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The Role of Tech-Enabled Business Models in Enhancing Financial Inclusion: The Case of Albania's Financial Sector

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Abstract: *In today's technological and business world it is crucial to ensure that everybody has access to financial services and can actively participate in economic activities, leading to faster economic development. Financial inclusion refers to the fundamental right of all individuals to access basic banking services, regardless of their socio-economic circumstances. Tech-enabled business solutions provide the necessary means to ensure financial inclusion, break traditional barriers, and ensure financial access for everyone, particularly to the unprivileged and marginalized groups. Financial inclusion is a global challenge, and middle-income countries like Albania cannot remain unaffected by its impact. In recent years, particularly in the post-COVID era, the financial system has maintained stability; however, several obstacles are encountered in attaining full financial inclusion. These primary obstacles encompass restricted availability of capital, particularly in rural regions and for specific demographic groups, low levels of financial literacy, and underdeveloped non-bank financial services.*

This study explores the impact of tech-enabled business models in enhancing financial inclusion. Considering the global challenge and the abovementioned obstacles, this research aims to answer the question of whether tech-enabled business models and tech-enabled efforts in traditional financial institutions can improve the financial sector and financial processes by enhancing and ensuring financial access to everyone. After conducting a thorough analysis and in-depth interviews with key financial service providers in Albania the findings reveal that integrating technology in financial services has led to positive changes in how financial organizations operate and communicate with their customers, and how tech-enabled business models expand financial services to marginalized communities.

1. INTRODUCTION

There is no generally accepted definition for financial inclusion (Sanderson et al., 2018), but researchers in a broader perspective define it as a process that ensures the weaker and vulnerable members of society access to fundamental financial services such as credit, money transfers, savings and insurance. The ecosystem and especially the financial sector is a key element in enhancing financial inclusion in a country.

In the wake of the digital revolution, financial sectors around the world are experiencing a paradigm shift, with conventional barriers to financial access being destroyed by the rapid adoption of technology. This transition is most visible in emerging economies, where digital financial services have ushered in a new era of inclusion and accessibility. On the other side, The COVID-19 pandemic hastened the digital shift in financial services, presenting both challenges and opportunities (Balla, 2020). Globally, the crisis accelerated the data revolution in finance, with traditional banks adopting data-driven solutions (Remolina, 2020). This changing landscape presents dangers to consumers and financial stability, which authorities must address (Remolina, 2020).

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Business models play a crucial role in the whole ecosystem as they are a sustainable form of understanding customers' needs and creating value for profit generation (Nielsen et al., 2018). Due to the rise of technological advancements and increased need for financial access, the banking sector is experiencing huge transformations which has led to tech-enabled financial services and more importantly tech-enabled business models (Dapp et al., 2015; Broby, 2021).

Albania, with a unique economic landscape and development trajectory, is an intriguing case study in this global narrative. As we delve deeper into Albania's financial sector, it becomes clear that, while digital transformation has enormous potential to foster financial inclusion, its actual realization depends on a variety of factors such as technological adoption, regulatory frameworks, and socioeconomic conditions (Demirgüç-Kunt et al., 2018).

This study aims to understand the impact of technology and innovation on transforming business models that can enhance financial inclusion, bridge financial barriers and more important empower Albania's economically deprived groups. Addressing these issues is crucial for enriching the academic discourse on financial inclusion and for informing policy and operational strategies that could significantly enhance the efficacy of digital financial services in Albania and broader.

2. LITERATURE REVIEW

The COVID-19 pandemic has accelerated the digital transformation of financial services worldwide, including Albania, reshaping the industry and exposing new challenges and opportunities. In Albania, the use of financial technology (fintech) has been critical in maintaining service delivery despite constraints, emphasizing its role in boosting financial inclusion (Balla, 2020). Internationally, this change reflects a wider pattern in which data-driven solutions address financial challenges while raising concerns about consumer protection and systemic stability (Remolina, 2020; Lahreche et al., 2020).

Albania's financial sector has made significant strides toward aligning with EU standards, facilitated by institutional reforms and macroeconomic stabilization. However, unresolved issues such as high euro consumption, non-performing loans, and uneven sectoral development continue to pose substantial challenges (Uldedaj et al., 2024). Despite advances in online banking and fintech adoption, the industry confronts legislative and operational concerns, such as maintaining strong frameworks to prevent money laundering in digital transactions (Habili et al., 2023; Balla, 2020).

Albania's financial environment has always mirrored the country's overall socioeconomic development. Before 1944, the sector saw the rise of domestic and foreign-backed institutions. Between 1944 until 1991, the banking sector was consolidated under state ownership, while post-1991 reforms allowed for market liberalization and the introduction of foreign capital, modernizing financial operations (Albanian Association of Banks, 2012). As of 2024, Albania's financial ecosystem comprises 11 licensed banks, 39 non-bank financial institutions, and 16 savings and loan associations, regulated by the Bank of Albania (2023).

Financial inclusion, a global developmental priority, remains a complex challenge in Albania. Structural barriers, including limited rural financial access, low financial literacy, and an underdeveloped non-bank sector, hinder comprehensive inclusion (Mexhuani & Ribaj, 2018; Dushku, 2022). While 70% of Albania's adult population held payment accounts in 2023, only 44% had bank accounts in 2021, underscoring the gap in financial accessibility (Bank of Albania, 2023).

Electronic payment systems have grown in popularity, with digital transactions increasing by 25.5% between 2022 and 2023, due to mobile and home banking services. Despite this increase, financial literacy remains low, with just 53% of the population demonstrating adequate financial knowledge and practices (Dushku, 2022). Furthermore, the banking sector's concentration, with four big banks accounting for more than 66% of total assets, combined with regulatory and infrastructure constraints, restricts access to credit and alternative financing (Mexhuani & Ribaj, 2018).

The existing literature highlights critical gaps in understanding the evolving dynamics of Albania's financial sector. Notably, research into the integration of emerging technologies, such as artificial intelligence and big data analytics, is still limited. These tools have the potential to dramatically improve service personalization, efficiency, and risk management, but they have yet to be explored in Albania.

Furthermore, little consideration has been paid to specific neglected categories, such as rural communities, young people, and low-income groups, whose exclusion undermines overall financial inclusion initiatives. Finally, while innovations like blockchain and mobile money have been lauded for their disruptive potential, their long-term implications for financial stability, consumer protection, and regulatory compliance are still unknown. Further investigation is essential to assess their viability within Albania's financial ecosystem.

3. RESEARCH METHODOLOGY

This study employs a qualitative research method to provide a comprehensive analysis of the situation in the Albanian landscape. Previous studies do support the use of these kinds of approaches to answer questions similar to the ones this paper treats (Koefer et al., 2024). Table 1 lists the selection criteria that properly present an inclusive sample. In total, 10 organizations have been reached out to, and the response rate toward scheduling an interview is 50%. The selected sample consists of 2 Banks, 2 Microfinance institutions, and 1 FinTech organization. At each organization, one interview with a representative of the organization has been conducted.

The data collection process involved semi-structured interviews with five inclusive finance organizations in Albania. This method was chosen for its flexibility and ability to offer diverse perspectives and insights into how these firms address financial inclusion through tech implementation and innovation of digital financial services. This protocol included a pre-interview discussion, a structured interview script, and a series of preset open-ended questions. Prompts were utilized to keep concentration. The interview questions were focused on characteristics of the business model, contributions to financial inclusion, the use of digital technology, approaches to financial literacy, and initiatives for developing digital literacy to improve financial inclusion. These inquiries sought to elicit insights about the organizations' actions and their impact on these critical areas, ultimately revealing light on their approaches to financial and digital inclusion.

Gioia technique, an inductive qualitative methodology (Gioia et al., 2013), was used to analyse the data. This approach divides data into first-order concepts, second-order themes, and aggregate dimensions. A graphical model that depicts the dynamic interactions between these elements was designed and is presented in Table 2. The analytical part included the following processes: transcription and coding of the interviews, examination of the relevant keywords in the code, production of first-order concepts, first-order concepts investigation for similarities and contrasts, resulting in second-order themes that correspond to the interview questions, combination of second-order themes into aggregate dimensions that describe the key points of discussion.

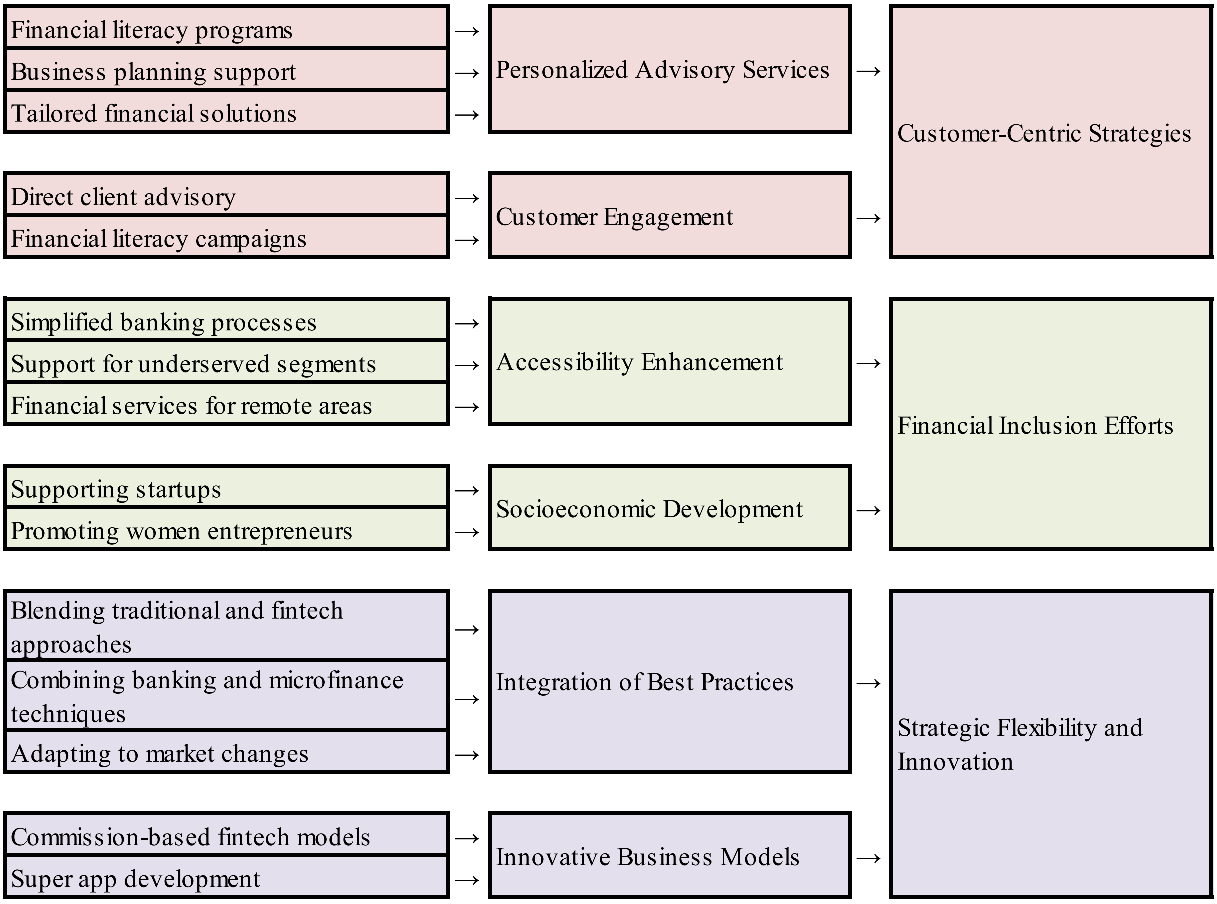
Table 1. Institution selection criteria

Institution	Selection criteria
Banks	• **Target Demographic**: The bank should have initiatives or products specifically designed to serve underserved communities. • **Commitment to Financial Inclusion**: The bank must demonstrate a clear commitment to increasing financial inclusion, particularly through the use of digital technologies. • **Innovation in Financial Services**: The bank should be engaged in innovating financial services to make them more accessible and user-friendly for all segments of the population, including those not well served by traditional banking models. • **Range of Services**: The bank provides a comprehensive suite of services, including but not limited to borrowing, savings, investments, and offering bank accounts that cater to both personal and entrepreneurial needs. • **Digital Engagement**: The bank should utilize digital platforms and technologies to enhance service delivery and customer interaction, ensuring that services are accessible via digital means.
MFIs	• **Target Community**: MFIs should target underserved communities as their customer segment. • **Focus on Financial Inclusion**: They should focus on strategies and products that increase the financial inclusion of these communities. • **Social Impact**: MFIs should strive for positive social outcomes through their services. • **Comprehensive Financial Services**: They must offer a variety of financial services tailored to the needs of their clients, including borrowing, savings, investments, and accounts for personal or entrepreneurial purposes.
FinTech organizations	• **Consumer Targeting**: FinTech organizations should focus on individual consumers or small enterprises, addressing specific needs unmet by traditional financial institutions. • **Customer-Centric Approaches**: They should prioritize the customer experience by making the use of financial services more accessible and simpler. • **Social and Inclusive Objectives**: FinTechs should have a clear aim toward social and inclusive goals, contributing to broader access to financial services. • **Diverse Financial Services**: They need to provide a spectrum of services such as borrowings, savings, investments, and financial management. • **Digital and Innovative Solutions**: FinTechs should offer their services primarily through digital channels using innovative technologies, ensuring that customers can access and use these services effectively and conveniently.

Source: Own research

Table 2. Results of Qualitative Interviews; Gioia Method

First-Order Concepts	Second-Order Theme	Aggregate Dimension
Customized loan products → Comprehensive service packages → Digital banking services → FinTech solutions → Specialized credit products →	Diverse Financial Offerings →	Product and Service Innovation
Targeting SMEs, Individuals, Agribusiness, Startups, Women-owned businesses →	Market Segmentation →	Product and Service Innovation
Mobile banking apps → Digital identification systems → Online banking platforms → MIS systems → Digital transaction services →	Digital Banking Transformation →	Technological Advancement
Streamlined account opening → Digital loan processing →	Process Efficiency →	Technological Advancement



Source: Own research

4. INTERVIEW RESULTS

4.1. The Gioia Method Framework: First-Order Concepts, Second Order Theme and Aggregate Dimension.

Using the acquired and processed data, a visual data structure that organizes the initial first-order concepts into second-order themes and aggregate dimensions were created, as shown in Table 2. This structure comprises five aggregate dimensions: Product and Service Innovation, Technological Advancement, Customer-Centric Strategies, Financial Inclusion Efforts, and Strategic Flexibility and Innovation. The following session presents the results analysis from this process.

4.2. Results Analysis

In this section, results analysis for each aggregate dimension are presented.

Product and Service Innovation: Financial institutions in Albania have developed a diverse range of products to meet the specific needs of their target customer segments. Some of them are focused on tailored loan products for sectors such as SMEs, agribusiness and startups. This comprehensive package aims to provide grater value and convenience for customers. These solutions are designed to make financial transactions more seamless and accessible, especially for tech-savvy customers and those looking for flexible payment options. Such diversification plays a crucial role in advancing financial inclusion by ensuring that various customer groups, including underserved populations, have access to customized financial services.

Technological Advancements: The institutions have made significant investments in technological innovations to enhance service delivery, boost operational efficiency, and improve customer engagement. The integration of digital platforms and cutting-edge technologies is a central strategy for advancing financial inclusion and ensuring broader access to financial services. One of the institutions has rolled out various FinTech solutions targeting both individuals and merchants, such as QR code payments, virtual POS systems, and innovative services like buy now pay later. Others have upgraded their online banking platforms, enabling customers to conduct a wide range of transactions from the comfort of their homes or offices. Additionally, Institutions leverage automated systems to streamline internal processes, manage customer data, track transactions, and ensure regulatory compliance.

Customer-Centric Strategies: The institutions have embraced customer-centric strategies to offer personalized advisory services and support. This approach aims to improve customer engagement, satisfaction, and financial literacy—key factors for promoting financial inclusion and empowering customers to make informed financial decisions. Some institutions run financial literacy programs to educate customers about financial management, services and fintech solutions. One of the main challenges in Albania is the lack of adequate financial and digital literacy. Therefore, these educational initiatives are particularly important in the Albanian context as they guide and help customers develop the skills and knowledge to make sound financial decisions.

Financial Inclusion Efforts: Institutions have made considerable efforts to improve access to financial services, by streamlining processes, supporting underserved segments, and offering inclusive financial products. These initiatives aim to eliminate obstacles to financial inclusion and ensure that a larger segment of the population can access and benefit from financial services. Institutions have implemented simplified banking processes to make financial services more accessible. They prioritize supporting underserved segments including startups, women-owned businesses, and micro and small enterprises. Through personalized advisory services and financial solutions, these institutions assist these groups in overcoming challenges related to accessing finance, thereby promoting economic growth and financial stability within these communities.

Strategic Flexibility and Innovation: Institutions demonstrate strategic adaptability by blending traditional banking practices with innovative fintech approaches. This integration allows them to adapt to market changes and offer unique financial solutions that meet the evolving needs of their customers. By continuously evolving their strategies to align with market dynamics, these institutions maintain competitive advantage and ensure long-term viability. Others offer innovative financial solutions, including commission-based fintech models and super app development. These innovative business models cater to the specific needs of different customer segments, providing them with customized financial services. The development of super apps, which consolidate multiple financial services into a single platform, showcases how institutions are utilizing innovation to improve customer convenience and engagement.

Table 3. Summary Table for Interviews

Inst.	Digital Technologies (Integration)	Customer-Centric Strategies	Financial Inclusion Efforts	Enhanced Financial Inclusion	Enhanced Customer Satisfaction
1.1	24/7 digital banking, online tutorials	Personalized advisory, face-to-face interactions	Simplified processes, tailored products	Yes	Yes
1.2	Digital platforms and innovative tools	Continuous workshops, youth programs	Simplified processes, sustainable activities	Yes	Yes

2.1	MIS for internal processes plans for online modules	Business planning support, advisory services	Supports startups, women-owned businesses	Yes	Yes
2.2	Modern portable systems, plans for digital signatures	Close interaction, tailored solutions	Formalizing businesses through advising	Yes	Yes
3	Mobile apps, digital identification software	Financial literacy campaigns, university lectures	Online payments, remittance solutions	Yes	Yes

Source: Own research

Table 3 represents a summary of the interviews. As can be seen, companies that invest in technology and integrate tech tools into their business model can enhance better their financial inclusion and customer satisfaction.

5. DISCUSSION

The integration of technology has transformed how financial institutions operate and connect with customers, addressing traditional barriers to financial access. This study highlights key factors influencing the relationship between technological adoption and financial inclusion.

Tech-Enabled Business Models: Innovative business models leveraging digital platforms have reduced barriers like high costs and limited-service access, enabling institutions to better serve underserved groups. These models streamline processes, improve efficiency, and provide tailored solutions for rural populations, women-owned businesses, and micro-enterprises.

Technology as a Driver of Inclusion: Tools like mobile banking, digital IDs, and data analytics allow institutions to offer innovative, accessible financial products. Super apps and fintech solutions have simplified interactions and promoted financial literacy, addressing Albania's low digital and financial literacy levels.

Customer-Centric Strategies: A focus on personalized support and financial education enhances customer satisfaction and long-term financial stability. Simplified processes and inclusive products effectively meet the needs of underserved groups, fostering a more inclusive financial ecosystem.

Despite progress, challenges remain, including regulatory gaps and uneven digital infrastructure. Addressing these issues is vital for sustained growth and broader inclusion.

6. CONCLUSION

This research highlights the transformative impact of tech-enabled business models on financial inclusion in Albania. By integrating digital technologies into their operations, financial institutions have made financial services more accessible, affordable, and inclusive, particularly for marginalized and underserved communities.

While challenges such as low financial literacy and limited rural access remain, the efforts made in recent years demonstrate that technology, when effectively harnessed, can serve as a powerful equalizer. Institutions that innovate their products, services, and business models have successfully addressed many barriers to financial access, enabling more individuals and businesses to participate in the formal financial system.

The findings emphasize that the integration of technology is not merely a tool but a strategic imperative for fostering financial inclusion. Continued efforts to enhance digital literacy, develop regulatory frameworks, and promote customer-centric approaches will be critical to sustaining this progress. By doing so, Albania can advance its journey toward building a more inclusive and equitable financial ecosystem, paving the way for broader socioeconomic development.

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