry by fostering a culture of innovations within the bank. They need to encourage and support internal research and development initiatives to identify and implement breakthrough technologies.
- Enhance customer bargaining power by developing user-friendly digital platforms that offer personalised experiences, easy access to information, and self-service options. They should encourage employee feedback loops to continually refine and enhance the user experience.

7.0 Limitations and Suggested Areas for Further Studies

The study scope confines it to cross-sectional data that was obtained just once. Research to study perceptions of other financial service providers such as insurance companies and non-banking financial service providers may also be conducted on their employees to get a complete and accurate vision of technological advancements and their effect on Porter's Five Forces. The study can also be extended by considering groups of respondents, one for the employees and one for the customers.

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