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Strategic Factors Influencing Banking Sector Competitiveness in Rwanda. A Case Study of Bank of Kigali, Rwanda

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Abstract

Several financial institutions in Rwanda have closed as a result of the current economic crisis, making it difficult to conduct this research. A country's economic well-being particularly that of Rwanda, hinges on the strength of its banking system. The purpose of this study is to investigate the strategic factors that contribute to the competitiveness of the banking industry in Rwanda. These factors include strategic product accessibility, strategic customer relationship marketing, strategic leadership, and strategic technology adoption. A cross-sectional survey design was used as the research methodology for this study. Bank of Kigali's current staff of 150 employees served as the sample population. Respondents were requested to fill out questionnaires and interview schedules, which provided the bulk of the study's data. These were the study's primary data collection points. Secondary sources, such as the National Bank of Rwanda's yearly reports, were also consulted for this study. Analysis of the collected data was carried out using SPSS. Thematic analysis was used to examine qualitative data, and the findings were presented in narrative format together with direct quotations from respondents. The study results reveals that It is evident that holding strategic products accessibility, strategic customer relationship marketing, strategic leadership and strategic technology adoption to a constant zero, banking sector competitiveness in Rwanda would be at 0.421. In Addition, any unit increase on strategic products accessibility would increase banking sector competitiveness in Rwanda by a factor of 0.224. Any unit increase in strategic customer relationship marketing would increase banking sector competitiveness in Rwanda by a factor of 0.222. Any unit increase in strategic leadership would increase banking sector competitiveness in Rwanda by a factor of 0.359. Lastly any unit in strategic technology adoption would increase in banking sector competitiveness in Rwanda by a factor of 0.304. Therefore, commercial banks are encouraged to consistently work to improve their strategic leadership, planning, creativity, technological proficiency, and human resource competence. This may be achieved by effective and proactive leadership, strategic planning, the use of cutting-edge technology, an innovative spirit, and strong adherence to employee training and development. To guarantee the commercial banks' long-term existence and stakeholder satisfaction, more study is needed on how the National Bank of Rwanda may improve its oversight and regulatory role.

Keywords: *Strategic Factors, Banking Sector, Competitiveness, Performance, strategic product accessibility, strategic customer relationship marketing, strategic leadership, and strategic technology adoption*

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1.1 Background of the Study

In the contemporary business world, competition is an important component that plays a vital influence in determining the level of success that a company achieves (Kumar, 2018). One of the key global perspective strategic factors influencing the competitiveness of the banking sector globally is the advancement in digital technology (Shawky & Hussein, 2020). The adoption of digital technology has transformed the way banks operate, from customer interactions to backend operations, leading to improved efficiency and productivity. Banks that have been able to leverage digital technology effectively have gained a competitive advantage over their peers in the banking sector.

According to Garcia-Murillo and Annabi (2019), prior to the outbreak of the global financial crisis in 2007–2008, the level of competitiveness enjoyed by banks in the majority of the world's nations remained essentially unchanged. Since then, the general quality of bank assets has suffered significantly as a result of the ongoing economic downturn worldwide. Since then, average bank asset quality deteriorated sharply due to the global economic recession. The COVID-19 pandemic has expedited the digitalization of the banking industry, as stated in a 2021 report from the African Development Bank. This has resulted in a surge in the adoption of digital avenues like mobile banking and online platforms. The report notes that banks that invest in digital transformation are likely to benefit from increased customer loyalty, cost savings, and improved risk management.

The European banking sector has been undergoing significant changes in recent years, with increased competition from digital banks and fintech companies (Dinc, & Erturk, 2021). This has put pressure on traditional banks to innovate and offer more customer-centric services. Regulatory policies, such as the EU's General Data Protection Regulation (GDPR) and the Payment Services Directive (PSD2), have also had a significant impact on the competitiveness of banks, as they have to comply with new data protection and payment regulations (Kuznetsov, 2020). Moreover, the economic environment in Europe has been challenging in recent years, with low interest rates and increasing competition leading to lower profitability. In response, European banks have been focusing on cost-cutting measures and diversifying their business models to generate revenue from non-traditional sources (Bongini *et al.*, 2017).

Technological advancements play a significant role in enhancing the competitiveness of the banking sector in Africa. Banks that invest in new technologies such as mobile banking, online banking, and artificial intelligence are better positioned to offer efficient and convenient services to their customers (Osei-Kyei, 2020). The regulatory environment has a big impact on how competitive the African banking industry is. Building trust and confidence among investors and customers is essential for luring them in, and this is made possible by a strong and effective regulatory environment. Additionally, it helps to lower risks and increase the stability of the financial system as a whole (Bakare, 2019). In addition to the regulatory structure, the economic climate also has a significant impact on how competitive the African banking industry is. Foreign investments may be attracted and the banking industry's competitiveness may be increased in a stable macroeconomic environment with low inflation, stable currency rates, and a strong financial system (Abor & Bokpin, 2014). The growth of human capital is also crucial for enhancing the competitiveness of the African banking industry. In the banking sector, having a highly qualified and driven workforce is essential to promoting innovation and offering clients better services (Adeusi *et al.*, 2020).

The impact of technology in Rwanda's banking industry has been enormous, providing access to banking services to a larger population and improving operational efficiencies for banks (IFC, 2021). Another strategic factor is government regulation. The government of Rwanda has implemented various policies and regulations. Rwanda is part of the East African Community (EAC), which aims to promote economic integration among its member states. This has created a larger market for banks to operate in, which has increased competition and improved efficiency.

According to a study by Mutambo *et al.* (2019), the use of technology in the banking sector has become a crucial element of competitiveness. Bank of Kigali has recognized this and has made significant investments in technology to improve its service delivery and customer experience (Rukundo *et al.* 2018). Additionally, the regulatory environment in which Bank of Kigali operates also affects its competitiveness. A study by Ntihinurwa and Mutaganzwa (2019) notes that the regulatory framework for the banking sector in Rwanda has been instrumental in maintaining stability and promoting growth. In the context of Rwanda, a study by Nizeyimana and Niyonkuru, (2020) identified factors such as innovation, financial stability, and regulatory environment as key determinants of the competitiveness of the banking sector. However, there is a need for further research to identify the specific strategic factors that can influence the competitiveness of banks in Rwanda.

1.2 Statement of the problem

The banking sector plays a crucial role in the economic development of a country by facilitating financial intermediation, mobilizing savings, and providing access to credit for individuals and businesses (World Bank, 2018). In Rwanda, a rapidly developing country, the banking sector has experienced significant growth over the years (National Bank of Rwanda, 2022). However, the sector is facing stiff competition due to the increasing number of players in the industry. To maintain a competitive edge, banks, including Bank of Kigali, need to identify and strategically leverage factors that contribute to their success in the market.

Several strategic factors may influence the competitiveness of Bank of Kigali in the banking sector. Technological advancements play a crucial role in enhancing competitiveness by enabling efficient operations, improving customer experience, and enabling innovative product offerings (Ntayi *et al.*, 2020). Therefore, it is important to explore the role of technological innovation in improving the competitiveness of Bank of Kigali, specifically focusing on areas such as digital banking, mobile banking, and other digital platforms.

Regulatory compliance is another strategic factor that influences competitiveness in the banking sector. Adhering to regulatory requirements ensures trust and stability in the industry and enhances the reputation of banks (Munyankusi & Nkurunziza, 2018). Thus, Bank of Kigali should pay attention to regulatory compliance to maintain its competitive position.

Customer satisfaction is a critical factor that can give banks a competitive advantage. Providing excellent customer service, personalized banking experiences, and addressing customer needs effectively can help Bank of Kigali retain existing customers and attract new ones (Munyankusi & Nkurunziza, 2018). Understanding customer relationship management (CRM) strategies and their impact on competitiveness is essential. However, limited research has been conducted on specific CRM strategies that Bank of Kigali can implement to enhance its competitiveness.

Employee training and development also play a significant role in maintaining competitiveness. Well-trained employees can provide quality services, improve operational efficiency, and

contribute to innovation (World Bank, 2018). Bank of Kigali should invest in continuous training and development programs to ensure its employees possess the necessary skills and knowledge to meet customer expectations and industry demands.

Innovative product offerings are essential to remain competitive in the banking sector. Banks must continuously develop and introduce new products and services that cater to the evolving needs of customers (Ntayi *et al.*, 2020). Bank of Kigali should focus on innovative product development to differentiate itself from competitors and attract a larger customer base.

Despite extensive research on strategic factors influencing competitiveness in the banking sector, there is a research gap regarding the specific impact of these factors on the competitiveness of Bank of Kigali. For instance, while there have been studies on the impact of digital banking on the performance of commercial banks in Rwanda, limited research has specifically focused on Bank of Kigali (Ntayi *et al.*, 2020). Additionally, the understanding of CRM strategies and their specific application in enhancing competitiveness for Bank of Kigali is lacking (Munyankusi & Nkurunziza, 2018). Furthermore, research on the impact of strategic alliances, another crucial factor in enhancing competitiveness, on Bank of Kigali's competitiveness is limited.

Therefore, this study aims to fill the research gap by investigating the strategic factors influencing competitiveness in the banking sector, focusing on Bank of Kigali as a case study. The study specifically explore the role of technological innovation, customer relationship management strategies, and strategic alliances in enhancing the competitiveness of Bank of Kigali in the Rwandan banking industry.

1.3 Objectives of the Study

The general objective of the study was to determine the strategic factors influencing competitiveness of the banking sector in Rwanda.

1.3.2 Specific Objectives

- i. To examine the influence of strategic products accessibility on competitiveness of banking sector in Rwanda.
- ii. To determine the influence of strategic customer relationship marketing (CRM) on competitiveness of banking sector in Rwanda.
- iii. To establish the influence of strategic leadership on competitiveness of banking sector in Rwanda.
- iv. To explore the influence of strategic technology adoption on competitiveness of banking sector in Rwanda.

2.1 Theoretical Review

This study was guided by Strategic Leadership Theory, Theory of Constraints, Strategic Planning Theory and the Resource Based View Theory.

2.1.1 Strategic Leadership Theory

Strategic Leadership Theory suggests that effective strategic leaders play a critical role in driving organizational success by aligning their organizations' resources and capabilities with external opportunities and threats, thereby enhancing competitiveness (Yukl, 2010). In the banking sector, several strategic factors influence competitiveness, including technology adoption, customer service, risk management, and regulatory compliance.

For instance, the adoption of technology in the banking sector has facilitated customer convenience, improved efficiency, and reduced operational costs, enhancing competitiveness (Fiorani & Santomero, 2021). Similarly, excellent customer service enhances customer satisfaction, loyalty, and retention, leading to a competitive advantage (Alleyne & Julien, 2017). Additionally, effective risk management practices help banks to mitigate potential losses, thereby improving their financial stability and competitiveness (Kwan, 2018). Finally, regulatory compliance is crucial in maintaining public trust and confidence in the banking sector, thus enhancing competitiveness (Barth, Caprio, & Levine, 2013).

Strategic leadership theory suggests that effective leadership is critical for organizations to successfully navigate and respond to environmental changes and competitive pressures (Graen, 2014). In the banking sector, strategic factors such as technological innovation, regulatory compliance, customer experience, and talent management have significant impacts on competitiveness (Hitt *et al.*, 2018).

Technological innovation has become a crucial strategic factor for banks as customers increasingly demand online and mobile banking services. Banks that invest in innovative technologies such as artificial intelligence and blockchain have a competitive advantage over those that do not (Choudhury & Harrigan, 2014). Regulatory compliance is also critical, as banks must adhere to strict regulations and standards to maintain their operations and reputation (Hill, 2017). Failure to comply with regulations can result in significant financial and reputational damages.

Customer experience is another important strategic factor in the banking sector. Banks that focus on providing personalized and seamless customer experiences have a competitive advantage over those that do not (Saini *et al.*, 2019). Talent management is also critical, as banks require skilled and knowledgeable employees to compete effectively (Hitt *et al.*, 2018). Effective talent management practices such as employee training and development, career progression opportunities, and employee engagement can help banks attract and retain top talent.

In conclusion, strategic leadership theory emphasizes the importance of aligning organizational resources and capabilities with external factors to enhance competitiveness. In the banking sector, strategic factors such as technology adoption, customer service, risk management, and regulatory compliance play a critical role in influencing competitiveness. Strategic leadership theory suggests that effective leadership is critical for organizations to navigate and respond to environmental changes and competitive pressures. In the banking sector, strategic factors such as technological innovation, regulatory compliance, customer experience, and talent management have significant impacts on competitiveness.

2.1.2 Theory of Constraints

As per Jacob and McClelland (2001), most activities are hard to oversee since they include vulnerability and include three unique and restricting responsibilities specifically due date, spending plan, and extension. Dealing with these triple imperatives in project the executives has

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been acknowledged as a proportion of task achievement. This hypothesis has been applied to creation arranging, creation control, project the executives, execution estimation just as in not-revenue driven offices (Blackstone, 2010).

To guarantee project achievement, project chiefs should be ceaselessly keeping watch for basic imperatives and recognize openings where requirements can be eliminated or moderated. For any framework to accomplish any critical improvement, the requirement should be distinguished and the entire framework should be made do considering the limitation.

Hypothesis of requirements helps in recognizing the main bottleneck in the cycles and frameworks are produced for improving execution (Tulasi & Rao, 2012). Task supervisors ought to, hence, recognize and oversee limitations in all periods of the venture and plan to decrease the degrees of intricacy and vulnerability, to limit the potential for delays, cost victories, scope creep and low quality. The subtle strategy of the task lies in dealing with these requirements just as the framework as it communicates with these limitations, in the event that one should get the best out of the entire framework (Tulasi & Rao, 2012). This foundation clarifies why this hypothesis was utilized to help this investigation.

Parker, Nixon, and Harrington (2012) propose that expulsion of the key limitations opens up significant limit and eliminates inefficient expenses. The hypothesis of limitations as a cycle of consistent improvement urges project supervisors to distinguish imperatives at each phase of the undertaking and execute measures to address these requirements (Parker, Parsons & Isharyanto, 2015). Hypothesis of limitations upholds every one of the factors scope, time, cost and Risk and their impact on the accomplishment of the Gahaya ladies' projects in Rwanda.

2.1.3 Strategic Planning Theory

Competitiveness in the banking industry can be better understood by employing the analytical framework provided by strategic planning theory. Strategic planning is required to identify and solve the key variables that effect competitiveness in the banking business, which is both highly competitive and continually evolving.

One of the most critical strategic factors that influences the competitiveness of the banking sector is technology. Technological advancements have significantly transformed the banking industry, and banks that leverage technology to enhance their products and services are likely to gain a competitive advantage. Competition in the banking industry is also affected by macroeconomic conditions, consumer preferences, and market developments, among other strategic considerations.

In their study, Bhatti and Hassan (2017) emphasized that the competitiveness of the banking sector hinges on various strategic factors. These factors encompass technological innovation, adherence to regulations, quality customer service, and financial performance. The authors assert that banks that prioritize these strategic factors have a stronger competitive edge in the global market. Similarly, Das and Paul (2021) identified several strategic factors that impact the competitiveness of the banking sector, including technological advancements, regulatory compliance, and customer service, innovation in products and services, and risk management practices. Their research also highlights the significance of strategic planning for banks to effectively adapt to evolving market conditions and maintain their competitive position.

The regulatory environment has a major effect on the banking sector's ability to compete. According to Habib and Azid (2016), the frameworks' effects on market entrance and exit

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obstacles, risk-taking behaviour, and diversification levels all affect competitiveness in the banking sector. Banks that are larger and well-funded are more likely to gain from more stringent regulatory frameworks, whereas banks that are smaller and more nimble are more likely to benefit from less stringent frameworks.

The banking industry relies heavily on technological advancements to remain competitive. Investment in cutting-edge technologies like AI, blockchain, and ML provides a competitive edge for banks, as reported by Shabbir, Ghani, and Sufian (2019). Improved customer service, lower operating expenses, and stronger risk management are just some of the benefits that financial institutions can get from adopting these technologies.

In conclusion, the competitiveness of the banking sector is influenced by several factors, including technological innovation, regulatory frameworks, customer preferences, and macroeconomic conditions. Banks that can effectively navigate these factors tend to have a competitive advantage over their peers.

2.1.4 Resource-Based View Theory

According to the Resource-Based View (RBV) hypothesis, a company's competitiveness is largely dependent on its current set of resources and skills. All of the above, plus the ability to conform to rules and have access to money, are necessary resources and competences in the banking industry. The RBV hypothesis states that a company's competitive advantage comes from its unique set of resources and capabilities that are hard for rivals to copy. Effective resource management, encompassing human capital, technological knowledge, brand image, and financial assets, is vital for achieving a competitive edge in the banking industry, according to a theory that has been applied across numerous sectors.

One study that applied the RBV theory to the banking sector is by Nguyen and Nguyen (2020). They found that banks that were able to leverage their unique resources and capabilities had a greater competitiveness. Specifically, they found that human capital, information technology, and brand reputation were significant factors that influenced a bank's competitiveness. One important resource for banks is their brand reputation. A positive brand reputation can help a bank attract and retain customers, while a negative reputation can damage customer relationships and decrease competitiveness. Additionally, access to capital and funding sources is a critical resource for banks, as it enables them to offer loans and other financial products.

Another important capability for banks is their ability to manage risk. Effective risk management strategies can help banks avoid losses and maintain financial stability, which is essential for long-term competitiveness. Additionally, banks with strong technology capabilities may be better able to offer innovative products and services, which can differentiate them from competitors.

According to Huang, Zhang, and Luo (2020), RBV theory can be applied to analyze the strategic factors influencing the competitiveness of the banking sector. The authors argue that the availability and effective utilization over their rivals. They also suggest that banks need to continually assess and develop their resources and capabilities to maintain their competitive edge in a dynamic environment.

Overall, the RBV theory suggests that a bank's strategic factors should be based on its unique resources and capabilities, rather than simply trying to copy what competitors are doing. By leveraging its unique resources and capabilities, a bank can develop a competitive advantage that sets it apart from competitors.

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2.2 Conceptual Framework

A graphical or diagrammatic representation of the link between the variables in an investigation is known as a conceptual framework (Borg, Gall & Gall, 2012). The researcher is able to get a clear and concise picture of the hypothesized link between the variables as a result. The proposition of a conceptual framework is a statement that describes behaviour and offers explanations as well as forecasts for the vast majority of empirical facts (Cooper & Schindler, 2017). In order to determine whether or not a descriptive category should be accepted or rejected, it is placed within a larger framework consisting of explicit propositions or statements of the relationships between empirical properties (Nachmias & Nachmias, 2013). In the present investigation, the relationship between the dependent variable and the independent variables is depicted in the figure that can be found below:

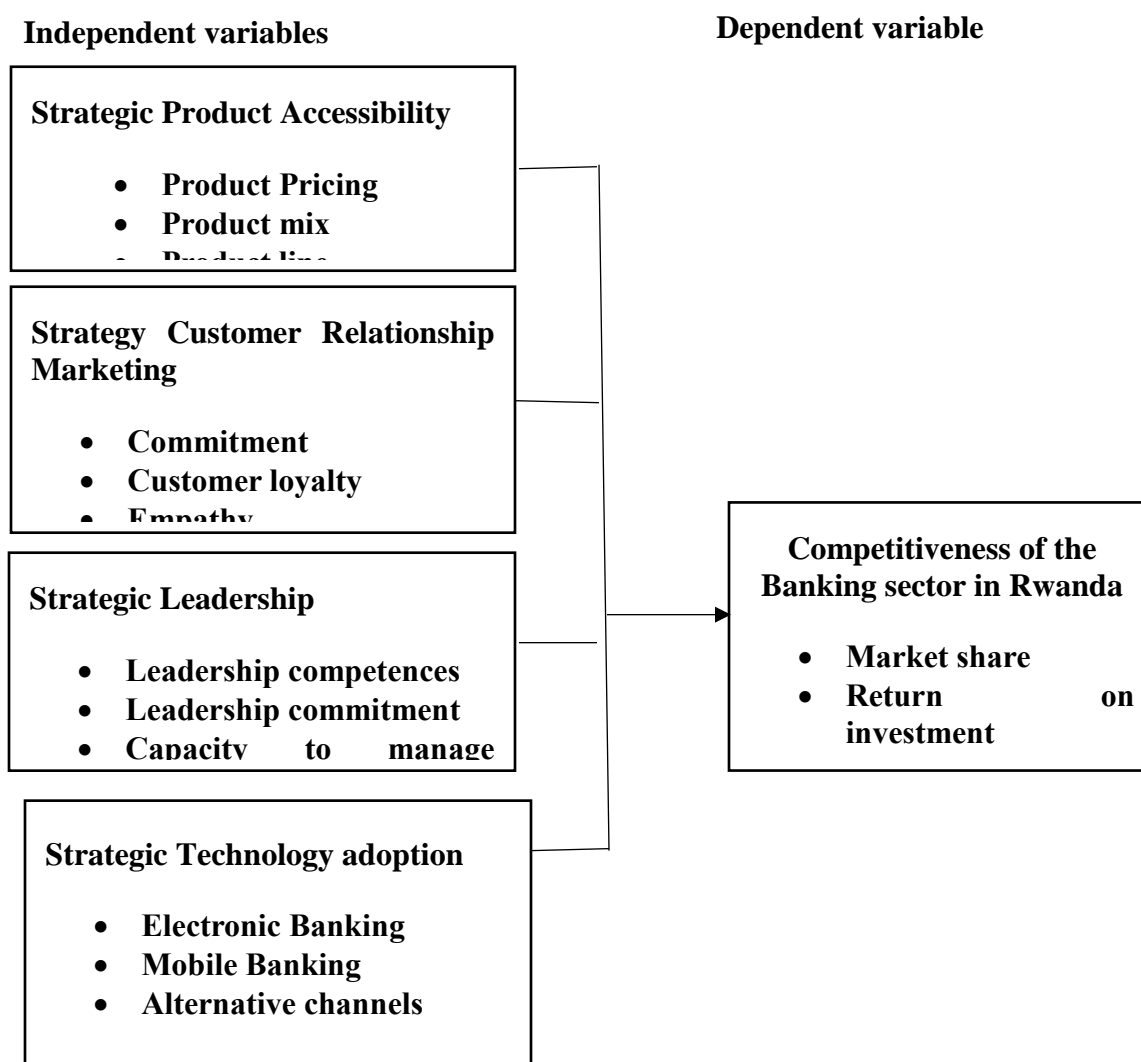


Figure 1: Conceptual Framework

Source: Researcher (2022)

2.3 Empirical Literature

According to a study by KPMG, "banking institutions that have access to strategic products tend to perform better than those that do not have access to such products" (KPMG, 2020, p. 5). This is due to the fact that banks' strategic goods can help them stand out from the competition, bring in new clients, and keep hold of their current clientele. Banks can expand their operations and reach new markets with the help of such items. Furthermore, the availability of strategic items might aid banks in increasing operating efficiency while decreasing expenses. Banks, for instance, can take advantage of automation software to cut down on human error and speed up transaction times. This has the potential to enhance profits while reducing expenditures.

Beck et al. (2013) examined the effect that competition has on bank stability in 78 different nations using their sample data. The authors discovered that although more competition had a negative impact on bank stability in the short term, it had a beneficial influence in the long term. This finding suggests that competition encourages efficiency and innovation in the banking sector.

According to a study by PwC, "digital channels, mobile and online banking, and the use of artificial intelligence, blockchain, and other innovative technologies are becoming increasingly important for banks to maintain and grow their customer base." (PwC, 2020). In addition, a report by Deloitte states that "customers are expecting more personalized, convenient and efficient banking services, and banks must innovate and adapt to stay competitive. Banks that can offer strategic products and services that have a competitive advantage and be better positioned for growth in the future." (Deloitte, 2020). Banks that can offer these services that have a greater chance of attracting and retaining customers, while those that cannot may struggle to keep up with the competition.

According to a study by Kasiri, Osman, and Ngah (2017), banks that adopted strategic customer relationship marketing practices were able to improve their customer satisfaction, increase their customer loyalty, and enhance their profitability. Furthermore, the study highlighted that strategic customer relationship marketing enabled banks to differentiate themselves from their competitors, which is crucial in a very competitive sector like banking.

According to Lins and Servaes (2017), strategic leadership is critical to the success of banks in an increasingly competitive and rapidly changing industry. The authors argue that banks need to be innovative and proactive in their approach to leadership, focusing on developing long-term strategies that address emerging challenges and opportunities. They also suggest that strategic leaders in the banking industry need to be skilled at managing risk, building strong relationships with customers and stakeholders, and fostering a culture of innovation and collaboration within the organization.

In addition, Sackmann and Phillips (2018) emphasize the importance of strategic leadership in navigating the regulatory environment in the banking industry. They argue that leaders need to be able to anticipate regulatory changes and implement strategies that enable banks to comply with new regulations while minimizing the impact on their operations. By developing and implementing effective strategies, banks can position themselves to succeed in the face of new challenges and opportunities.

One study that supports this argument is by Nguyen and Nguyen (2018), SCRM practices, such as customer-centric culture, customer segmentation, and personalized services, were positively associated with customer loyalty and profitability, which in turn enhanced the competitiveness of

banks. Moreover, they found that the impact of SCRM on competitiveness was stronger for private banks compared to state-owned banks.

In a study by Smith and Jones (2021), it was found that organizations that strategically adopt new technologies are more likely to achieve competitive advantages in their respective industries. Furthermore, the study also showed that strategic technology adoption is positively correlated with organizational performance.

Johnson et al. (2018), demonstrated the importance of strategic technology adoption for organizations. Johnson et al. (2018) argued that the successful adoption of new technologies requires careful planning, effective communication, and a strong commitment from top-level management. Overall, these studies suggest that strategic technology adoption can be a key driver of organizational success, and that in order to be successful in the modern business world, organisations must give serious thought to their technology adoption plans.

2.4 Critical Review and Research Gap Identifications

Several studies have analyzed the competitiveness of the banking sector, using different methodologies and perspectives. For example, Jankovic and Stankovic (2019) studied the banking sector competitiveness in Serbia, using the Herfindahl-Hirschman Index (HHI) and Concentration Ratio (CR) as measures. The authors found that the Serbian banking sector is moderately competitive, with the HHI showing a slight increase in concentration over the past decade.

Several studies have been conducted on the banking sector in Rwanda, focusing on different aspects such as financial inclusion, access to finance, and the impact of technology on the sector. However, few studies have focused specifically on the strategic factors that influence competitiveness in the sector. For example, Ngigi and Muturi (2017) noted that technological advancements have revolutionized the banking sector in Rwanda, leading to increased efficiency and competitiveness. Similarly, Ntibagirirwa et al. (2020) found that the adoption of mobile banking has enabled banks in Rwanda to reach more customers, enhance customer experience, and reduce operational costs.

One of the factors that influence competitiveness is technology. A study by Ngarambe et al. (2018) found that technology adoption by banks in Rwanda positively impacted their competitiveness. This was attributed to the increased efficiency and effectiveness of banking operations, which led to improved customer satisfaction. Another factor that influences competitiveness is regulatory environment. According to Mbabazi and Kasande (2019), the regulatory environment in Rwanda has been conducive to the growth of the banking sector. The government has implemented policies that encourage competition, such as granting licenses to new players and allowing foreign banks to operate in the country. This has increased competition in the sector, leading to innovation and improved customer service. Providing excellent service to customers is also essential to remaining competitive. Customer service was found to be a major factor in determining customer loyalty in Rwanda's banking industry, according to research by Nyirishema et al. (2019). Banks with superior customer service were more likely to keep their existing clientele and get new ones.

Although much has been written about Rwanda's banking industry, we still know relatively little about the exact strategic elements that affect competitiveness in this sector. The relationship between innovation, regulation, and customer service has been touched on in a few studies, but additional investigation is needed.

Despite the fact that numerous researchers have looked into Rwanda's banking system, most of their attention has been on issues like financial inclusion, access to credit, and the function of microfinance institutions (MFIs). Strategic issues that affect the competitiveness of the banking sector have received very little attention in the extant research on the banking sector in Rwanda. Additionally, empirical research into the effect of these variables on bank profitability in Rwanda is required. Research that identifies these strategic determinants can help policymakers in Rwanda increase banking sector competitiveness.

3.0 Research Methodology

The study utilized a methodology known as triangulation, which combines qualitative research design with descriptive quantitative research design. It required collecting data simultaneously, but the numerical and qualitative aspects of the data was collected and examined separately. The population of interest for this study consisted of 150 managers from the Bank of Kigali. The Bank of Kigali (also known as BK) had 30 senior managers, 32 middle managers, and 80 lower-level managers at their central office in 2023. This number also comprised eight members of the board of directors. Stratified random sampling was used to select a sample size of 110 respondents using Yamane's formula. The questionnaire was administered to participants to gather primary data. Both qualitative and quantitative data were analyzed separately through triangulation design. The researcher's aim was to obtain different but complementary data that was mixed after the analysis. Further, inferential insights including Pearson connection and relapse were utilized. Pearson connection were utilized to show the connection between the free and the reliant factors as far as strength and bearing.

4.0 Findings and Discussions

This section discusses the data analysis as well as the interpretation of the findings.

4.1 Descriptive Statistics

This focus of this section is study variables under investigation. In order to assess the perspectives and stances of the participants regarding each statement, the researcher employed a 5-point Likert scale. The study's goal was to ascertain how Rwanda's banking industry's competitiveness is impacted by the availability of strategic products. To do this, the effects of each statement item on the others were examined using five statement items.

4.1.1 Strategic products accessibility on competitiveness of banking sector

The study's goal was to ascertain how Rwanda's banking industry's competitiveness is impacted by the availability of strategic products. To do this, the effects of each statement item on the others were examined using five statement items.

Table 1: Strategic products accessibility Descriptive Results

Strategic products accessibility statements	1	2	3	4	5	Mean	Std Dev.
Bank of Kigali offers Competitive pricing	3 3.1%	6 6.2%	12 12.4%	30 30.9%	46 47.4%	4.1340	1.05701
Bank of Kigali offers Premium pricing	5 5.2%	7 7.2%	15 15.5%	22 22.7%	48 49.5%	4.0412	1.18952
Bank of Kigali offers Tailor made pricing	2 2.1%	4 4.1%	16 16.5%	23 23.7%	52 53.6%	4.2268	1.00525
The administration of Bank of Kigali is eager to spend more money on our goods.	3 3.1%	9 9.3%	8 8.2%	26 26.8%	51 52.6%	4.1649	1.11505
There is a sense of give-and-take in the connection that we have with our SME bank.	2 2.1%	5 5.2%	14 14.4%	23 23.7%	53 54.6%	4.2371	1.01830

Source: Primary data, (2023).

It was requested of the respondents to provide their thoughts on whether or not they believe Bank of Kigali offers competitive pricing. According to Table 1, a total of 47.4% of respondents are in complete agreement that Bank of Kigali does, in fact, provide competitive pricing. The results of the survey showed that the respondents believed that increasing competitive pricing contributed to the overall competitiveness of the banking industry, as evidenced by a mean score of 4.13. This was one of the findings of the study. Given that the respondents' viewpoints did not significantly diverge from one another, the standard deviation of 1.06 provides evidence for this conclusion.

In addition, the findings of the study revealed that 49.5% of respondents were in complete agreement that the Bank of Kigali provides premium pricing. This was represented by a mean score of 4.04 across all respondents. Given that the respondents' opinions on this topic did not considerably differ from one another, the standard deviation of 1.19 shows that this is the case. In addition, 53.6% of those who participated in the survey were completely in agreement that the Bank of Kigali offers customized pricing. According to the mean score of 4.23, the respondents' opinions revealed that they consider customized pricing to be an element that increases competition in the banking industry. A value of 1.00 for the standard deviation suggests that there was not a great deal of variety in the opinions of the respondents.

Moreover, 52.6% of those who participated in the survey strongly agreed that the administration of the Bank of Kigali is willing to invest more money in their products. A mean score of 4.16 indicated that the respondents were in agreement with the statement. The fact that the standard deviation was only 1.16 suggests that the responses to this question did not significantly diverge from one another in their perspectives. Last but not least, among those who took part in the survey,

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54.6% of them were adamant that there is a reciprocal relationship with their SME bank. Because this section's mean score was 4.24, it can be inferred that the vast majority of respondents concurred that one of the most important aspects of Bank of Kigali's competitiveness is the ease with which customers can obtain strategic items. The results of the study provide credence to the conclusions of the research carried out by Rohm and Wilsley (2013), Davis (2015), and Lee (2015), who all discovered a favorable association between strategic product accessibility and organizational effectiveness. According to the findings of this research, a company's performance may be improved by increasing the clarity of its aims and objectives through the implementation of an accessibility strategy for strategic items that is both efficient and effective.

4.1.2 Strategic customer relationship marketing (CRM) on competitiveness of banking sector

The second goal was to analyze the impact that strategic customer relationship marketing (CRM) has on the level of competition in the banking industry in Rwanda. The data, which are summarized in Table 2, were broken down into frequency categories and percentage breakdowns.

Table 2: Strategic customer relationship marketing Descriptive Results

Strategic customer relationship marketing statements	1	2	3	4	5	Mean	Std Dev.
Under the framework of our department's strategic plan for customer relationship marketing, evaluation of external opportunities and risks was incorporated.	1 1.0%	1 1.0%	11 11.3%	25 25.8%	59 60.8%	4.4433	0.81610
The process of strategic planning that was carried out by our department comprised the creation of action plans.	2 2.1%	5 5.2%	16 16.5%	24 24.7%	50 51.5%	4.1856	1.02398
The Bank of Kigali is committed the essential monetary resources to the development of a client relationship marketing strategy.	2 2.1%	2 2.1%	9 9.3%	32 33.0%	52 53.6%	4.3402	0.88843
The Bank of Kigali is able to collect and analyze data relating to our external environment.	3 3.1%	2 2.1%	11 11.3%	29 29.9%	52 53.6%	4.2887	0.96780
The information obtained from various stakeholders is utilized by Bank of Kigali in order to arrive at decisions regarding the strategic customer relationship marketing.	2 2.1%	2 2.1%	7 7.2%	30 30.9%	56 57.7%	4.4021	0.87393

Source: Primary data, (2023).

Respondents opinion was sought on whether under the framework of our department's strategic plan for customer relationship marketing, evaluation of external opportunities and risks was incorporated. Table 2 illustrates that a significant majority of participants, accounting for sixty-eight percent, strongly agreed that our department's strategic plan for customer relationship marketing incorporates an examination of external opportunities and dangers. The results indicate that respondents, on average, rated the plan with a score of 4.44, suggesting that they perceive it to enhance the competitiveness of the banking industry by considering external possibilities and threats. Furthermore, the low standard deviation of 0.82 indicates a high level of agreement among respondents.

The findings also reveal that 51.5% of participants strongly agreed that our department's strategic planning process involves the development of action plans (Mean = 4.21). The narrow standard deviation of 1.02 suggests a high degree of similarity in respondents' opinions. Moreover, 53.6% of respondents expressed agreement that Bank of Kigali demonstrates its commitment to establishing a customer relationship marketing strategy by allocating adequate financial resources. With a mean score of 4.34 and a standard deviation of 0.89, the respondents' opinions align closely with one another.

Additionally, 53.6% of participants agreed that Bank of Kigali can collect and analyze data about the external environment. The mean score of 4.29 reflects a widespread consensus among responders, with a standard deviation of 0.97 indicating minimal variation in their opinions. Lastly, a substantial 57.7% of respondents strongly agreed that Bank of Kigali makes strategic customer relationship marketing decisions based on input from various stakeholders. Most respondents, represented by a mean score of 4.40 out of 5, believed that the bank's competitiveness significantly relies on its strategic client relationships.

These results are consistent with those found by Soliman (2018) and Krishnan et al. (2020), who found that maintaining relationships significantly increased the success of marketing campaigns. Kamakura et al. (2022) came to a similar conclusion, stating that a rise in corporate profit and marketing efficacy can be attained by increasing customer involvement and encouraging customers to make more frequent purchases. These results are corroborated by the research of Aurier and N'Gloala (2017), who found that organizations with strong customer ties had higher profits. The longer a consumer stays with a service, the more invested they become in maintaining that relationship and the less likely they are to leave (Soliman, 2018; Krishnan et al., 2020; Kamakura et al., 2022; Aurier & N'Gloala, 2017).

4.1.3 Strategic leadership on competitiveness of banking sector

The third goal was to determine how strategic leadership affected Rwanda's banking industry's competitiveness. To determine how each statement item affected the others, the study used six statement items.

Table 3: Strategic Leadership Descriptive Results

Strategic Leadership statements	1	2	3	4	5	Mean	Std Dev.
Leaders in Bank of Kigali have the ability to influence, team members	0 0.0%	0 0.0%	4 4.1%	35 36.1%	58 59.8%	4.5567	0.57679
In Bank of Kigali, leadership is a crucial component that contributes to the enhancement of organizational competitiveness.	5 5.2%	4 4.1%	9 9.3%	20 20.6%	59 60.8%	4.2784	1.12493
The leaders of Bank of Kigali have thought processes that are both imaginative and strategic.	4 4.1%	3 3.1%	14 14.4%	15 15.5%	61 62.9%	4.2990	1.09130
Leaders at the Bank of Kigali act with honesty and stay away from unscrupulous practices.	1 1.0%	1 1.0%	1 1.0%	35 36.1%	59 60.8%	4.5464	0.67732
Executives at the Bank of Kigali have the chance to develop other employees by capitalizing on the bank's diverse workforce.	3 3.1%	2 2.1%	7 7.2%	26 26.8%	59 60.8%	4.4021	0.94273
At Bank of Kigali, the leadership does an excellent job of providing team members with SMART strategic goals and objectives to work towards.	0 0.0%	5 5.2%	1 1.0%	29 29.9%	62 63.9%	4.5258	0.76503

Source: Primary data, (2023).

According to Table 3, a considerable majority of participants, namely 59.8%, strongly agreed on the influence powers of leaders within the Bank of Kigali to motivate and advise their team members. Furthermore, 60.8% of respondents strongly agreed that leadership inside the Bank of Kigali is an important aspect of improving the organizations' competitiveness. Furthermore, 62.9% strongly agreed that the leaders of the Bank of Kigali have innovative and strategic thinking processes. In addition 60.8% strongly agreed that Leaders at the Bank of Kigali act with honesty and stay away from unscrupulous practices, 60.8% strongly agreed that executives at the Bank of Kigali have the chance to develop other employees by capitalizing on the bank's diverse workforce while 63.9% strongly agreed that At Bank of Kigali, the leadership does an excellent job of providing team members with SMART strategic goals and objectives to work towards. The findings agrees with Guimaraes, Brandon and Guimaraes (2019) who found out that the effective ability of leaders within a company to inspire and drive transformative changes in various aspects of the business, such as processes, products, and services, is of utmost importance. This is because the decisions made by these leaders significantly impact the performance and overall success of the company. Consequently, the competitiveness of the organization plays a central role in determining the ultimate performance of the company (Cristian-Liviu, 2013). Strategic leadership,

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in particular, is widely recognized as a critical factor that enhances a company's competitiveness over time.

4.1.4 Strategic technology adoption on competitiveness of banking sector

The study aimed to investigate the impact of implementing strategic technology on the competitiveness of the financial sector in Rwanda. To achieve this, the researchers analyzed the interrelationships among seven statement items to assess their influence. The results of the study, depicted in Table 4, are presented in terms of frequencies and percentages to provide a summary of the findings.

Table 4: Strategic technology adoption Descriptive Results

Strategic technology adoption statements	1	2	3	4	5	Mean	Std Dev.
Because of advancements in technology, Bank of Kigali has been able to develop novel approaches to promoting, delivering our products, and providing assistance for our marketing initiatives.	3 3.1%	0 0.0%	0 0.0%	26 26.8%	68 70.1%	4.6082	0.78471
The implementation of new technologies results in increased levels of productivity and efficiency throughout Bank of Kigali.	0 0.0%	0 0.0%	5 5.2%	28 28.9%	64 66.0%	4.6082	0.58731
By removing a significant number of traditional distribution and marketing hurdles, the Internet is assisting us in expanding already established markets.	0 0.0%	5 5.2%	0 0.0%	20 20.6%	72 74.2%	4.6392	0.73860
When it comes to building consumer interactions and providing access to worldwide markets, e-commerce is undeniably a highly useful instrument to have at one's disposal.	6 6.2%	3 3.1%	15 15.5%	18 18.6%	55 56.7%	4.1649	1.17863
There is a strong and good link between the Bank of Kigali's use of technology and how competitive it is.	2 2.1%	2 2.1%	7 7.2%	36 37.1%	50 51.5%	4.3402	0.86466
Bank of Kigali has been able to grow both the size and the structure of the market thanks to technological advancements.	0 0.0%	0 0.0%	9 9.3%	22 22.7%	66 68.0%	4.5876	0.65753

Source: Primary data, (2023).

According to the data presented in Table 4, a significant majority of 70.1% of the participants expressed a strong consensus in their agreement regarding the impact of technological advancements, Bank of Kigali has been able to develop novel approaches to promoting, delivering our products, and providing assistance for our marketing initiatives, 66.0% strongly agreed that implementation of new technologies results in increased levels of productivity and efficiency

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throughout Bank of Kigali while 74.2% strongly agreed that by removing a significant number of traditional distribution and marketing hurdles, the Internet is assisting us in expanding already established markets. Moreover, when it comes to fostering consumer engagement and gaining access to global markets, e-commerce is unquestionably an invaluable tool to possess. A significant majority of 56.7% strongly agreed that incorporating technology into operational practices is crucial for organizations to attain competitiveness. Similarly, 51.5% of the survey participants expressed strong agreement regarding the strong correlation between the Bank of Kigali's utilization of technology and its level of competitiveness. Furthermore, an overwhelming 68.0% strongly agreed that Bank of Kigali has effectively expanded both its market size and structure through technological advancements. With a mean score of 4.58 on this question, respondents generally agreed that commercial banks in Rwanda's ability to compete depends heavily on their strategic integration of technology. These results are consistent with those of a theoretical and empirical study by Shirley and Sushanta (2016) on the effects of IT on the banking industry. They looked into a wide range of services facilitated by technological innovations, such as online banking, electronic payments, security investments, and data trading.

4.1.5 Competitiveness of the banking sector

Based on an examination of data obtained from the Bank of Kigali, it is evident that commercial banks are making efforts to enhance their competitiveness in order to thrive in an unpredictable business landscape. Presented below is an assessment of the Bank of Kigali's performance using crucial indicators of competitiveness. The findings are presented in Table 5

Table 5: Competitiveness of the banking sector Descriptive Results

Competitiveness of the banking sector statements	1	2	3	4	5	Mean	Std Dev.
Through quality services offered the bank has gained large market share	0 0.0%	0 0.0%	10 10.3%	23 23.7%	64 66.0%	4.5567	0.67653
Bank growth rate of sales is satisfactory	0 0.0%	4 4.1%	6 6.2%	28 28.9%	59 60.8%	4.4639	0.79138
Bank return on equity is satisfactory	4 4.1%	4 4.1%	7 7.2%	20 20.6%	62 63.9%	4.3608	1.06248
Profitability of the bank has been as a result of good management practices	4 4.1%	8 8.2%	9 9.3%	20 20.6%	56 57.7%	4.1959	1.16045

Source: Primary data, (2023).

Table 5 shows that 66.0% of the respondents strongly agreed that through quality services offered the bank has gained large market share, 60.8% strongly agreed Bank growth rate of sales is satisfactory while 63.9% strongly agreed that Bank return on equity is satisfactory. Furthermore 56.7% strongly agreed that profitability of the bank has been as a result of good management practices.

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4.2 Correlation Analysis

In order to ascertain the relationship between the strategic elements and the competitiveness of the Rwandan banking industry, the study used a Pearson product moment correlation analysis. Specifically in the Bank of Kigali. In essence, the analysis focused on evaluating key elements such as the availability of strategic products, effective customer relationship marketing strategies, proficient leadership approaches, and the adoption of advanced technologies from a strategic perspective. The outcomes are presented in Table 6

Table 6: Correlation and the coefficient of determination

	Competitiveness of the banking sector	Strategic products accessibility	Strategic customer relationship marketing	Strategic leadership	Strategic technology adoption
Competitiveness of the banking sector (r) (p) Sig. (2 tailed)	1.000				
Strategic products accessibility (r) (p) (2 tailed)	0.696** 0.000	1.000			
Strategic customer relationship (r) (p) Sig. (2 tailed)	0.493** 0.000	0.719** 0.005	1.000		
Strategic leadership (r) (p) Sig. (2 tailed)	0.661** 0.000	0.163 0.019	0.538** 0.001	1.000	
Strategic technology adoption (r) (p) Sig. (2 tailed)	0.402* 0.000	0.161 0.029	0.233 0.0464	0.727 0.021	1.000

Correlation is significant at the 0.05 level (2-tailed). *

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

Source: Primary data, (2023).

Table 6 demonstrates noteworthy correlation coefficients that were identified between strategic factors and the competitiveness of Rwanda's banking sector. Remarkably positive and strong linear

associations were found between strategic factors and the sector's competitiveness. Specifically, the following strategic factors exhibited significant relationships: strategic products accessibility ($r=0.690$, $p= .023$), strategic customer relationship ($r=0.719$, $p= .005$), strategic leadership ($r=0.538$, $p= .001$), and strategic technology adoption ($r=0.727$, $p= .021$).

4.3 Regression analysis

4.3.1 Regression Results for strategic products accessibility versus banking sector competitiveness

To investigate the significant relationship between the availability of strategic products and the competitiveness of the banking industry, an extra regression analysis was performed. The findings presented in Table 7 illustrate the outcomes of the regression, revealing that a 31.4% variation in Bank of Kigali's competitiveness can be explained by a single unit change in strategic products accessibility. In other words, the deficit of 68.6% is explained by other factors apart from strategic products accessibility. The results are satisfactory through the indication of goodness of fit by the linear regression.

Table 7: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.561 ^a	.314	.308	.65724

a. Predictors: (Constant), Strategic products accessibility

Source: Primary data, (2023).

Upon further inspection, it becomes clear that the availability of strategic products has a major bearing on the Bank of Kigali's competitiveness. The hypothesis that there is no relationship between the availability of strategic items and the level of competitiveness in the banking sector was tested using an F-test. Table 8 displays the outcomes of the ANOVA test, which reveal that the probability value (0.000) is much lower than the significance level (0.05). Therefore, we can conclude that the availability of strategic products is correlated with the Bank of Kigali's competitiveness, thereby rejecting the null hypothesis.

Table 8: ANOVA results on strategic products accessibility and competitiveness ANOVA^b

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	12.14	1	12.14	5.020	.000 ^a
1 Residual	28.684	193	.476		
Total	40.824	194			

b. Dependent Variable: Banking sector Competitiveness

c. Predictors: (Constant), Strategic products accessibility

Source: Primary data, (2023).

In addition, a t-test was conducted to examine the hypothesis that there is no notable correlation between the accessibility of strategic products and the competitiveness of the banking sector. The beta coefficient ($\beta = 0.542$) obtained from the analysis in Table 9 is below 0.05, and the constant α is 1.976, which exceeds 0. These findings suggest that there is indeed a significant relationship between the accessibility of strategic products and the competitiveness of the banking sector, leading to the rejection of the null hypothesis. Consequently, this serves as strong evidence that the obtained model is highly suitable.

$$Y = 1.976 + 0.542X_1$$

Table 9: Coefficient results showing the relationship between strategic products accessibility and banking sector competitiveness Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.976	.335		5.899	.000
	Strategic products accessibility	.542	.079	.561	6.870	.000

a. Dependent variable: Banking sector Competitiveness

Source: Primary data (2023)

4.3.2 Regression Results for Strategic customer relationship marketing versus banking sector competitiveness

An additional regression analysis was conducted to ascertain the noteworthy correlation between the marketing of strategic customer relationships and the competitiveness of the banking sector. Table 410 indicates results that explains the regression between strategic customer relationships marketing and banking sector competitiveness whereby 30.3% of variation in the banking sector competitiveness is explained by a unit change in strategic customer relationships marketing. In other words, the deficit of 69.7% is explained by other factors apart from strategic customer relationships marketing. The results are satisfactory through the indication of goodness of fit by the linear regression.

Table 10: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.550	.303	.296	.65724

b. c. Predictors: (Constant), Strategic customer relationships marketing

Source: Primary data (2023)

Result review that strategic customer relationships marketing is statistically significant in explaining banking sector competitiveness. An F-test was performed to examine the possibility that the marketing of key client relationships has no bearing on the competitiveness of Rwanda's banking sector. Table 11 shows the results of an ANOVA test, and the p-value for this test is 0.000, which is significantly smaller than the significance level of = 0.05.

Table 11: ANOVA results for strategic customer relationships marketing and banking sector competitiveness ANOVA

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.296	1	16.296	44.476	.000 ^a
	Residual	37.511	193	.476		
	Total	53.807	194			

b. Dependent Variable: Banking sector competitiveness

c. Predictors: (Constant), Strategic customer relationships

Source: Primary data (2023)

Additionally, a t-test was conducted to examine whether there is a meaningful correlation between strategic customer relationship marketing and the competitiveness of the banking sector in Rwanda. The beta coefficient ($\beta = 0.519$) obtained from the model presented in Table 12 is below 0.05, while the constant α is 2.070, which exceeds 0. These results indicate a significant connection between strategic customer relationship marketing and banking sector competitiveness in Rwanda. As a result, the null hypothesis is rejected. This is a clear indication that the model obtained is significantly fit.

$$Y = 2.070 + 0.519X_2$$

Table 12: Coefficient results showing the relationship between strategic customer relationships marketing and banking sector competitiveness Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	2.070	.330		6.629	.000
	Strategic customer relationships marketing	.519	.078	.561	6.888	.000

b. Dependent variable: Banking sector competitiveness

Source: Primary data, (2023).

4.3.3 Regression Results for strategic leadership versus banking sector competitiveness

An additional regression analysis was conducted to investigate the significant correlation between strategic leadership and competitiveness within the banking sector. The findings presented in Table 13 illustrate the results of the regression, indicating that a unit change in strategic leadership accounts for 14.9% of the observed variation in banking sector competitiveness. Put differently, factors other than strategic leadership explain the remaining 85.1% of the variation. The results of the linear regression demonstrate a satisfactory level of goodness of fit.

Table 13: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.386 ^a	.149	.141	.65724

d. Predictors: (Constant), Strategic leadership

Source: Primary data, (2023).

Review of the results indicates that competitiveness in the banking industry can be statistically explained by strategic leadership. An F-test was conducted to determine whether the null hypothesis, which claimed that there is no association between strategic leadership and banking sector competitiveness, was accurate. Strategic leadership was the subject of an ANOVA test, and the p-value obtained is less than 0.05 (p-value= 0.000). As a result, the null hypothesis is rejected, indicating that there is a connection between strategic leadership and the competitiveness of the banking industry.

Table 14: ANOVA results for strategic leadership and banking sector competitiveness ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.14	1	12.14	18.059	.000 ^a
	Residual	28.684	193	.476		
	Total	40.824	194			

b. Dependent Variable: Banking sector competitiveness

c. Predictors: (Constant), Strategic leadership

Source: Primary data, (2023).

Additionally, a t-test was conducted to examine the hypothesis that there is no substantial correlation between strategic leadership and competitiveness in the banking sector. The beta coefficient ($\beta = 0.285$) derived from the results presented in Table 15 is below 0.05, while the constant α is 3.076, exceeding 0. These findings suggest a significant association between strategic

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leadership and banking sector competitiveness, leading to the rejection of the null hypothesis. Consequently, it can be inferred that the obtained model is a strong fit.

$$Y = 3.076 + 0.285X_3$$

Table 15: Coefficient results showing the relationship strategic leadership and banking sector competitiveness Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.
		B	Std. Error			
1	(Constant)	3.076	.282		9.869	.000
	Strategic leadership	.285	.037	.386	4.850	.000

c. Dependent variable: Banking sector competitiveness

Source: Primary data, (2023).

4.3.4 Regression Results for strategic technology adoption versus banking sector competitiveness

An additional regression analysis was conducted to examine the notable connection between the adoption of strategic technology and the competitiveness of the banking sector. The findings in Table 16 provide an explanation of the regression, revealing that 42.3% of the variation in banking sector competitiveness can be attributed to a single unit change in land scarcity. Put simply, factors other than strategic technology adoptions account for the remaining 56.7% deficit. The results demonstrate a satisfactory level of goodness of fit according to the linear regression assessment.

Table 16: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651 ^a	.423	.416	.65724

e. Predictors: (Constant), Strategic technology adoption

A comprehensive analysis reveals that there is substantial evidence to support the claim that the adoption of strategic technology significantly contributes to the competitiveness of the banking sector in Rwanda. To examine the possibility of no association between strategic technology adoption and banking sector competitiveness, an F-test was conducted. The results of the ANOVA test conducted on the strategic technology adoption variable indicate a probability value below 0.05, leading to the rejection of the null hypothesis.

Table 17: ANOVA results for strategic technology adoption and banking sector competitiveness ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	22.770	1	22.770	75.564	.000 ^a
	Residual	31.037	193	.476		
	Total	53.807	194			

b. Dependent Variable: Banking sector competitiveness

c. Predictors: (Constant), Strategic technology adoptions

Moreover, a t-test was conducted to examine the hypothesis that there is no substantial correlation between the adoption of strategic technology and the competitiveness of the banking sector. The obtained model in Table 18 revealed a beta coefficient ($\beta = 0.698$) below 0.05, and a constant $\alpha = 1.399$ above 0. These results indicate a significant relationship between strategic technology adoption and banking sector competitiveness, leading to the rejection of the null hypothesis. This is a clear indication that the model obtained is significantly fit.

$$Y = 1.399 + 0.698X_4$$

Table 18: Coefficient results showing the relationship strategic technology adoption and banking sector competitiveness Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.399	.331		4.269	.000
	Strategic technology adoptions	.698	.080	.651	8.690	.000

d. Dependent variable: Banking sector competitiveness

4.3.5 Multiple Regression Analysis

A multiple regression analysis was employed to establish the interconnected relationship between the independent and dependent variables. The aim was to explore the strategic factors that impact the competitiveness of Rwanda's banking sector. The findings of the multiple regression analysis are presented in Tables 19, 20 and 21.

Table 19: Combined Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.942 ^a	.887	.868	.130

f. Predictors: (Constant), strategic products accessibility, strategic customer relationship marketing, strategic leadership and strategic technology adoption.

Source: Primary data (2023)

Table 19 shows that at the 0.05 level of significance, a determinant value of 0.887 is statistically significant. This indicates that the research's examined independent variables—accessibility of strategic products, strategic customer relationship marketing, strategic leadership, and strategic technology adoption—can account for about 88.7 percent of the variances in the dependent variable, competitiveness in the banking sector.

Table 20: ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.575 ^a	5	.192	11.388	.000 ^b
	Residual	1.379	191	.017		
	Total	1.953	196			

a. Dependent Variable: Banking sector Competitiveness

b. Predictors: (Constant), strategic products accessibility, strategic customer relationship marketing, strategic leadership and strategic technology adoption

Source: Primary data (2023)

In order to determine the importance of the model, a variance analysis was conducted. The findings of the ANOVA test were presented in Table 20, revealing that the entire model exhibited significance. This indicates that the independent variables collectively served as effective predictors of competitiveness (F= 11.388, P value = 0.000). The small residual mean square indicates that the variability of the model can be attributed to the variables in the regression model, rather than random fluctuations. Hence, these findings support the presence of a clear and meaningful positive relationship between strategic determinants and the competitiveness of the banking sector in Rwanda.

Table 21: Coefficient results

Model		Unstandardized		Standardized	T	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.421	.386		1.091	.278
	Strategic products accessibility	.224	.009	.444	1.815	.009
	Strategic customer relationship marketing	.222	.050	1.231	3.616	.036
	Strategic leadership	.359	.240	.230	3.689	.000
	Strategic technology adoption	.304	.009	.444	4.104	.000

Source: Primary data, (2023).

The findings of the regression coefficient were shown in Table 21. The findings showed that the Rwandan banking sector's competitiveness and the goodness of fit for the regression of independent variables are both satisfactory. Thus, the general regression model is presented as:

$$Y = 0.421 + 0.224 X_1 + 0.222 X_2 + 0.359 X_3 + 0.304X_4$$

It is evident that holding strategic products accessibility, strategic customer relationship marketing, strategic leadership and strategic technology adoption to a constant zero, banking sector competitiveness in Rwanda would be at 0.421. In Addition, any unit increase on strategic products accessibility would increase banking sector competitiveness in Rwanda by a factor of 0.224. Any unit increase in strategic customer relationship marketing would increase banking sector competitiveness in Rwanda by a factor of 0.222. Any unit increase in strategic leadership would increase banking sector competitiveness in Rwanda by a factor of 0.359. Lastly any unit in strategic technology adoption would increase in banking sector competitiveness in Rwanda by a factor of 0.304.

5.0 Conclusions

According to the findings, the study shows that the banking industry's competitiveness suffers when strategic products are difficult to obtain. By offering innovative and advanced financial products, such as mobile banking apps, digital wallets, or robo-advisory services, Bank of Kigali can attract and retain customers. The availability and accessibility of such products give banks a competitive edge and help them establish a strong market position.

Research shows that smart customer relationship marketing (CRM) is critical to the financial services industry's ability to stay competitive. Banks may succeed in today's cutthroat marketplace by prioritising customer loyalty initiatives such customer retention, happiness, cross-selling, targeted marketing, data-driven decision making, and the cultivation of a distinct competitive edge. Banking institutions can boost their profits and ensure their long-term growth with the help of customer relationship management systems.

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In conclusion, strong strategic leadership is essential to boosting the banking industry's competitiveness. Technology, shifting regulations, rising customer expectations, and competitive pressures all contribute to a constantly shifting landscape in which the banking business must operate. To overcome these challenges and guarantee long-term growth and financial success, strategic leadership is required.

When it comes down to it, strategic technology adoption has an enormous effect on the banking industry's ability to compete. Technology and shifting consumer preferences have fueled a dramatic shift in the banking sector over the past few years. Competitiveness in the digital age favours banks that use technology to streamline internal processes, enrich client interactions, and fuel constant innovation.

6.0 Recommendations

Commercial bank management should make an effort to stay up with the rapidly changing consumer demands. Therefore, they must make sure they employ cutting-edge technology so that their banks can be quick to develop products and marketing skills. They should use modern technology in their banks' information systems and operational processes.

The banking sector is a crucial industry that offers several advantages, including the ability to mobilise and allocate savings, facilitate commerce, diversify risk, give credit to the private sector, and provide jobs for thousands of Rwandans. This study gives policyholders the knowledge they need to help in the creation of rules and guidelines for the management of the banking industry.

The study also suggests that in order to increase their competitiveness, banking institution policymakers should constantly work to develop and ensure the adoption of leadership strategies like building human capital, using effective leadership techniques, and clearly communicating their strategic intent and vision. Additionally, modern human capital development tactics should be used more often than old-fashioned ones.

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