



Instituto Politécnico
de Viana do Castelo

ASSOCIAÇÃO DE POLITÉCNICOS DO NORTE (APNOR)

INSTITUTO POLITÉCNICO DE BRAGANÇA

Peculiarities of Banking competition in the example of Georgia

Giorgi Narsia

Final Dissertation submitted to *Instituto Politécnico de Bragança*

To obtain the Master's Degree in Management, Specialisation in Business Management

Supervisors:

Ana Paula Monte

Valer Mosiashvili

Bragança, July, 2024.



ASSOCIAÇÃO DE POLITÉCNICOS DO NORTE (APNOR)

INSTITUTO POLITÉCNICO DE BRAGANÇA

Peculiarities of Banking competition in example of Georgia

Giorgi Narsia

Supervisors:

Ana Paula Monte (PhD)

Valer Mosiashvili (PhD)

Bragança, July, 2024.

Abstract

This thesis explores the peculiarities of banking competition in the context of Georgia. By analyzing the specific characteristics and dynamics of the banking industry in Georgia, this study aims to identify the factors that shape competition among banks and understand its implications on the economy.

This thesis explores the importance of digital banking and a good reputation in the context of the banking industry. The study investigates the impact of these factors on customer acquisition, retention, and market competitiveness. Through a combination of quantitative analysis and qualitative research, including surveys, this research involved 310 respondents. The findings reveal that the respondents highlighted the significance of innovation and a good reputation in the banking sector. Furthermore, some respondents expressed a willingness to pay extra for unique or luxurious services provided by a bank, indicating the value they place on differentiated offerings.

The study underscores the importance of both innovation and reputation management as crucial factors for banks to remain competitive and attract customers.

Keywords: digital banking, reputation, customer acquisition, market competitiveness, innovation, survey, respondents, differentiated services.

Resumo

Esta tese explora as peculiaridades da concorrência bancária no contexto da Geórgia. Ao analisar as características específicas e a dinâmica do setor bancário na Geórgia, este estudo visa identificar os fatores que moldam a concorrência entre os bancos e entender suas implicações na economia.

Esta tese explora a importância do banco digital e de uma boa reputação no contexto do setor bancário. O estudo investiga o impacto desses fatores na aquisição, retenção e competitividade de mercado de clientes. Por meio de uma combinação de análise quantitativa e pesquisa qualitativa, incluindo pesquisas, esta pesquisa envolveu 310 entrevistados. Os resultados revelam que os entrevistados destacaram a importância da inovação e de uma boa reputação no setor bancário. Além disso, alguns entrevistados expressaram disposição de pagar mais por serviços exclusivos ou luxuosos fornecidos por um banco, indicando o valor que atribuem a ofertas diferenciadas.

O estudo ressalta a importância da gestão da inovação e da reputação como fatores cruciais para que os bancos se mantenham competitivos e atraiam clientes.

Palavras-chave: banco digital, reputação, aquisição de clientes, competitividade de mercado, inovação, pesquisa, respondentes, serviços diferenciados.

აბსტრაქტი

წინამდებარე ნაშრომი იკვლევს საბანკო კონკურენციის თავისებურებებს საქართველოს კონტექსტში. საქართველოში საბანკო ინდუსტრიის სფეციფიკური მახასიათებლებისა და დინამიკის ანალიზით, ეს კვლევა მიზნად ისახავს გამოვალინოს ფაქტორები, რომლებიც აყალიბებს კონკურენციას ბანკებს შორის და მისი გავლენას ეკონომიკაზე

ნაშრომში, ძირითადად ყურადღება გამახვილებულია, იმაზე თუ რაოდენ მნიშვნელოვანია კარგი რეპუტაციის შენარჩუნება და ციფრული ბანკინგის ტექნოლოგიების ათვისება, კვლევის მიზანია იმ ფაქტორების ანალიზი რომელიც გავლენას ახდენს მომხმარებელთა არჩევანზე, შენარჩუნებასა და ბაზრის კონკურენტუნარიანობაზე. რაოდენობრივი ანალიზისა და თვისობრივი კვლევის მეშვეობით გამოიკითხა 310 რესპონდენტი, მათი პასუხებიდან გამომდინარე თამამად შეგვიძლია ვთქვათ, რომ პოზიტიური რეპუტაცია და თანამედროვე ტექნოლოგიების დანერგვა ერთ-ერთი უმნიშვნელოვანესი საკითხია საქართველოს საბანკო სექტორში. გარდა ამისა ბევრი რესპონდენტი მზადაა გადაიხადოს მეტი თუ კი ბანკი მათ შესთავაზებთ უნიკალურ/ძვირადღირებულ სერვისებს, რაც მიუთითებს იმაზე თუ რამხელა მნიშვნელობას ანიჭებენ მომხმარებლები დიფერენცირებულ შეთავაზებებს.

კვლევა ბაზს უსვამს როგორც ინოვაციების, ასევე პოზიტიური რეპუტაციის მნიშვნელობას, როგორც გადამწყვეტ ფაქტორებს ბანკების კონკურენტუნარიანობის შესანარჩუნებლად და მომხმარებლების მოზიდვისთვის

ძირითადი საძიებო სიტყვები : ციფრული ბანკინგი, რეპუტაცია, მომხმარებლების მოზიდვა, ბაზრის კონკურენტუნარიანობა, ინოვაცია, გამოკითხვა, რესპონდენტი, დიფერენცირებული სერვისები.

Acknowledgment:

I would like to express my deepest gratitude to the Polytechnic Institute of Bragança (IPB) for providing me with the opportunity to pursue my academic journey and complete this thesis. The knowledge and skills I have acquired during my time at IPB have been instrumental in shaping my research and academic growth.

I am immensely grateful to my thesis advisor, Ana Paula Monte, and Valer Mosiashvili for their invaluable guidance, support, and expertise throughout this research endeavor. Their insightful feedback, constructive criticism, and continuous encouragement have played a pivotal role in shaping the direction and quality of this thesis.

I am sincerely grateful to IPB for providing me with the platform and resources to pursue my academic aspirations. The knowledge and experiences gained at this esteemed institution have been invaluable in shaping this thesis and preparing me for future endeavors.

Acronyms

BC - Banking Competition

BI - Banking Industry

GB - Georgian Banking

BCB - Banking Competition Board

CIB - Competition in Banking

NBG - National Bank of Georgia

GBA - Georgian Bankers Association

EU: European Union

H: Hypothesis

O: Objective

Q: Question

FDI - Foreign Direct Investment

API - Application Programming Interface

IBA - International Banking Association

IFRS - International Financial Reporting Standards

Table of content

List of Tables	vii
Introduction.....	1
1. Literature review.....	3
1.1 Definition of banking competition	3
1.2 Effects of public image and Reputation on Banking Competition	5
1.3 Importance of Digital Banking in Today's World	6
1.4 General Description of the Georgian banking sector.....	9
1.5 The crucial importance of the banking sector in the financial market.....	10
1.6 Institutions Regulating the financial system and their influence on the competitive environment	14
2. Research Methodology	18
2.1 Objective of the Study and Research Hypotheses	18
2.2 Description of Data Collection and Data Analysis Methods.....	19
3. Presentation and Analysis of Results	21
3.1 Data and Profile of Respondents	21
3.2 Descriptive Analysis	22
3.3 Validation of Research Objectives	24
3.4 Validation of Research Hypothesis	25
3.5 Main Results	26
Conclusions, Recommendations, Limitations, and Future Research Lines	27
References	30
Appendix – Questionnaire	34

List of Tables

Table 1. Objectives, Hypotheses and data analysis technique.	20
Table 2. Profile of respondents	21
Table 3. Familiarity of respondents with banking sector	22
Table 4. Customer’s opinion, on digital banking adoption	22
Table 5. Reliability of Georgian Banks from the Customer’s Point of View	23
Table 6. Level of competition in the Banking industry of Georgia from the customer’s perception.	23
Table 7. The loyalty of customers based on their age	24
Table 8. Customers’ Attitudes Towards Adaptation of Technology/innovation	24
Table 9. Customers’ Attitudes Towards Public Image and Reputation	25
Table 10. Pearson’s Correlation Test.	25
Table 11. Chi-Square Test.	26
Table 12. Main results	26

Introduction

"If banks compete against each other, they have to provide great services for their customers - otherwise people will switch to another, better, bank. This makes banks more efficient and productive, which is good for the economy" (Bank of England, 2019, p.2).

How does competition in banking impact financial stability and real economic outcomes? Although these questions are important for researchers and policymakers, there is little agreement on the answers. In theory, competition among banks could either increase or decrease credit provision and risk-taking. Thus, answering these questions requires empirical research. However, finding the causal effect of bank competition is difficult because concentration and competition are usually not independent factors (Carlson, Correia & Luck, 2019).

A well-functioning banking sector is crucial for any economy. Banks support economic growth by holding and exchanging financial assets and providing credit to businesses and consumers. Competition in banking can bring similar benefits as in other industries, such as improving efficiency and encouraging innovation, ultimately leading to stronger economic growth (Northcott, 2012).

The idea that competition is the best market structure is a long-standing principle in economics. It ensures productive and allocative efficiency, encourages innovation from both existing and new firms, lets consumers buy at lower prices, and choose from different producers. Ultimately, it benefits society as a whole (Coccorese, 2017).

Given the well-known essential role of banks in the economy, particularly in providing credit, implementing monetary policy, and handling payments, it is important to study how competition within the banking sector affects economic performance. Evaluating and measuring competition and market power in the banking sector has been a significant topic in economic studies for a long time. Recently, the impact of banking market power on economic growth has become the subject of many theoretical and practical studies. Contrary to the traditional belief that less competitive banking sectors harm social welfare, some researchers suggest that greater market power can enhance the information banks have for lending and increase their readiness to build closer relationships with their clients (Coccorese, 2017).

The banking industry plays a pivotal role in facilitating economic growth and financial stability within a country. Within this industry, competition among banks is a crucial factor that influences market dynamics, customer experiences, and overall industry performance. Understanding the peculiarities of banking competition is of great importance for policymakers, regulators, and industry participants aiming to foster a healthy and sustainable banking environment. This thesis focuses on exploring the specific peculiarities of banking competition within the context of Georgia, utilizing a case study approach.

To comprehensively analyze the peculiarities of banking competition in Georgia, this research employs a combination of quantitative and qualitative research methods. A survey was conducted as part of this research, with the participation of 310 individuals, to gather data and understand customer perspectives on banking competition. The survey focused specifically on determining the effects of digital banking technologies and public image on banking competition.

The findings of this research are expected to contribute to the existing literature on banking competition, specifically within the Georgian banking industry. By uncovering the unique characteristics of banking competition in Georgia, this research will offer some knowledge and recommendations to policymakers, regulators, and industry stakeholders. The main goal of this thesis is to determine the effects of digital banking technologies and public image on banking competition, providing insights to enhance competition, promote the adoption of digital banking technologies, and cultivate a positive public image within the banking sector of Georgia.

1. Literature review

1.1 Definition of banking competition

Competition is a common occurrence across all sectors of the economy, including the banking sector. However, competition in banking activities possesses distinct characteristics. Unlike other types of services, banks enter the market after conducting thorough market analysis, ensuring they are well-prepared and equipped with appropriate technologies to carry out banking operations. On one hand, banking activities must serve an economic purpose, while on the other hand, they must meet the financial demands of the market. Additionally, these activities should be designed to ensure that the services, offered by banks are accessible to the public (Odunga & Nyangweso, 2012).

In the present day, there is a pressing need to foster competition and enhance the competitiveness of commercial banks within the banking sector. Many authors and researchers have emphasized the significance of competition in the banking industry. The consensus is that the progress of a country's banking system relies on regulating banking activities in a manner that promotes fair competition. Not only does fair competition drive the growth of the banking sector, but it also contributes to the country's overall economic stability. Consequently, it becomes essential to investigate and define the concept of "competition" specifically within the banking sector, as it is a relevant and timely topic for research (Begimkulov, 2023).

Recognizing the extent of competition in the banking industry is essential for banks to formulate effective strategies and provide products and services that offer a competitive edge (Naym, 2018). Evaluating the concentration and competition within the banking sector is crucial for clients, bank managers, regulators, and other stakeholders, as it impacts the system's performance, efficiency, and stability. In both developed and developing nations, a competitive banking system is key to facilitating economic growth by converting savings into investments. The competition level in the financial sector has both beneficial and detrimental effects on the efficiency and quality of financial services. It also drives innovation and influences access to financing, which subsequently affects general economic growth (Mathisen & Buchs, 2005).

Numerous studies have emphasized the importance of competition in the banking sector and its effects on pricing, efficiency, social welfare, and stability. When companies compete, consumers benefit in several ways, including lower prices, a broader selection of products, better quality, and increased innovation. Competition in banking also fosters financial inclusion by lowering the cost of financial services, thereby improving access to finance. Conversely, a lack of competition in this sector leads to poor service quality, higher fees, and a deficiency in innovation, causing customer dissatisfaction. According to (Claessens & Laeven 2004), a reduction in banking competition increases the cost of financial services, limiting financing options and slowing economic growth.

Besides the beneficial impacts on welfare, competition in the banking industry can also lead to negative economic outcomes. Intense competition may drive banks to lower their lending standards and take on excessive risks, potentially jeopardizing the stability and operation of the banking system, and causing broader financial disruptions. A detailed look at the subprime lending market in the USA shows that heightened competition can lead to poorer lending practices (Dell'Ariccia, Laeven & Igan, 2008). (Cuestas, 2017) analyzed commercial banks in the Baltic states from 2000 to 2014 to explore the link between competition and bank risk. Their study concluded that greater market power, indicative of less competition, correlated with reduced bank risk-taking and lower insolvency risk. In contrast, insufficient competition is likely to increase individual banks' risk-taking behavior, negatively impacting the sector's stability.

However, Competitive banking fosters financial stability by reducing the risk of individual bank failures. Intense competition encourages banks to maintain sound lending practices, risk management strategies, and robust capital buffers, thus minimizing the likelihood of systemic risks and financial crises. Banking competition stimulates innovation as banks strive to differentiate themselves and gain a competitive edge. Faced with competition, banks invest in technological advancements, such as online banking platforms, mobile apps, and fintech collaborations. Competition in banking drives market efficiency by exerting pressure on banks to allocate resources efficiently and optimize their operational processes. Market-driven competition promotes cost reduction, encourages resource allocation to profitable sectors, and enhances productivity, leading to improved allocation of capital within the economy (Badarau & Lapteacru, 2019).

Banking competition plays a crucial role in shaping the economy, providing numerous benefits such as financial stability, improved consumer welfare, innovation, and market efficiency. However, it also poses risks, including excessive risk-taking, erosion of profit margins, and market consolidation. Policymakers and regulators must strive to strike a balance between promoting competition and safeguarding the stability and resilience of the financial system. Effective regulations and supervision are necessary to encourage healthy competition, foster innovation, and mitigate potential negative impacts, ultimately supporting sustainable economic growth (Leroy & Lucotte, 2017).

1.2 Effects of public image and Reputation on Banking Competition

Reputation and public image hold immense importance for banks as they play a crucial role in establishing trust, attracting customers, and maintaining regulatory compliance. A positive reputation built on ethical conduct, transparency, and customer-centricity helps banks acquire and retain customers by instilling trust and confidence. It also allows them to differentiate themselves from competitors, attracting new customers and increasing market share. Furthermore, a solid reputation enhances a bank's credibility with regulatory bodies, facilitating positive relationships and potentially leading to less stringent oversight. However, a tarnished reputation can invite increased scrutiny and reputational damage, underscoring the need for effective crisis management strategies (Bravo, Montaner & Pina, 2009).

Investor confidence is closely tied to a bank's reputation, as investors seek reputable institutions with a track record of ethical practices and reliable financial performance. A positive reputation improves a bank's ability to raise capital, expand operations, and pursue growth opportunities. Additionally, a strong reputation aids in talent acquisition and retention, as professionals are drawn to reputable banks that offer stability, career growth, and ethical work environments. A positive reputation fosters employee loyalty and contributes to the development of a talented and motivated workforce (Shatila, 2021).

A strong reputation allows banks to differentiate themselves from competitors in a crowded marketplace. Positive word-of-mouth, favorable media coverage, and endorsements from satisfied customers enhance a bank's brand value and increase its appeal to potential customers, contributing to customer acquisition and market share growth. (Dinç, 2000). Banks with a strong reputation are better positioned to manage and mitigate reputational crises effectively. Proactive crisis management strategies, including open communication, swift actions to address issues, and transparent disclosure, can help minimize reputational damage during challenging times. Maintaining a positive reputation beforehand provides a cushion of goodwill and public trust, which aids in crisis recovery and resilience. Banks with a strong reputation have an advantage in attracting and retaining top talent. Professionals seek to work for reputable institutions that offer stability, career growth, and ethical work environments. A positive reputation fosters employee loyalty, boosts morale, and supports the development of a talented and motivated workforce (Thomson & Jain, 2006).

A bank's reputation influences customer loyalty and satisfaction (Babić-Hodović,, Mehić & Arslanagić, 2011).. A good reputation fosters a deep emotional bond with customers, resulting in lasting loyalty and higher customer retention. Customers are more likely to remain with a bank that has consistently demonstrated a positive reputation and has earned their trust. A bank's reputation is closely associated with its ability to withstand economic fluctuations and financial crises. Customers are more inclined to trust and rely on banks with a proven track record of financial stability, as it gives them peace of mind regarding the safety of their deposits and investments. In an increasingly digital world, customers prioritize banks with a strong reputation for data privacy and security. A positive reputation in these areas assures customers

that their personal and financial information will be safeguarded against unauthorized access and cyber threats. A bank's reputation for excellent customer support and responsiveness plays a significant role in customer satisfaction and loyalty. Customers appreciate banks that prioritize their needs, promptly address concerns, and provide efficient and personalized services. A positive reputation in these areas fosters a strong customer-bank relationship (Babić-Hodović, Mehić & Arslanagić, 2011).

1.3 Importance of Digital Banking in Today's World

In today's world, it's hard to imagine the banking sector without the digital transformation of information. The need for physical visits to banks has significantly diminished, and banks themselves are actively facilitating this transition through various means. We can now deposit funds online, perform currency conversions digitally, transfer money between accounts, make online purchases, and even obtain loans without unnecessary bureaucratic processes. These advancements not only reduce costs for both banks and customers but also play a role in curbing corruption (Kitsios & Giatsidis, 2021).

The utilization of software processing has a profound impact on reducing transaction costs. Banks now have the ability to present customer accounts electronically, resulting in substantially lower expenses compared to delivering paper invoices through traditional mail services. In fact, electronic billing costs approximately 40% less than delivering invoices in paper form. These cost savings benefit both customers and banks by enabling lower-priced banking services while ensuring the provision of efficient and diverse services (Lakshmi & Kavitha, 2020).

Banks find it much easier to understand customer preferences through social networks. This insight allows them to create and offer banking products that meet customer needs. Banks strive to provide a wide array of financial services, such as bill presentation and payment, real estate financing, insurance, financial planning, loans, and brokerage services. By earning customer loyalty and becoming a reliable source for various financial tools, banks can offer all-inclusive banking service packages and increase revenue per client. Banks adopt a new role, functioning as financial portals, enabling customers to access products and services with minimal bureaucracy, reduced transaction time, and less dependence on human assistance (Lakshmi & Kavitha, 2020).

Digital banking encompasses the complete digitization of banks and all their operations, services, and functions. This includes not only the digital transformation of customer-facing banking services and products but also the automation of internal processes. Digital banking automates every facet of the banking relationship, reaching beyond the boundaries of online, offline, mobile, and Internet banking systems (Jerene & Sharma, 2019).

Digital banking represents a full transition to a digital environment, encompassing interfaces, backends, and everything in between, for both employees and customers. It utilizes big data, new technologies and analytics to improve customer service quality. A bank is truly digital only if it has digitized all its functions, from customer support to product development.

Here are some of the aspects of digital banking that can be considered as a main competitive advantage (Fathiddinovna, 2020), as follows:

- Cost reduction is a crucial imperative for banks to maintain competitiveness. Embracing digitalization allows banks to streamline operations and reduce costs significantly. By transitioning to digital platforms, banks can avoid the need to invest in costly, outdated software and hardware to keep legacy systems up to date. Digitalization offers a more cost-effective and efficient alternative, ensuring banks can allocate resources more effectively and stay competitive in the ever evolving financial landscape.
- Digital banking presents an opportunity for increased profitability. Traditional banks often lack a comprehensive understanding of their customers, including their preferences and needs. However, through the utilization of smart systems and customer-oriented platforms, banks can gather valuable customer information and tailor banking products accordingly. By conducting research on customer preferences through social networks and instant messengers, banks can develop products that align with customer interests. Furthermore, a larger market share for a bank enhances the likelihood of increasing its profitability as it gains a broader customer base and market presence.
- Digital banking offers the advantage of attracting new clients and retaining the loyalty of existing customers while outperforming competitors. The emergence of financial technologies and other disruptors has disrupted the banking industry, leading to heightened demand for enhanced customer service and personalized offerings. As a result, established banks are confronted with the challenge of staying competitive, often resulting in increased costs for their products and services. Digital banking addresses this challenge by improving the quality of customer service and reducing costs, enabling banks to proactively anticipate and address customer demands effectively. By embracing digitalization, banks can stay ahead of the competition and meet the evolving needs of their customers.
- Studying the benefits of emerging technologies enables us to forecast how innovations like cognitive banking, blockchain, and data analytics will impact banking business models. However, outdated systems hinder banks' ability to react swiftly to these developments. Complete digitalization is necessary to explore these technologies' advantages and determine the bank's future positioning.

Customer expectations are evolving, competition from tech companies is increasing., and new regulations are emerging. These changes act as catalysts for banks to adapt and embrace digitalization, ensuring they

can meet the changing needs and demands of their customers. By creating a robust digital space, banks can enhance customer experiences, remain compliant with regulations, and effectively compete in the dynamic financial industry. (Fathiddinovna, 2020)

Listed below are some key drawbacks of digital banking. (Fathiddinovna, 2020), as follows:

- **Security Systems.** Digital banks must adhere to the same laws and regulations as traditional banks. Advanced encryption software is intended to safeguard your account details, but no system is flawless. Digital bank accounts are vulnerable to threats like malware, phishing, hacking, and other unauthorized activities. It is crucial for digital banks to stay alert and implement strong security measures to minimize these risks and protect information and customer accounts.
- Digital banks might offer fewer services compared to their traditional counterparts. For instance, they may not provide all-encompassing financial services like insurance or brokerage accounts. Traditional banks often extend unique perks to their regular customers, such as free investment guidance and exclusive rates. Additionally, some essential services, like bank signatures and notarizations, may not be available online but are important for various financial and legal procedures. On the other hand, in today's digital landscape, social media can impact lending rates. Users who gather a certain number of "likes" for a bank can influence its rates. This approach is akin to store loyalty programs, where achieving specific thresholds of likes—such as 10,000 or 20,000—can lead to lower lending rates through the bank's loyalty initiatives.
- In digital banking, there may be limitations in establishing personalized relationships with clients. Traditional banks often have an advantage in this aspect as they possess knowledge of their clients, including their credit history and specific business requirements, which allows them to offer favorable terms. However, the nature of digital banking systems may not provide the same level of personalized opportunities and tailored services to individual clients. The focus in digital banking is often on efficiency and convenience, which may limit the ability to provide highly customized solutions based on a deep understanding of the client's specific needs.
- For complex or significant transactions, direct interaction with the client is often necessary. Traditional banks have the advantage of being able to arrange in-person meetings and consult experts to address specific issues. However, in digital banks, the ability to handle complex international operations, issues related to syndicates, and international financing may be limited. The absence of face-to-face interaction and the reliance on digital platforms may hinder the seamless execution of intricate transactions that require a high level of expertise and coordination.

The development and management of activities related to crypto assets involve several components. This includes mining, where participants support the network and generate new blocks, earning rewards in the form of new cryptocurrency units and transaction fees. It also includes smart contracts, which are

automated digital agreements that execute terms and obligations through online transactions. Moreover, various functions such as consulting, issuing, trading, storing, distributing, managing, insuring, crowdfunding (collective investment), and applying blockchain technology play a vital role in broadening investment options and encouraging business ventures in this field (Fathiddinovna, 2020).

To facilitate the advancement and utilization of blockchain technologies, it is important to focus on personnel training to enhance qualifications in this field. This includes offering training programs that impart hands-on skills for using contemporary information and communication technologies in blockchain development and application. Furthermore, fostering comprehensive cooperation with international and foreign organizations is crucial. This collaboration helps in expanding knowledge and expertise in crypto assets and blockchain technologies. Additionally, attracting highly skilled foreign experts in blockchain development promotes joint implementation of projects in the digital economy (Fathiddinovna, 2020).

Digital banking opens up a range of innovative products and services for customers. From virtual wallets and peer-to-peer payments to robo-advisory and customized financial planning tools, customers have access to a broader array of banking solutions tailored to their specific needs. This expanded offering enables customers to make informed financial decisions and optimize their banking experience. From a customer perspective, digital banking and the implementation of modern technologies have become vital in the banking industry. Customers value the convenience, accessibility, and improved services that digital solutions provide. Digital banking offers 24/7 availability, seamless banking experiences, expanded product offerings, and personalized recommendations, enhancing customer satisfaction and financial empowerment. Furthermore, it fosters financial inclusion by reaching underserved markets and providing educational resources (Fathiddinovna, 2020).

1.4 General Description of the Georgian banking sector.

Since the inception of the Georgian banking system, there has been a trend toward decreasing the amount of commercial banks, whereas the amount of branches and service centers has been steadily rising each year. This reduction in commercial banks has been driven by the National Bank's increasing demands for higher minimum authorized capital for these institutions. Statutory capital is one of the main levers for the implementation and provision of banking activities, which aims to ensure the normal functioning of banking activities and strengthen the bank's operations. Opportunities to expand, neutralize expected and unexpected financial losses, ensure maximum protection of the interests of depositors and creditors, and possibly in the banking system Minimize negative consequences. Georgian banking legislation for determining the authorized capital for commercial banks in full Provides for the recommendation of the Basel Committee on the powers of the supervisory body to determine the amount of capital. For example, in the 1990s, the minimum authorized capital of commercial banks was \$ 500, As a result, hundreds of

unreliable and unstable banks were opened, which could not enjoy the factor of public trust, and most of them soon ceased to exist. After that, the National Bank of Georgia in 1997 In January, issued an order requiring commercial banks to increase their share capital to GEL 5 million. Commercial banks operating in Georgia were obliged to gradually increase their capital to 5 million GEL by the end of 2000. The purpose of these measures was to further consolidate the banking sector. By 2017, all commercial banks in Georgia were required to have a minimum authorized capital of at least GEL 12 million (Condei & Gattini, 2019).

Supervisory capital is a specialized type of capital intended to facilitate banking operations, cover potential or unforeseen financial losses, and mitigate various risks. On May 3, 2017, the President of the National Bank of Georgia issued a directive raising the minimum supervisory capital requirement for commercial banks from 12 million GEL to 50 million GEL. This increase was designed to reduce the incentives for high-risk behavior in banks with insufficient capital and to attract financially robust institutions, thus bolstering the overall stability of the banking sector. Presently, Georgia's minimum capital requirement is among the lowest worldwide, which does not align with the country's financial and economic development. This regulatory change was supported by the International Monetary Fund. Prior to this directive, existing commercial banks in Georgia had a phased capital requirement: a minimum of 30 million GEL by December 31, 2017; at least 40 million GEL by June 30; and 50 million GEL by December 31, 2018 (Condei & Gattini, 2019).

1.5 The crucial importance of the banking sector in the financial market

There are many definitions of a financial market, for example, A financial market is a set of market institutions through which cash flows flow from owners to borrowers. The financial market is also called the market in which funds are transferred from those who are aware of the excess cash to those who are short of funds. The explanations clearly show why the financial market plays an important role in the economy. As already mentioned the financial market allows people to Those whose investment opportunities are limited, transfer funds to those who have such opportunities. Ultimately, the financial market increases consumer welfare (Jokipii & Monnin, 2013).

Georgian legislation provides for a two-tier banking system, with the National Bank of Georgia on one tier and commercial banks on the other tier. Commercial banks have historically established themselves as universal banks in Georgia and acted as financial intermediaries. The financial system includes markets, intermediaries, financial services firms, and other institutions with the help of which various companies, governmental organizations, and other organizations make financial decisions (Mosiashvili, Lomidze & Qoqosadze, 2009).

The modern financial system is characterized by globalization, which means real-time financial transactions through the international telecommunications network by financial markets and intermediaries. Georgia's financial system is also involved in this process, but as in all other countries with economies in transition, so are our financial markets (Mosiashvili, Lomidze & Qoqosadze, 2009).

The banking system is the most important aspect of the credit and financial system and is one of the largest employers in the country's economy. The bank is a special institution that carries cash Accumulation, issue of money, and payment. The banking system is divided into central banks and commercial organizations based on its functions and operations. Most of the financial intermediaries are commercial banks, banking institutions can also mobilize financial resources and turn them into investment resources, so the banking system plays a key role in accelerating the country's economic growth (Chelidze & Topchishvili, 2018).

The economic literature distinguishes between a "bank-based financial system" and a "securities-based financial system".

The financial system in Georgia is based on banks and other financial intermediaries. From the functions of the financial system, we can distinguish information, control, management, risk management, accumulation of savings, and reduction of obstacles to turnover. As the financial system of all countries, The financial system of Georgia also performs these functions, but there is a difference in the levels of development of individual institutions (Mosiashvili, Lomidze & Qoqosadze, 2009).

Financial intermediaries are firms whose main role lies in offering financial services and selling financial products. These include banks, investment, insurance companies, and other institutions. Most of the resources transferred through the financial system will not pass through the financial markets, they will move freely with the help of financial intermediaries. From economic entities with financial resources to entities experiencing a lack of resources. It is well known that there are two ways to transfer cash resources from lenders to borrowers: direct and indirect financing channels. One of them is Implemented through financial intermediaries. They are called indirect funding channels. Financial intermediaries are creditors-savers and As intermediaries between the borrower-spender. For example, a bank may receive funds at its disposal in the form of savings deposits from the population, then it can use these funds to buy any asset, for example, it can lend to a company, or buy bonds of these companies in the financial market, resulting in the redistribution of funds from the population. To the company through a financial intermediary (bank) (Ehlers & Villar, 2016).

As already mentioned, the financial market is called the transfer of cash flows from owners to borrowers, funds are transferred from lender-savings to borrowers-spenders through two main types of financing, direct and indirect. Financial markets are direct or indirect financing, while indirect financing is done with the help of financial intermediaries, financial intermediaries play a big role in the financial market development scheme (Ehlers & Villar, 2016).

Commercial lending has always been an attractive area for banks to operate in the activities of financial intermediaries. A professional working in this field should be able to solve the client's problems in a way that does not upset the balance between the borrower's wishes and the bank's credit policy, the commercial lender has no right to make a mistake. In order for a bank to ensure even minimal profitability, the lender must make the right decision. In many countries financial intermediaries play a major role compared to the securities market, there are also a number of countries where the stock and bond markets differ from each other. In the US, the bond market plays a significant role as the most important source of corporate financing. By selling bonds The amount of funds received is on average 10 times higher than the number of funds raised at the expense of shares, while in countries such as France and Italy, the stock market is more often used for capital investment, Compared to the bond market (Ehlers & Villar, 2016).

The financial system in Georgia is represented as a market of securities and a market of market loans. However, the financial market, whose main participants are commercial banks, is more developed than the non-bank financial market (Mosiashvili, Lomidze & Qoqosadze, 2009).

The banking system occupies a strategic position in the economy. The resilience of the banking sector is determined by many factors, including:

- Changes in prices for banking products and services,
- Dynamics of interest rates,
- exchange rates,
- Change in prices of securities,
- Inflation rate.

The factors listed above affect the quantitative characteristics of the system and can disrupt its integrity. The stability of the banking system is determined by the degree of financial stability of its elements and the system as a whole, by possible structural changes, such as the creation or growth of specialized credit organizations, as a response to external and internal factors; By expanding or reducing the circle of commercial banks, their authorized capital with state participation in the formation; The financial sustainability and quality of management of the elements of the banking system, their strategic goals, etc. (Mosiashvili, Lomidze & Qoqosadze, 2009).

The financial stability of the Georgian banking system is the most important mechanism in achieving stabilization of the financial-economic situation of the country both in the short and long term.

The problem of sustainability, in a broad sense, is central not only to banking but also to other financial institutions in a market economy, as it ultimately reflects the competitive environment of all economic entities in the process of achieving economic stabilization. The actual impact on the country's economy among the factors, a special place is occupied by determining the conditions for ensuring the financial stability of the banking system (Mosiashvili, Lomidze & Qoqosadze, 2009).

It is noteworthy that the securities markets play a positive role in the economic growth of the country, as the financial markets provide the collection of complete information about new technologies and display them at market prices. The market system creates incentives by increasing competition for economic development, in addition to offering competition as an alternative means of financing investment, securities markets can limit the excessive power of banks (Chelidze & Topchishvili, 2018).

One of the important sectors for the development of the country's economy is commercial banks, their existence always plays a big role in the economy and performs crucial functions in industry and commerce. Banks act as protectors of state wealth as well as providers of resources for the economy, which is essential for the development of society. Their role in the development of the economy is multifaceted (Chelidze & Topchishvili, 2018).

The banking system occupies a strategic position in the economy. The sustainability of the banking sector is important for the economy, it is determined by many factors, in particular, the prices of banking products and services changes in interest rate dynamics, exchange rates, changes in securities prices, and inflation levels. These factors affect the quantitative characteristics of the system and can disrupt its integrity. The set of variables named above, in turn, is defined by macroeconomic parameters such as budget balancing, tax policy, government domestic and foreign loans, investment activity, compliance with aggregate demand and aggregate supply, and more. The stability of the banking system is determined by the degree of financial sustainability of the elements and the system as a whole, with possible structural changes, such as the creation or growth of specialized credit organizations, both foreign and domestic. Response to impact on factors; By expanding or reducing the circle of commercial banks, with state participation in the formation of their authorized capital; The financial sustainability and quality of management of the elements of the banking system, their strategic goals, etc. (Mosiashvili, Lomidze & Qoqosadze, 2009).

National savings are one of the determinants of a country's future prosperity. Like personal savings, national savings are often used to make investments that generate country revenue. Promotes growth. For example, we can use a person who decides to make savings with his own income for a certain period of time he will benefit, during this time financial institutions lend savings to businessmen and individuals who use the money for investment activities and thus contribute to the economic growth of the country. Saving and investing are of great importance to the economy. In order for savings to be converted into investments, those wishing to save must provide cash to the borrowers. This function is assigned to banks in our country. Therefore, the stability of financial institutions (banks) is a determining factor in the prosperity of the country (Mosiashvili, Lomidze & Qoqosadze, 2009).

One of the important functions of banks is the ability to create and destroy credit money. It is carried out through credit and investment operations with the country's central bank. The ability of a bank to "make money" is of great importance to the economy. It is realized in a flexible credit system, which is a necessary condition for the relatively solid growth rate of the economy. The economy needs to supply the necessary and not the size of money. The country's central bank aims to ensure circulation and align the amount of

money available with the national objectives of price stabilization, to promote economic growth rates and high levels of employment. Banks play an important role in achieving this goal, they are a necessary channel for increasing or decreasing the money supply. Banks provide important services to all sectors of the economy by accumulating savings and subsequently using them for various economic and social needs. By lending, banks play an important role in Production expansion, capital increases, and a high standard of living is achieved. Lending to the agricultural sector, trade, industry, and other sectors is extremely important for the economy (Mosiashvili, Lomidze & Qoqosadze, 2009).

1.6 Institutions Regulating the financial system and their influence on the competitive environment

The National Bank of the Republic of Georgia was established on the basis of the Office of the State Bank of the Soviet Union. And state-owned "commercial and joint-stock" commercial banks were established on the basis of the Republican branch offices of the Union branch banks. The creation of the National Bank and its development by civilized methods could only take place under the proper legal framework, when banking, credit, foreign exchange, settlement, interest, and other relations were regulated by relevant legislative acts and other norms. In August 1991, the Supreme Council of the Republic promptly adopted laws (Matsne, 2022) as follows:

- On monetary regulation in the Republic of Georgia
- On banks and banking activities in the Republic of Georgia
- About the National Bank of the Republic of Georgia

These laws defined how and to whom the regulation of monetary relations in the Republic should be carried out and what role the National Bank of the Republic should play in this direction (Matsne, 2022).

At the first stage of its establishment and operation, the National Bank was hindered from developing and conducting a sound monetary policy due to the fact that it did not have (Matsne, 2022) as follows:

1. Own signs of money
2. Own credit resources
3. Stocks of foreign convertible currency (International reserves)
4. Gold reserves

The National Bank of Georgia, which is a leading link in the credit system, currently has its own currency signs and foreign currency reserves. (NBG, 2020a).

The National Bank of Georgia (NBG) serves as the regulatory authority for Georgia's banking sector. In June 1995, the Law of Georgia on the National Bank was enacted. This law grants the NBG autonomy in

implementing monetary policy and overseeing banks, and it also empowers the NBG to manage foreign exchange reserves. Beyond monetary policy, the NBG ensures the stability of the banking system. It oversees banking operations in partnership with the Financial Supervision Agency (FSF) to guarantee their safe functioning. The Organic Law of Georgia on the National Bank of Georgia outlines the NBG's rights, responsibilities, operational rules, and independence. As the government's fiscal agent, the NBG aims to maintain the national currency's liquidity, ensure price stability, and support the liquidity, solvency, and market stability of Georgia's financial and credit systems. The NBG's status and independence are established by the country's constitution (Bakradze & Billmeier, 2009).

In the context of price stability, the NBG aims to pursue a monetary policy that ensures that non-inflationary monetary assets are non-inflationary and that the economy is increasingly monetized in the wake of economic growth and increased demand for cash (Bakradze & Billmeier, 2009).

At least in theory, the NBG has a sufficient number of monetary instruments. It can use several tools to manage the liquidity of the banking system (Matsne, 2022) as follows:

- 1) Interventions in foreign exchange trading
- 2) Open market transactions, which include interference in interbank credit auctions as well as in repurchase transactions with commercial banks.
- 3) Permanent access transactions such as withdrawing deposits from commercial banks and issuing overnight loans to secure daily interest rates
- 4) Issuance of Central Bank securities
- 5) Establishment of minimum reserves on GEL and foreign currency deposits in commercial banks

The primary responsibility of the National Bank is to maintain price stability. Additionally, the National Bank is tasked with ensuring the stability and transparency of the financial system and fostering sustainable economic growth, provided this does not compromise its main objective (NBG, 2020).

One of the main strategic tasks of monetary policy is should be able to support real production and employment. In this regard, it is important to ensure the growth of resources for lending to production programs (Matsne, 2022).

The NBG and its supervisory service have carried out large-scale and time-consuming work to unify and consolidate the restructuring of the country's banking system, to institutionalize individual credit institutions, increase their solvency and liquidity, and to better protect the interests of depositors and creditors (Matsne, 2022).

The primary law governing supervision is the Law on the National Bank. Article 16 of this Law, in its third paragraph, outlines the authority of the Financial Sector Supervision Committee of the National Bank. The Committee is empowered to (Matsne, 2022) as follows:

- a. Review and draft legal acts concerning financial supervision regulation;

- b. Address feedback from financial sector representatives regarding actions taken by the relevant structural units of the National Bank;
- c. Examine specific cases within financial sector supervision and make proper decisions;
- d. Request information from the structural units of the National Bank on matters related to the Financial Sector Supervision Committee's activities within a specified timeframe

The Financial Sector Supervision Committee's decision is presented as a recommendation to the President of the National Bank. Based on the President's final decision, the National Bank issues legal acts. (Matsne, 2022)

Supervision of a commercial bank and a non-bank depository institution

The National Bank is authorized to (Matsne, 2022) as follows:

- oversee the operations of a non-bank depository institution and a commercial banks. The granting and revoking of permits, inspections, regulations, written instructions, imposing extra conditions and limitations, and the use of punishments and supervisory actions are all examples of supervision;
- seek and obtain information on a commercial bank's funding sources, important owners, and beneficial owners;
- request and receive, within the bounds of its authority, any information—including private information—about the beneficial and direct owners of a commercial bank and impose further conditions on them by legal action;
- monitor and oversee commercial banks and non-bank depository institutions; examine their subsidiaries; conduct an audit of the financial reporting components, accounting records, and other materials; and request any information from them in the form and to the extent that it is authorized by it. The materials will be given to the appropriate authorities if the inspection reveals any indications of criminal activity;
- to stop active operations, raise reserve requirements for commercial banks and non-bank depository institutions, forbid profit distribution, accrual, and payment of dividends, raise salaries, give out bonuses, and do other comparable compensation;
- suspend the administrators' ability to sign documents for commercial banks and non-bank depository institutions; levy a fine and require that they be fired; to settle a fine with a non-bank depository organization and a commercial bank; revoke the pertinent licenses held by non-bank depository institutions and commercial banks;
- to specify the conditions that must be met in order for a commercial bank or non-bank depository institution to receive and revoke a license, as well as the amount and mode of administration of the penalties. The fine amount is allocated to Georgia's state budget;

The main task of supervisors is for commercial banks and other equivalent credit institutions to comply with banking legislation and National Bank regulations. The Supervisory Service pays special attention to the dispute over economic norms by commercial banks, as economic norms and their variants are the most effective means of influencing the National Bank on commercial banks, their activities, and their effective operation (Matsne, 2022)

Functions of the National Bank of Georgia (Matsne, 2022) as follows:

- a) formulate and carry out monetary and exchange rate policy in compliance with the primary directives established by the Georgian Parliament;
- b) supervise the financial industry;
- c) guarantee the monetary system's functioning;
- d) possess, look after, and dispose of government foreign reserves;
- e) be a banker and Georgian government fiscal agent;
- f) to encourage the payment system's efficient, safe, and sustainable operation;
- g) to print Georgian banknotes;
- h) to generate and distribute data about the nation's foreign and financial sectors in compliance with global standards and procedures;

The main direction of the National Bank of Georgia is to issue an inflation forecast a year in advance. That's what the NBG monetary policy regime is to target inflation. This estimate cannot be considered superficial, as the NBG's one-year inflation forecast model for determining the one-year inflation outlook is reinforced by information from more long-term structural models and expert estimates (Matsne, 2022).

It should be noted that countries with economies in transition are characterized by high levels of inflation, which is associated with high rates of productivity growth. There is no doubt about the fact that inflation and nominal wages are closely linked. Price dynamics are significantly influenced by the exchange rate both in the short and long term, which is due to the high level of dollarization in the country and the large (Matsne, 2022).

Term, the National Bank of Georgia will mainly use the policy rate during 2022-2024, the change of which will be transmitted to the economy through the following monetary policy instruments: refinancing loans, one-month open market instrument; Permanent instruments, certificates of deposit, transactions with government securities, foreign exchange interventions, minimum reserve share of imported goods in the consumer basket. (NBG, 2020b)

2. Research Methodology

2.1 Objective of the Study and Research Hypotheses

Before we dive deep into our main Objectives of the work, I would like to do a small introduction about How important it is nowadays for Banks to adapt to a new era of technological advancement and innovation while maintaining and trying to increase public trust towards them and other old school institutions

In the ever-evolving landscape of the banking industry, the competitive environment has made significant transformations, caused by technological advancements and changing customer expectations. The advent of innovative technologies has revolutionized the way banking services are delivered and experienced. The integration of digital platforms, mobile banking, VR banking, and other technological innovations have transformed the industry's landscape, offering new avenues for customer engagement and operational efficiency. However, the implementation of these advancements is not without challenges. Maintaining public trust is the number one priority for banks, as it forms the foundation of their reputation and long-term viability. Customers expect their financial institutions to safeguard their assets, provide secure transactions, and protect their sensitive information. Therefore, as banks embrace technological advancements, they must strike a delicate balance between innovation and maintaining public trust.

This research study aims to explore the unique characteristics of banking competition, focusing specifically on the context of modernization and how it affects the reputation and trustworthiness of an institution. The study will employ a quantitative research design and an online poll to examine how banking modernization has affected the industry's competitiveness, consumer choices, and customer behavior.

Two primary research objectives (O) for the study were determined during the research process:

1. **O₁**: Analyse the importance of technological advancement of banking institutions from the customer's perspective
2. **O₂**: Find out if Georgian Banking Customers consider the public image and reputation of the banking institution before choosing them

To finalize the study, two hypotheses (H) were created based on the primary goals of the work:

1. **H₁**: There is a positive correlation between the statement that Banks need to adapt to modern times/technology in order to stay competitive and the statement that Customers would pay extra money for a unique experience/service provided by Bank.
2. **H₂**: There is an association between age and customers willing to pay more money for having extra unique/luxurious features provided by the bank.

2.2 Description of Data Collection and Data Analysis Methods

The current study has objectives and hypotheses and is based on quantitative analysis. To collect data to achieve the proposed objectives and validate the hypothesis, it was developed a survey, through a questionnaire forms. The questionnaire consists of 2 parts. In the first part, there are 3 questions that contain personal information, such as age, gender, and work status. And the second part consists of 11 questions and completely covers the respondent's relationship with the bank as a customer. The web tool Google Forms was used to convey the survey, which lets users save the answers, export and analyze data in SPSS. Facebook and Instagram were the social media platforms used to distribute the questionnaire. The usage of active groups brought the entire audience together. Therefore, respondents were chosen at random (Tvalavadze, 2022).

Analysis is the process of using logical and analytical reasoning to summarize the data that has been collected. Goal of the process is to find correlations, patterns, and trends in the data. Furthermore, it entails interpreting numerical figures and seeking supporting evidence for the main findings. The software SPSS was utilized for data entry and analysis. We will use descriptive statistics to examine the participant's demographic profile. There will be absolute and relative frequencies shown in these statistics. To accomplish the specific objectives, frequency analysis tables, the mean, and the standard deviation will be used.

Additionally, inferential statistics and corresponding hypothesis testing will be employed to assist in making assumptions based on the obtained data. To fulfill the primary objective of the study, numerous assumptions were considered and validated through various means. If the sample size and normal distribution requirements are met, the Pearson correlation coefficient will be used to analyze the relationship between the variables. The association between two category variables will be investigated using the non-parametric Chi-Square test (Tvalavadze, 2022).

Table 1 summarizes the objectives, hypotheses, and techniques used to analyse the data.

Table 1. Objectives, Hypotheses and data analysis technique.

Label	Objective or research hypothesis	Technique
O₁	Analyze the importance of technological advancement of banking institutions from the customer's perspective	Mean and Standard deviation. Frequencies
O₂	Find out if Georgian Banking Customers consider the public image and reputation of the banking institution before choosing them	Mean and Standard deviation. Frequencies
H₁	There is a positive correlation between the statement that Banks need to adapt to modern times/technology in order to stay competitive(Q11) and the statement that Customers would pay extra money for a unique experience/service provided by Bank(Q13).	Pearson's Correlation Test
H₂	There is an association between age and customers' willingness to pay more money for having extra unique/luxurious features provided by banks.	Chi-Square Test

3. Presentation and Analysis of Results

This section will look over and evaluate the study's conclusions. Initially, an in-depth description of the participants in the study is given, together with the attributes of the sample about gender, age, and profession.

3.1 Data and Profile of Respondents

Three hundred and ten participants took part in the study titled "Peculiarities of Banking Competition on the Example of Georgia" during the investigation. Among the 310 respondents, 149 were female and 161 male. The distribution of the percentages of the results is as follows: The majority of poll respondents, were under 41 years old, with 52% being male and 48% being female. Of the respondents, 21.9% are students and 49.3% are either self-employed or employed. A total of 1.9% of persons are others, and 26.8% are retired or unemployed.

Table 2. Profile of respondents

Variables	n	%
Age		
Less than 18	48	15.5%
19 - 30	102	32.9%
31 - 40	72	23.2%
41 - 55	49	15.8%
56 - 65	24	7.7%
65 and more	15	4.8%
Total	310	100%
Gender		
Male	161	51.9%
Female	149	48.1%
Total	310	100%
Occupation		
Student	68	21.9%
Employed	107	34.5%
Self-employed	46	14.8%
Unemployed	53	17.1%
Retired	30	9.7%
Other	6	1.9%
Total	310	100%

3.2 Descriptive Analysis

Table 3 below presents the results concerning the respondent's contact history with the banking industry, which data was obtained from the question 4 - Have you had any contact with the banking sector? This illustrates the significance of banks in our daily lives and offers both numerical and percentage data regarding the replies to the question. Of 310 respondents almost all had contact with a Banking institution, which is 308 (99.3%).

Table 3. Familiarity of respondents with banking sector

Answers	n	%
Yes	308	99.3%
No	2	0.7%
Total	310	100%

On table 4. we can see that, among the participants, the highest percentage of respondents (39.9%) and (28.6%) believe that Georgian banks have embraced and integrated digital banking technologies "very well" and "moderately well", respectively. This indicates that a significant portion of the respondents have a positive view of the efforts made by Georgian banks in adopting and incorporating digital banking technologies. A relatively smaller proportion of respondents (20.1%) believe that Georgian banks have adopted and integrated digital banking technologies "adequately". This group considers the banks' efforts to be satisfactory, but not outstanding or particularly remarkable. Lastly, the smallest group of respondents (7.5%) and (3.9%) believe that Georgian banks have adopted and integrated digital banking technologies "poorly" or "not at all." This indicates a low level of satisfaction among these participants, expressing a lack of confidence in the banks' utilization of digital banking technologies.

Table 4. Customer's opinion, on digital banking adoption

Answers	n	%
Very well	123	39,9%
Moderately well	88	28,6%
Adequately	62	20,1%
Poorly	23	7,5%
Not at all	12	3,9%
Total	308	100,0%

The Table 5. We can see the reliability of Georgian Banks from the customer's point of view. On the suggestion "Georgian Banking sector is reliable" 126 (40.9%) agreed and 41 (13.3%) strongly agreed which

means a total of 54.2% positive feedback, 62 (20.1%) were neutral and the rest gave negative feedback. The data indicates that there is a range of perceptions regarding the reliability of the banking sector, with a notable proportion of respondents expressing neutrality or disagreement.

Table 5. Reliability of Georgian Banks from the Customer’s Point of View

Answers	n	%
No answer	2	0.7%
Strongly agree	41	13.3%
Agree	126	40.6%
Neutral	62	20.1%
Disagree	49	15.6%
Strongly disagree	30	9.7%
Total	308	100%

The degree of competition in Georgia's banking sector is low from the perspective of the customer. Consequently, the percentage distribution of those who strongly agree with the statement is 17.8%, and 35.7% of respondents agree, yielding a total of 53.5% positive feedback. This indicates that a sizable portion of participants believe the level of competition in the industry is noticeably low and restricted. Finally, a comparatively small percentage of respondents—11.3% and 9.3%, respectively—disagreed or strongly disagreed with a statement, suggesting that they believed there was a fair amount of competition in Georgia's banking industry. Of the respondents, 24.8% were neutral.

Table 6. Level of competition in the Banking industry of Georgia from the customer’s perception.

Answers	n	%
Strongly agree	56	18,2%
Agree	113	36,7%
Neutral	77	25,0%
Disagree	34	11,0%
Strongly disagree	28	9,1%
Total	308	100,0%

Table 7 analyzes the loyalty of respondents to their bank based on their age, more specifically it will show if there is a difference between ages. Statement is “How likely are you to switch to another bank if you find better offers or services” For example, 83 people in the age group 1 to 30 (total of 150) answered “Likely”

and 71 people in the age group of 31 to 65 and more (total of 158) answered “Unlikely” This indicates that older respondents are more loyal compared to younger ones.

Table 7. The loyalty of customers based on their age

Age	Likely	Neutral	Unlikely	Total
1-30	83 (55.4%)	41(27.3%)	26(17.3%)	150
31-65 and more	32 (20.25%)	55(34.8%)	71(45%)	158
Total	115	96	97	308

3.3 Validation of Research Objectives

To address the first research objective, O1, which is to “*Analyze the importance of technological advancement of banking institutions from the customer’s perspective*” the mean and standard deviation were computed. The mean was found to be 4.01, with a standard deviation of 1.238. Consequently, 23.1% of respondents strongly agreed with the statement, and 49.7% agreed, resulting in a total of 72.8% positive responses (see Table 8). These findings indicate that customers place a high value on the technological progress of banking institutions.

Table 8. Customers’ Attitudes Towards Adaptation of Technology/innovation

Statement	Mean	SD
In order to stay competitive Banks need to successfully adapt and implement modern technology/innovations. (Q ₁₁)	4.01	1.238
Amount of participants:	Strongly agree	Agree
	71 (23.1%)	49.7%

The following research objective is O2: “*Find out if Georgian Banking customers consider the public image and reputation of the banking institution before choosing them.*” According to the findings, the mean score for this statement is 4.00, with a standard deviation of 1.195. In percentage terms, 19.8% of respondents strongly agree with the statement, while 49% agree (see Table 9). This clearly shows that customers consider the public image and reputation of a banking institution when making their choice.

Table 9. Customers’ Attitudes Towards Public Image and Reputation

Statement	Mean	SD
Good Public Image and Reputation are the Key factors when choosing a Banking institution. (Q12)	4.00	1.195
Amount of participants:	Strongly agree	Agree
	61 (19.8%)	151 (49%)

3.4 Validation of Research Hypothesis

The initial hypothesis states, “*There is a positive correlation between the statement that Banks need to adapt to modern times/technology in order to stay competitive(Q11) and the statement that Costumers would pay extra money for a unique experience/service provided by Bank(Q13).*” To test this hypothesis, the correlation between these two variables was determined.

The findings show that there is a substantial link between the two variables, supporting Q11 and Q13. as two variables are positively correlated, it means that as one rises, the other must as well. For both questions, the Pearson correlation coefficient is 0.907 at a significance level below 0.001 (Table 10). This implies that people who think banks are technologically sophisticated also think these institutions can provide special experiences, for which they are prepared to spend more. Based on these results, the research hypothesis is subsequently confirmed.

Table 10. Pearson’s Correlation Test.

		Q ₁₃
Q ₁₁	Pearson Correlation	.907
	p-value	<.001
	n	308

The second Hypothesis is “*There is an association between age and customers’ willingness to pay more money for having extra unique/luxurious features provided by banks.*” The chi-square test was used.

To validate this Hypothesis, respondents were divided into two groups of age, less than/or equal to 30 years old and more than 30 years old. The chi-square test results indicate a significant relationship between age and customers' willingness to pay extra, thereby confirming the hypothesis. The results are displayed in Table 11 below. The data supports the hypothesis, as the p-value is below 0.05, signifying that the study's findings are statistically significant.

Table 11. Chi-Square Test.

	Value	Degrees of freedom	p-value
Pearson Chi-Square	30.188 ^a	4	0.001

3.5 Main Results

For an easy understanding, comprehension of the outcomes, Table 12 provides a concise description of the research objectives and hypotheses. Mean and standard deviation are utilized for the study objectives, and hypothesis, whether or not a hypothesis was confirmed.

Table 12. Main results

Label	Objective or research hypothesis	Main Results	
		Mean	Standard deviation
O₁	Analyze the importance of technological advancement of banking institutions from the customer's perspective	4.01 points	1.238
O₂	Find out if Georgian Banking Customers consider the public image and reputation of the banking institution before choosing them	4.00 points	1.195
H₁	There is a positive correlation between the statement that Banks need to adapt to modern times/technology in order to stay competitive(Q11) and the statement that Customers would pay extra money for a unique experience/service provided by Bank(Q13).	Corroborated	
H₂	There is an association between age and customers' willingness to pay more money for having extra unique/luxurious features provided by banks.	Corroborated	

Conclusions, Recommendations, Limitations, and Future Research Lines

In today's modern society, banks play a crucial role in our everyday lives. They are not just financial institutions but also integral components of the economic framework, they provide essential services that allow us to manage our finances, carry out transactions, save for the future, and access credit when needed. It facilitates and provides essential services to individuals, businesses, and even governments. With the advent of digital banking, their influence has expanded even further, making banking services more accessible and convenient. As we navigate the complexities of the modern financial landscape, banks continue to be a vital part of our lives, enabling us to achieve our financial goals and contribute to economic stability.

The study on the peculiarities of banking competition in Georgia highlights the significance of maintaining public trust, a positive image, and implementing modern innovative digital technologies, emphasizing the need for transparency, accountability, and ethical practices, while recommending proactive engagement, enhanced customer experiences, collaborations with fintech companies, continuous monitoring and improvement, and suggesting future research areas such as comparative analysis, internal factors, regulatory environment, and technological advancements.

During the research survey was conducted and 310 people participated, this allowed us to gather all the necessary information to determine Thesis Objectives and Hypothesis

Based on the analysis conducted for the objectives and hypothesis testing in the study, the following conclusions can be made, Technological advancement is considered important from the customer's perspective in the banking sector in Georgia. The majority of respondents perceived technological advancements as significant, highlighting the importance of the implementation of modern innovative digital technologies, such as mobile banking apps, online platforms, and personalized services. By providing convenient and user-friendly digital banking experiences, banks can better meet customer expectations and improve customer satisfaction.

This study underscores the crucial role of maintaining public trust and a positive image in the effective functioning of banks. The findings indicate that public trust is a fundamental pillar for the stability and success of the banking sector. To build and maintain public trust, banks must prioritize transparency, accountability, ethical practices, and proactive customer service.

Determining the hypotheses was a crucial component of the research project. Finding a relationship between these two assertions was the first hypothesis to be tested: "Banks need to adapt to modern times/technology in order to stay competitive" and "Customers would pay extra money for a unique experience/service provided by a bank." The survey data were analyzed using Pearson's Correlation Test.

The results indicated a strong positive correlation between the two statements, with a Pearson correlation coefficient of .907 and a p-value of less than .001. In conclusion, the results suggest that banks that adapt to modern times and leverage technology are more likely to meet customers' expectations for unique experiences and services. This correlation underscores the importance of banks embracing technological advancements to stay competitive in the industry and attract customers who are willing to pay extra for enhanced banking experiences.

This section of the survey aimed to examine the association between age and customers' willingness to pay more for additional unique or luxurious features offered by banks. The statistical analysis was performed using the Chi-square Test. The results revealed a statistically significant association between age and customers' willingness to pay more, with a Pearson Chi-Square value of 30.188, degrees of freedom equal to 4, and a p-value of 0.001. In conclusion, the results indicate that customers' age plays a role in their willingness to pay more for enhanced features from banks. This association implies that different age groups may have varying preferences and expectations when it comes to the value they place on unique or luxurious banking features. Understanding these age-related differences can assist banks in tailoring their offerings to meet the specific needs and desires of different customer segments.

In conclusion, this research highlights the importance of technological advancements, public trust, and customer preferences in the banking sector of Georgia. Banks that prioritize the implementation of modern digital technologies, maintain public trust and understand customer expectations are better equipped to thrive in a competitive environment. By consistently monitoring and improving their services, working in partnership with fintech companies, and improving customer experiences, banks can effectively navigate the complexity of the modern financial landscape and contribute to economic stability. Future research can build upon these findings, exploring additional dimensions and factors to understand banking competition in Georgia.

While the study sheds light on the significance of maintaining public trust and implementing digital technologies, it is important to acknowledge certain limitations. The research was conducted in a specific context, focusing solely on the banking sector in Georgia. As such, the generalizability of the findings to other regions may be limited. Additionally, relying on self-reported responses introduces the possibility of response bias. The research did not extensively explore internal factors, regulatory environments, and comparative analysis, leaving room for future investigation in these areas.

To further enhance our understanding of banking competition in Georgia and related factors, future research could consider the following areas

- Conduct qualitative interviews or focus groups to gather more in-depth insights into customers' perspectives regarding technological advancements and the importance of public image and reputation in their decision-making.

- Explore specific technological advancements that customers prioritize in their banking experiences. This would help banking institutions tailor their strategies and investments accordingly.
- Investigate the impact of other factors, such as pricing, service quality, accessibility, and convenience, on customer decision-making in the Georgian banking sector.
- Analyze the influence of demographic factors beyond age, such as income level, education, and occupation, on customers' preferences and attitudes toward banking services and features.

By addressing these research areas, future studies can contribute to a deeper understanding of the Georgian banking landscape, improve competitiveness, and provide valuable insights for banking institutions to better serve their customers.

References

- Babić-Hodović, V., Mehić, E., & Arslanagić, M. (2011). Influence of banks' corporate reputation on organizational buyers perceived value. *Procedia - Social and Behavioral Sciences*, 24, 351–360. <https://doi.org/10.1016/j.sbspro.2011.09.063>
- Badarau, C., & Lapteacru, I. (2019). Bank Risk, competition and bank connectedness with firms: A literature review. *Research in International Business and Finance*. <https://www.sciencedirect.com/science/article/abs/pii/S0275531919301291>
- Bakradze, G., & Billmeier, A. (2007). Inflation targeting in Georgia: Are we there yet? *International Monetary Fund Working Papers*, 07(193), 1. <https://doi.org/10.5089/9781451867572.001>
- Bank of England (2019). Why is competition important in banking? Bank of England. <https://www.bankofengland.co.uk/explainers/why-is-competition-important-for-banks>
- Bank of England (2019). Why is competition important in banking? Bank of England. <https://www.bankofengland.co.uk/explainers/why-is-competition-important-for-banks>
- Beginkulov, E. (2023). Competitiveness in banking sector: A Systematic Literature Review. *The Hungarian Journal of Marketing and Management*, 56(4), 47–56. <https://doi.org/10.15170/mm.2022.56.04.05>
- Bravo, R., Montaner, T., & Pina, J. M. (2009). The role of bank image for customers versus non-customers. *International Journal of Bank Marketing*, 27(4), 315–334. <https://doi.org/10.1108/02652320910968377>
- Carlson, M., Correia, S., & Luck, S. (2022). The effects of banking competition on growth and financial stability: Evidence from the National Banking Era. *Journal of Political Economy*, 130(2), 462–520. <https://doi.org/10.1086/717453>
- Chelidze, M., & Topchishvili, M. (2018). The role of financial technologies in the development of the banking sector. *Globalization and Business*, 3(5), 246–248. <https://doi.org/10.35945/gb.2018.05.041>
- Claessens, S., & Laeven, L. (2004). What Drives Bank Competition? some international evidence. *Journal of Money, Credit, and Banking*, 36(3b), 563–583. <https://doi.org/10.1353/mcb.2004.0044>
- Coccoresse, P. (2017, April). Banking competition and economic growth. <https://www.siecon.org/online/wp-content/uploads/2017/04/Coccoresse.pdf>

- Condei, J. i, & Gattini, L. (2019). Financing in Georgia: Small and medium enterprises and the private sector. *European Investment Bank*.
https://www.eib.org/attachments/efs/smes_and_private_sector_financing_in_georgia_en.pdf
- Cuestas, J. C., Lucotte, Y., & Reigl, N. (2019). Banking sector concentration, competition, and financial stability: The case of the Baltic countries. *Post-Communist Economies*, 32(2), 215–249.
<https://doi.org/10.1080/14631377.2019.1640981>
- Dell’Ariccia, G. D., Igan, D., & Laeven, L. (2008, April). Credit booms and lending standards: Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market, *International monetary fund*,
<https://www.imf.org/external/pubs/ft/wp/2008/wp08106.pdf>
- Dinç, I. S. (2000). Bank reputation, bank commitment, and the effects of competition in credit markets. *The Review of Financial Studies*, 13(3), 781–812.
https://doi.org/https://scholar.google.com/citations?view_op=view_citation&hl=en&user=c28dz2UAAAJ&citation_for_view=c28dz2UAAAJ:WF5omc3nYNoC
- Ehlers, T., & Villar, A. (2016). The role of Banks. Bank for international settlements.
https://www.bis.org/publ/bppdf/bispap83b_rh.pdf
- Fathiddinovna, M. L. (2020). The role of digital banking in modern banking ecosystem and terms of establishing in the republic of Uzbekistan. *International Journal of Economics, Commerce and Management*, 8(2), February 2020, 363-368 (ISSN 2348 0386) <https://ijecm.co.uk/wp-content/uploads/2020/02/8224.pdf>
- Jerene, W., & Sharma, D. (2019). The adoption of banking technology and Electronic Financial Services: Evidence from selected bank customers in Ethiopia. *International Journal of Electronic Finance*, 9(4), 310–328. <https://doi.org/10.1504/ijef.2019.104080>
- Jokipii, T., & Monnin, P. (2013). The impact of banking sector stability on the real economy. *Journal of International Money and Finance*, 32, 1–16. <https://doi.org/10.1016/j.jimonfin.2012.02.008>
- Kitsios, F., Giatsidis, I., & Kamariotou, M. (2021). Digital Transformation and strategy in the banking sector: Evaluating the acceptance rate of E-Services. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(3), 204. <https://doi.org/10.3390/joitmc7030204>
- Lakshmi, M., & Kavitha, M. (2020). Customer satisfaction on digital banking. *Journal of Xi'an University of Architecture & Technology*, 12(3), 727-734, <https://www.studocu.com/row/document/uganda->

martyrs-university/masters-in-business-administration/54-mar2020-customer-satisfaction-and-digitalization/17144929

Leroy, A., & Lucotte, Y. (2017). Is there a competition-stability trade-off in European banking? *Journal of International Financial Markets, Institutions and Money*, 46, 199–215. <https://doi.org/10.1016/j.intfin.2016.08.009>

Mathisen, J., & Buchs, T. D. (2005, January 1). Competition and efficiency in banking: Behavioral evidence from Ghana. *International monetary fund*, <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Competition-and-Efficiency-in-Banking-Behavioral-Evidence-from-Ghana-17930>

Matsne (2022) About the National Bank of Georgia. სსიპ “საქართველოს საკანონმდებლო მაცნე.” [JSC "Legislative Herald of Georgia."]
<https://www.matsne.gov.ge/ru/document/view/101044?impose=translateEn&publication=61>

Mosiashvili, V., Lomidze, P., & Qoqosadze, P. (2009). Banking. <https://www.bpa.ge/book/book98.pdf>

Naym, J. (2018). Competition and Concentration in Banking Sector: Evidence from Bangladesh. https://thekeep.eiu.edu/cgi/viewcontent.cgi?article=1003&context=lib_awards_2018_docs

NBG, Organic law of Georgia on the National Bank of Georgia (2020a), The National Bank of Georgia. https://nbg.gov.ge/fm/ინდივიდუალურ_სამართლებრივი_აქტები/ნორმატიული_აქტები/english/nbg-law.pdf

NBG, Organic law of Georgia on the National Bank of Georgia (2020b), The National Bank of Georgia, https://www.nbg.gov.ge/uploads/legalacts/supervision/2020/nbg_law.pdf

Northcott, C. A. (2012, January). Competition in banking. <https://www.bankofcanada.ca/wp-content/uploads/2012/01/fsr-0604-northcott.pdf>

Odunga, R. M., & Nyangweso, P. M. (2012). Credit Risk, Liquidity and Operating Efficiency for Low and High Market Share Commercial Banks in Kenya. Moi University. <http://ir.mu.ac.ke:8080/jspui/bitstream/123456789/2347/1/KADALLAH%20RAMADHANI%20THOMAS.pdf>

Shatila, K. (2021). The impact of banking ethics on the financial performance of Banks. *Business Excellence and Management*, 11(4), 95–111. <https://doi.org/10.24818/beman/2021.11.4-07>

Thomson, D., & Jain, A. (2006). Corporate governance failure and its impact on National Australia Banks Performance. *Journal of Business Case Studies (JBCS)*, 2(1), 41–56.
<https://doi.org/10.19030/jbcs.v2i1.4879>

Tvalavadze, G. (2022). Perception of Georgian consumers towards corporate social responsibility in the restaurant industry (thesis). Retrieved 2024, from <https://bibliotecadigital.ipb.pt/handle/10198/26143>.

Appendix – Questionnaire

Please take part in the study conducted on banking competition. This research aims to understand the competitive dynamics within the banking sector and how it affects consumers' experiences.

Thank you for your participation!

Question 1. Your age

1. Less than 18
2. 19-30
3. 31-40
4. 41-55
5. 56-65
6. 65 +

Question 2. Your Gender

1. Male
2. Female
3. Other

Question 3. Work Status

1. Student
2. Employed
3. Unemployed
4. Self-Employed
5. Retired
6. Other

Question 4. Have you had any contact with the banking sector?

1. Yes
2. No

Question 5. Which credit institution do you prefer?

1. Banks
2. Microfinance organizations
3. Non-bank depository institution
4. Landing entities
5. None

Question 6. How well do you think your bank understands and meets your financial needs?

1. Very well
2. Moderately well
3. Adequately
4. Poorly
5. Not at all

Question 7. How well do you think Georgian banks have adopted and integrated digital banking technologies?

1. Very well
2. Moderately well
3. Adequately
4. Poorly
5. Not at all

Question 8. Georgian Banking sector is reliable

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

Question 9. How likely are you to recommend your current bank to others based on your personal experience with Bank

1. Highly likely
2. Likely
3. Neutral
4. Unlikely
5. Highly unlikely

Question 10. There is very low competition in the banking sector of Georgia

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

Question 11. In order to stay competitive Banks need to successfully adapt and implement modern technology/innovations

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

Question 12. Good Public Image and Reputation is one of the Key factors while choosing Banking institution

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

Question 13. I would pay extra to have acces on Bank's unique services/features

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

Question 14. How likely are you to switch to another bank if you find better offers or services?

1. Highly likely
2. Likely
3. Neutral
4. Unlikely
5. Highly unlikely