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Enhancing the Adoption of Financial Innovations to Foster Socioeconomic Welfare

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Abstract

The integration of digital technologies has garnered global attention, with a primary focus on their potential to streamline the convergence of digital and non-digital economies. This trend is poised to generate self-employment opportunities and spur socio-economic development, transcending geographic boundaries. In the context of Georgia, where the number of digitally connected individuals is on the rise, it becomes imperative to ascertain the extent to which financial technologies deployed in the financial services industry contribute to the well-being of the population and business representatives. This research aims to assess the benefits of these technologies while acknowledging that their utilization does not impede the future implementation of novel financial innovations by institutions in the sector. Emphasizing user-centricity, this study underscores the need to prioritize the fulfillment of users' requirements. Notably, it is not solely traditional financial institutions that shape the landscape, but also technology firms offering innovative products and services, which exert a significant influence on fostering a dynamic business environment. Furthermore, the evaluation of emerging technologies such as cloud computing, the Internet of Things (IoT), artificial intelligence, and blockchain elucidates their potential impact in enhancing the well-being of

businesses and the general population. Nevertheless, given the current stage of their development, a comprehensive nationwide implementation of these technologies remains challenging.

Keywords: Financial innovation, commercial bank, financial services, welfare

Introduction

Objective: The goal of the research is to study the impact of fintech on the activities of commercial banks and the overall growth of financial innovations, as well as to examine the transformation of the banking sector in the context of fintech integration. It also aims to simplify the cooperation between digital technologies and non-digital economies by assigning significant value in the current stage globally, to all components of the population, individual economic activities, and MSMEs representing the majority of Georgia, whose number is increasing, and the integration of fintech services with them. The recommendations were made based on the analysis of each mentioned aspect.

Literature Review:

The integration of financial technologies, diverse financial product offerings, and the establishment of accessible digital financial ecosystems are highly significant worldwide. These developments aim to facilitate alternative platforms for financial transactions, promote the practical utilization of extensive datasets, and harness the power of cloud technologies. Additionally, the creation of opportunities for fintech startups in the financial sector and the overall promotion of business development within the country is of utmost importance.

According to the Economic Freedom Index of 2021, Georgia ranked 7th among European countries, demonstrating a favorable outcome. This achievement can be attributed to the proactive adoption of new technologies in our country, showcasing the integration of advanced technologies on one hand, and the mandatory requirement for competitors to unveil their internal potential, facilitate business development, and adapt to the challenges of the COVID-19 pandemic on the other hand.[1]

The utilization of financial technologies signifies the integration of computer programs and technologies into the banking industry, enabling easier financial management and control for both micro and small businesses, as well as large business representatives. The digitization of

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[1] ეკონომიკური თავისუფლების ინდექსი. 2021 https://www.economy.ge/uploads/files/2017/reitingebi/2021/heritage_2021_geo.pdf

financial services creates an inclusive and efficient financial system, fostering sustainable economic growth as a result. Fintech initiates transformative changes in the financial sector, affecting financial companies, and the regulatory framework of the financial sector, as well as facilitating easier financial planning and control for businesses.

The digitalization of financial services signifies the creation of an inclusive and efficient financial system, which in turn promotes overall economic development. Financial technology's influence further extends to significant changes in financial products, payment systems, business models, active market participants, market structure, and even personal finance. The COVID-19 pandemic has accelerated the prominence of fintech. Following the pandemic, the significance of fintech has become even more pronounced, as it contributes significantly to the implementation of key financial policies in countries, such as financial stability, governance, inclusivity, efficiency, innovation, competition, and the promotion of digital economy.[2]

Financially oriented business models and products initiated by financial technologies have the potential to significantly impact the development of a country's economy, which is especially relevant in the context of the COVID-19 pandemic and the ongoing conflict between Russia and Ukraine.[3]

In this regard, it is necessary to establish a balanced political approach that addresses various risks associated with financial stability and consumer protection, as well as the confidentiality of user and investor data.
Financial technologies have experienced significant growth in the functioning of financial institutions, necessitating changes in the sphere of banking services. It should be noted that the widespread adoption of fintech companies' services in countries is limited by certain restrictions and the continued importance of banking institutions in fulfilling their role in the economy, similar to traditional institutions.

Financial innovations and the institutional integration of the financial system reduce information asymmetry, strengthen the integrity of the database, facilitate operations for business representatives, and enhance their competitiveness. [4]Additionally, there is a direct connection between financial

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[2] International Monetary Fund. 2022. World Economic Outlook: Countering the Cost-of-Living Crisis. Washington, DC. October.

[3] World Development Report 2022: Finance for an Equitable Recovery. A World Bank Group Flagship Report. https://openknowledge.worldbank.org/server/api/core/*bitstreams/e1e22749-80c3-50ea-b7e1-8bc332d0c2ff/content*

[4] Wang, Rong, and Junlan Tan. Exploring the coupling and forecasting of financial development, technological innovation, and economic growth. *Technological Forecasting and Social Change* 163: 1–11. 2021.

innovations and the development of the financial sector, supporting the firm's overall well-being.[5]

Innovation is crucial for societies as it is a three-part mechanism that combines innovation, investment, and competition to create wealth and distribute socio-economic benefits throughout the population. Innovation is particularly significant for the financial services sector, as it not only enhances sectoral efficiency but also contributes to the overall productivity of the economy. This is evident not only in the early historical period but also in the post-World War II era.[6]

It should be noted that the emergence of recent technologies and user demand has increased the importance of financial services that are secure and more accessible. Traditional and non-banking financial institutions have been reluctant to adopt financial technologies. Fintech companies have the potential to transform the landscape of the financial sector through the delivery of innovative products and services that address user needs, such as convenience, speed, simplicity, low costs, and security.[7]

Financial innovation is not limited to financial inclusion but also has a strong connection to economic growth. The empirical evidence supports the positive relationship between financial inclusion and economic development. A global empirical study was conducted using data from 185 countries for the period 1996-2015. Financial inclusion was measured by indicators such as bank accounts, bank branches, ATMs, and life insurance premiums. Economic growth was evaluated based on overall domestic product per capita. The findings revealed a positive correlation between financial inclusion and economic growth.[8]

Each of the above-mentioned findings highlights the fact that the banking sector is significant for the country's economic development, as it plays a vital role in utilizing economic resources efficiently and ensuring the well-being of its population.

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[5] Mr. Ndua Daniel Ndicu. Financial Innovations Risk, Financial Distress and Firms Value: A Critical Review of Literature. European Scientific Journal April 2018 edition Vol.14, No.10. https://core.ac.uk/download/pdf/236411346.pdf

[6] Rethinking Financial Innovation Reducing Negative Outcomes While Retaining The Benefits. A World Economic Forum report in collaboration with Oliver Wyman. World Economic Forum. 2012. https://www3.weforum.org/docs/WEF_FS_RethinkingFinancialInnovation_Report_2012.pdf

[7] Ibrahim A. Zeidy. The Role of Financial Technology (FINTECH) in Changing Financial Industry and Increasing Efficiency in the Economy. Special Report. https://www.comesa.int/wp-content/uploads/2022/05/The-Role-of-Financial-Technology.pdf

[8] Gul, F., Usman, M., & Majeed, M. T. (2018). Financial Inclusion and economic growth: A global perspective. Journal of Business & Economics, 10(2), 133–152.

Research methodology:

The research includes both qualitative and quantitative analysis, examining the significance of financial technologies in the country's economy in terms of financial resources and the impact on the well-being and growth of the population and companies. The study is focused on a main research question, determining how important financial technologies are for the development of the country's economy and the welfare of the population and business representatives. It also includes surveys to provide answers to the research question, covering both subjective and objective data. The implemented method allows for a more comprehensive understanding of the research topic.

To answer the questions raised in the study regarding the evaluation of Georgian users' perception of financial innovations and their usage in daily operations, as well as the assessment of these products, a research study was conducted. The study encompassed a total of 500 individuals, consisting of 250 physical persons and 250 representatives connected solely to legal entities involved in banking operations. In the selection of legal entities, every sphere was covered, and consequently, interviews were conducted with 50 participants from the construction and real estate sector, 50 from the restaurant and food service sector, 50 from the hotel industry, 50 from the retail sector, and 50 representatives from beauty salons. The results, presented in Diagram 1 below, illustrate the distribution of opinions.

Diagram 1. Distribution of Legal Entities by Sectors

In order to provide an answer to the research question, it was necessary to examine respondents of different ages, considering both the presence of barriers related to age and the consideration of various social statuses. The analysis of pensioner respondents was conducted with the aim of investigating their banking behavior, particularly focusing on whether their pensions are deposited in a bank account and to what extent they frequently or generally use other banking services (see Diagram 2).

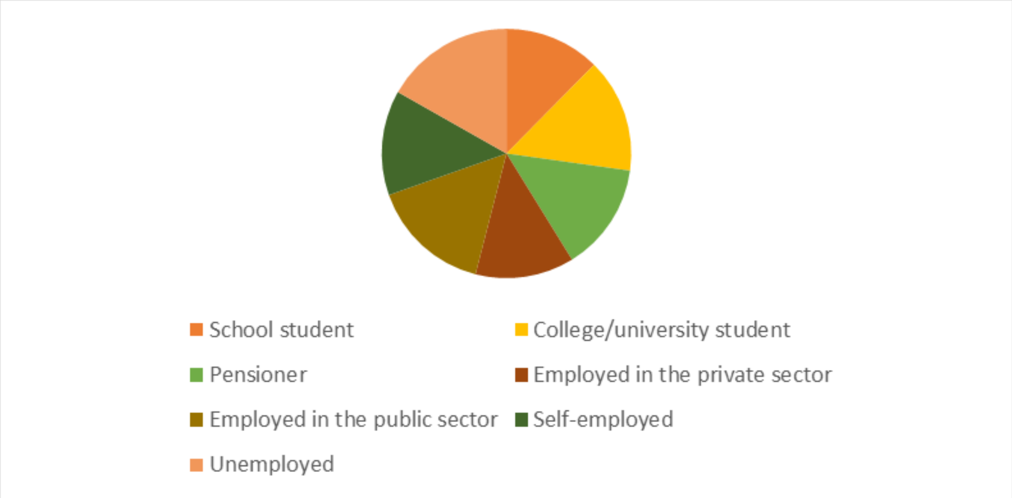

Diagram 2. Respondents' Social Status

Respondents were surveyed with the aim of examining their utilization of distance services, as financial innovations are increasingly employed in the provision of these services (refer to Diagram 3).

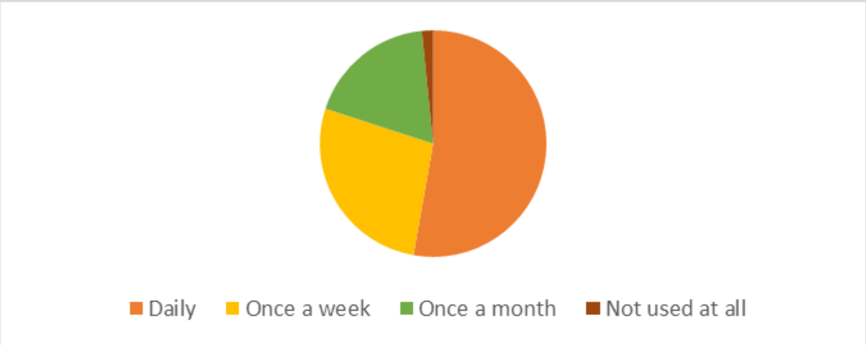

Diagram 3. Frequency of Using Distance Banking Services

As a result of the survey, it was determined that the majority of respondents use banking services on a daily or weekly basis, which indicates that financial technologies have become an integral part of these services in Georgia. It should also be noted that traditionally, it would have been more desirable for pensioners to receive banking services through branches, but the study yielded direct evidence that financial technologies are gaining credibility and popularity in our country.

The next question addressed the acceptance of distance products, which respondents can use independently. They had the option to choose one or more variants.

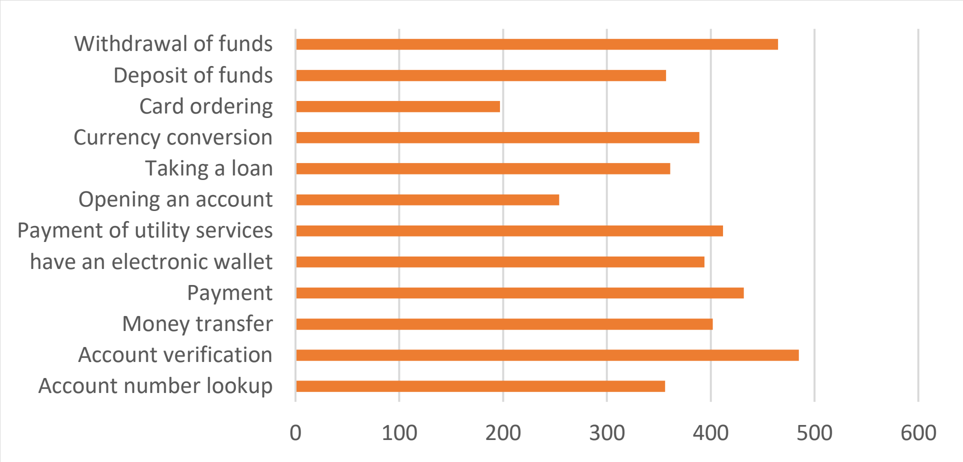

Diagram 4. Attitudes towards the Implementation of Distance Services

Based on the results presented in the diagram, it can be concluded that respondents are significantly interested in utilizing various remote banking services. In order to provide a response to the research question, it is noteworthy to consider the preferences towards the adoption of distance services.

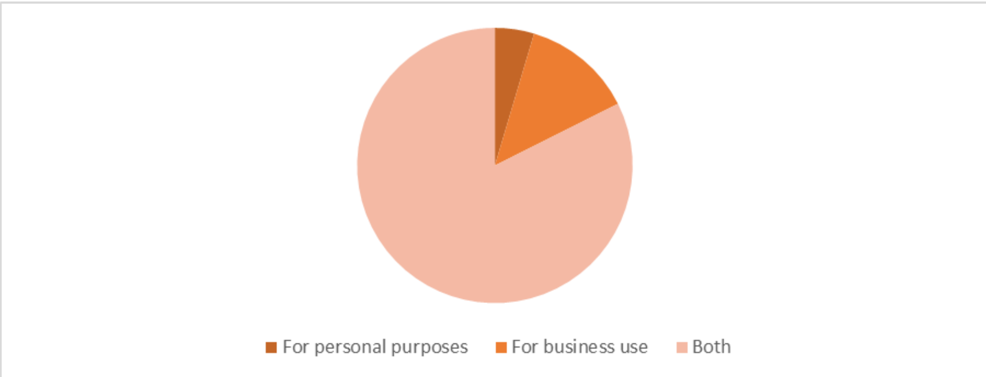

Diagram 5. Objectives of Remote Banking Services

The findings of the survey confirm that 85% of respondents utilize remote banking services for personal as well as professional purposes, which reflects the increasing importance of financial innovations in daily financial activities of the population.

The subsequent question aimed to determine to what extent users find it convenient to access remote banking services. (Refer to Diagram 6).

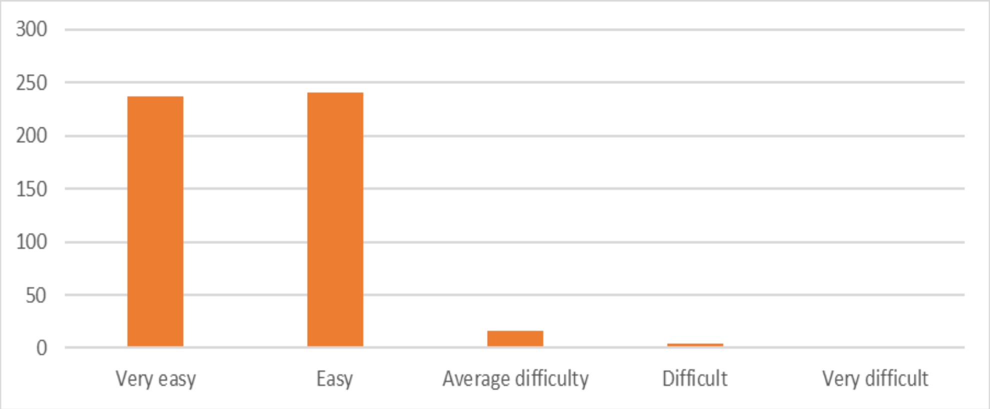

Diagram 6. Simplification of Distance Banking Services for Users

Based on these evaluations, it can be said that the use of financial technologies by respondents does not pose a problem. Consequently, we evaluated the process of delivering products defined by the bank for clients, using subjective research methods. Their acceptance is important in order for them to simplify the application process and provide non-discriminatory responses, which is an effective strategy. As we can see, the strategy of banks aligns financial innovations in an easy and understandable way until it brings remote services to users, which should be carried out in accordance with product quality requirements. This fact implies that technological progress facilitates people's lives and innovations are implemented easily and efficiently in our daily lives. Banks have the correct implementation strategy and adequately assess the demand, which can be considered a significant advantage of Georgia's banking system.

The next question was aimed at examining how many operations were conducted by users within the entire range of banking services they received.

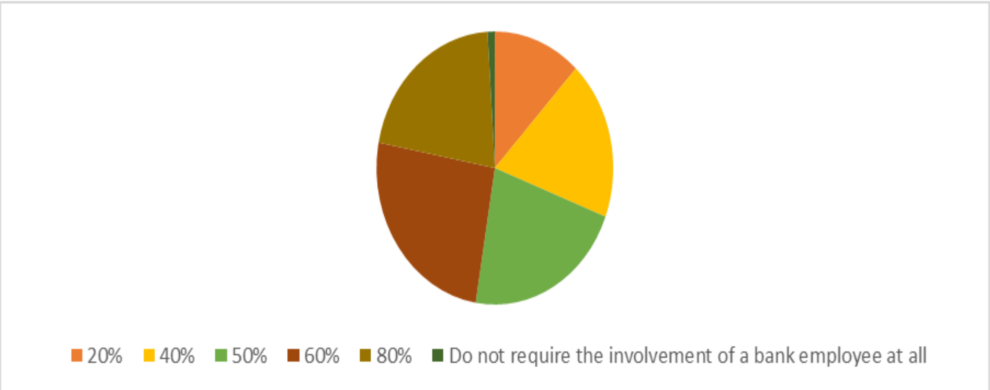

Diagram 7. Distribution of operations performed by users in the overall banking service

The analysis reveals that a significant portion, approximately 80%, of banking operations can be handled without the assistance of service personnel. This indicates that banks could potentially offer financial technology solutions to clients in the form of automated services. It is noteworthy that banks' strategy encompasses the implementation of automated tasks and templates, as routine procedures do not require additional expenses from users to be completed. This raises another intriguing question: whether there is a necessity for the presence of teller-operators in banks in the future. This category would include individuals who are unable or unwilling to perform operations independently, yet it is also important to note the decreasing trend in the number of teller operators. ProCredit Bank serves as an example, where a remote branch occupies significantly more space than other sections.

Of particular interest was identifying the constraints faced by users in the process of receiving banking services at the self-service stage (refer to Diagram 8).

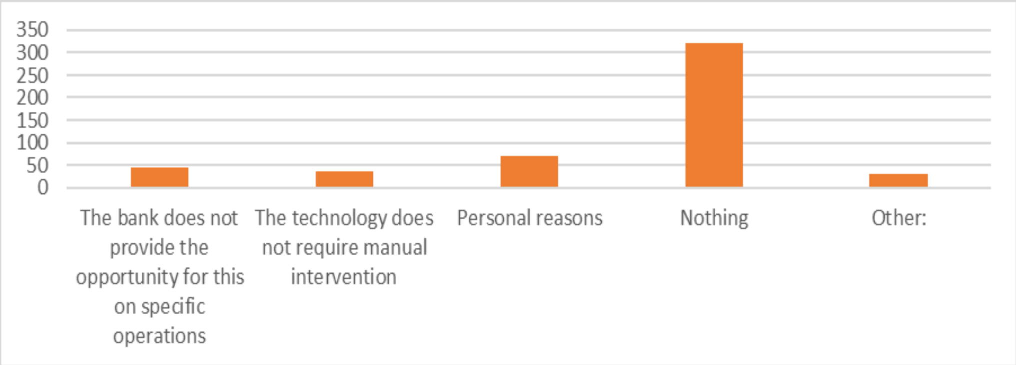

Diagram 8. Factors present in the process of receiving banking services for an independent user

Observations reveal that certain users, who belong to the category of physical persons, encounter difficulties in accessing banking services independently, resulting in a disadvantage for elderly pensioners. Moreover, individuals representing vulnerable groups experience challenges in obtaining certain types of services remotely. In connection with these issues, representatives of banks have declared that specific problems exist, which they are addressing.

To better understand the scope of financial technologies, we asked users what types of financial technologies they prefer most (see Diagram 9).

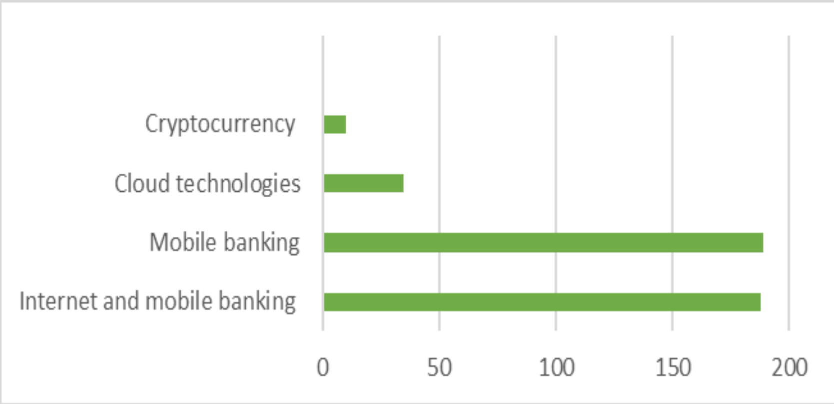

Diagram 9. Indicator of Financial Inclusion with Various Financial Technologies

The respondents' answers are based on the research conducted by a Georgian investment bank, which confirms that in Georgia, the usage of contactless payments with Visa cards surpasses the number of traditional cash payments. With one in ten transactions being contactless, Georgia ranks second globally in this regard. Furthermore, as the adoption of contactless technology continues to rise, transactions exceeding 10 GEL are now fully processed using contactless methods.[9]

Digital payments dominate the banking sector in Georgia, with a total transaction value of 444 million US dollars in 2021. In the alternative lending segment, the average transaction value per user reached 7,760 US dollars by the end of 2021. Within the digital payments segment, it is projected that the number of users will reach 2.07 million by 2025. Additionally, the digital investment segment witnessed a significant 40.8% revenue growth in 2022.[10]

The subsequent question aimed to identify key indicators of emerging financial technologies, such as the economic benefits of users in terms of savings in both money and time. (Refer to Diagram 10 for further analysis).

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[9] E-commerce in Georgia. Galt&Taggart. Creating opportunity. Sector research. 2021 https://galtandtaggart.com/en/reports/research-reports/e-commerce-georgia

[10] Digital market. Fintech. Georgia https://www.statista.com/outlook/dmo/fintech/georgia. FinTech data is derived from a primary investigation conducted by Statista (a global survey of users), incorporating both bottom-up modeling, data from independent data sources, and third-party resources. The analysis encompasses various key databases and macroeconomic indicators, historical trends, current developments, relevant database indicators, and interviews with experts from Statista.

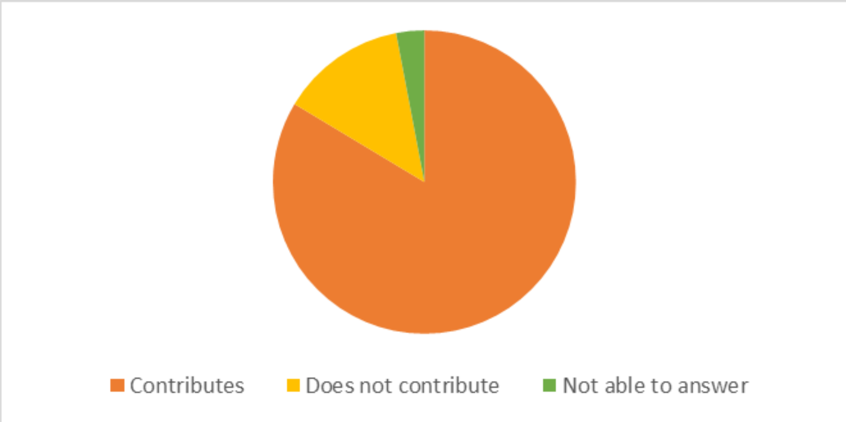

Diagram 10. Examining the Impact of Financial Technologies on Cost and Time Efficiency

Based on the opinions of the surveyed individuals, the adoption of financial technologies significantly contributes to cost and time efficiency. It should be noted that the same outcome is observed for financial technologies utilized intensively by institutions.

Findings:

- The financial system in Georgia is evolving due to the introduction of innovative products and services that address customer needs, including low cost, simplicity, convenience, and security.
- Traditional commercial banks in Georgia, predominantly high-fee financial institutions, contrast with fintech companies which offer innovative products at lower prices, significantly benefiting both businesses and the public.
- Promoting financial inclusion in the country requires measures such as enhancing the availability of financial services for the general population and small businesses. This includes raising awareness about technological advancements, reducing transaction fees for core services, and broadening the scope of online services.
- Financial technology integration in Georgia is still in its early stages, necessitating further expansion of cloud computing, Internet of Things (IoT), artificial intelligence, and blockchain technologies.
- Ongoing development and enhancement of cybersecurity measures is also crucial.

Limitations:

Limited data for impact assessment: Our research has found that gauging the impact of financial technologies such as cloud computing, IoT, artificial intelligence, and blockchain proves challenging due to the lack of comprehensive data. The scarcity of data on aspects such as cybersecurity, technical vulnerabilities, data management, and privacy is particularly noticeable. This makes it difficult to fully assess the potential risks and benefits associated with these technologies.

Lack of in-depth regulatory analysis: While the report underscores the need for additional regulation to tackle issues like cybersecurity and data management, it does not deliver a comprehensive analysis of existing regulations or their effectiveness in managing emerging financial technologies.

Focus on the specific context of Georgia: The research conducted is specifically aimed at the financial sector in Georgia. Consequently, the findings may not be directly applicable to other regions or countries.

Addressing these limitations in future research may bolster the validity and reliability of the findings, providing a more comprehensive understanding of the impact of financial technologies and the necessary regulatory responses.

Conclusion

Consequently, the above findings lead to the conclusion that the country's regulators must meet the challenges posed by financial innovation, particularly in regards to cybersecurity, data management, and privacy. Striking a balance between fostering innovation and implementing appropriate regulations is crucial to encourage the adoption of secure technologies. This ensures that businesses can flourish while citizens reap the benefits of fintech. Georgia stands on the brink of a transformative era in its financial sector, and proactive measures are needed to establish an inclusive and secure environment for innovative financial decision-making. In doing so, the country can unleash the full potential of fintech, enhancing the lives of its citizens and contributing to overall economic growth and development.

Human Studies:

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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Data Availability: All the data are included in the content of the paper.

Conflict of Interest: The authors reported no conflict of interest.

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2. Digital market. Fintech. Georgia https://www.statista.com/outlook/dmo/fintech/georgia. FinTech data is derived from a primary investigation conducted by Statista (a global survey of users), incorporating both bottom-up modeling, data from independent data sources, and third-party resources. The analysis encompasses various key databases and macroeconomic indicators, historical trends, current developments, relevant database indicators, and interviews with experts from Statista.
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