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Exploring the Adoption of Fintech and Its Difficulties in Pakistan's Emerging Economy Concerning Financial Inclusion

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A B S T R A C T

The rapid proliferation of financial technology (FinTech) in our nation holds the promise of not only boosting financial inclusivity but also significantly improving overall financial efficiency. Despite the undeniable impact of FinTech on the future of the financial industry, its widespread acceptance remains uncertain, largely due to customer apprehensions surrounding associated risks. This research adopts a qualitative research framework to delve deeply into this subject matter. The primary research methodology employed involves conducting in-depth interviews as the principal means of data collection. The core objective of this research is twofold: first, to evaluate the significance of Financial Technology (FinTech), and second, to delineate the hurdles confronted by banks offering branchless banking services in Pakistan during the integration of FinTech. its particular focus lies on microfinancing institutions. The study's findings underscore the potential of FinTech to bolster financial inclusion and to address economic disparities among marginalized segments of society. To harness this potential effectively, it is imperative to promote financial literacy through a multifaceted approach encompassing workshops, online resources, media campaigns, and community leaders. This multifaceted strategy empowers individuals, enabling them to make well-informed financial decisions in the digital age.

INTRODUCTION

Digital technology has revolutionized the current world and has had a substantial impact on old modes of operating. Financial institution's use of technology in providing financial services has increased significantly (Saleem, 2021; Upe, 2023). Financial inclusion and the financial sector stimulate economic activity throughout the world, particularly in developing economies. It is critical to expand these operations through banking and financial institutions (Jatoi et al., 2023). FinTech refers to businesses or their representatives that mix financial services with cutting-edge technology (Saba et al., 2019). Technology is forcing these Fin-Legacy financial organizations to rethink their goals, acquire new skills, and change their organizational cultures. In other words, financial innovations enabled by technology could lead to building new business models, procedures, products, and applications that impact financial services (Ashraf et al., 2022; Gupta et al., 2022). Pakistan is a developing country that views technology advancement as an important component of its growth and development. Pakistan possesses the possibility to emerge as a notable hub for Fintech expansion owing to several factors.

These include a sizable youth demographic, a rise in smartphone and internet accessibility, a consumer inclination towards e-commerce and digital transactions, and an ability to absorb innovations inside the financial system. Nevertheless, the widespread acceptance and implementation of technology are impeded by individuals' apprehension regarding the potential adverse consequences and risks associated with the use of emerging technological advancements (Saleem, 2021).

Pakistan exhibits a significantly deficient level of financial inclusion, positioning it as one of the least financially inclusive nations globally.

Approximately 53% of the population lacks access to financial services, leaving only 47% with some form of access. However, within this subset, a mere 23% are formally served, while the remaining 24% rely on informal financial services. Financial inclusion plays a crucial role in facilitating individuals' engagement in the process of economic expansion, as it enhances their ability to access various economic possibilities and expands their range of choices. Consequently, financial inclusion contributes to increasing individuals' productivity and efficiency (Alkhawaldeh, et al., 2023; Lasak, 2022).

There are two potential avenues through which it can contribute to the reduction of poverty. First and foremost, the augmented availability of financial resources contributes to the facilitation of educational access, heightened self-employment opportunities, and enhanced human development, so contributing to the amelioration of poverty. Additionally, the provision of inclusive access to a wide range of financial goods and services facilitates the effective allocation of resources, granting the economically disadvantaged population enhanced financial leverage in their efforts to alleviate poverty. Insufficient financial resources not only serve as a deterrent to economic progress but also contribute to the perpetuation of income disparities (Zulfiqar et al., 2016). The issue of financial inclusion has garnered considerable attention on a global scale, with a particular focus on developing nations (Zaidi & Shah, 2023). It has been observed that a considerable segment of the population in Pakistan lacks access to financial services, resulting in a state of being unbanked.

In comparison to less developed countries, developed countries exhibit a higher degree of inclusivity within their financial systems. The percentage of adults with official bank accounts in industrialized countries is 81%, whereas, in less developed countries, this figure stands at only 28%. The three primary indicators utilized to evaluate the extent of financial inclusion within a nation are the proportion of the population possessing an account at a formal institution, the proportion of the population with savings at a formal institution, and the proportion of the population engaging in borrowing from a formal institution (Zulfiqar et al., 2016).

According to (Sioson, 2019) the implementation of fintech technologies has the potential to enhance the efficiency and security of remittance transactions, while also reducing associated costs. Consequently, this might lead to a rise in the volume of remittances being sent and received. By improving the financial infrastructure and implementing mobile banking, it is possible to mitigate or minimize the limitations associated with geographical distance, hence expanding the accessibility and availability of financial services (Shahani et al., 2022). Following the successful launch of Telenor's “Easy Paisa” service, other telecom carriers in Pakistan have now been offering similar services. Currently, in Pakistan, prominent telecommunications companies and commercial banks are providing branchless banking services inside the mobile money service provider sector.

The mobile financial services, Konnect-HBL, Omni-UBL, Mobile Paisa, UPaisa, Zindigi-JS bank, Jazz Cash, and TimePey (Mansoor, 2023). These companies provide services such as micro-lending, digital wallets, payment gateways, and online and mobile financial services. In brief, the fintech sector in Pakistan has transformed, expanding from the introduction of mobile financial services to encompass digital banking and microfinance. The expansion of financial technology (fintech) within the nation possesses the capacity to enhance both financial inclusivity and efficiency. However, there exist some obstacles that must be effectively tackled to fully realize its promise. To foster the expansion of fintech in Pakistan, the government and financial institutions must allocate resources towards the enhancement of digital infrastructure, the facilitation of financial literacy, and the establishment of a regulatory framework that incentivizes innovation and effective risk management.

The potential influence of financial technology (fin-tech) on the future of the financial industry is significant; nonetheless, its widespread acceptance remains questionable due to customer apprehension regarding the associated risks. Although financial technology (Fin-tech) has numerous benefits, it is crucial to acknowledge the potential risks and hazards that may be underestimated about different Fin-tech solutions. The absence of comprehensive international regulations governing the utilization of financial technology may pose risks, hence rendering digitalized corporate operations potentially hazardous. The adoption of financial technology in a given nation is impeded by emerging risks, including cyber security and intellectual property concerns, apprehension over the acquisition of capable and trustworthy clientele, and regulatory uncertainty (Ashraf et al., 2022). The moderate degree of trust in banks, financial institutions, and their services primarily stemmed from the prevailing skepticism among the majority of clients. Trust poses a persistent obstacle to the successful and efficient attainment of financial inclusion in Pakistan. In addition, there exist several enduring challenges that impede the implementation of financial inclusion in the country. These challenges include overall illiteracy, limited financial literacy, gender disparities, inadequate access to internet services in rural regions, lack of awareness regarding financial inclusion, a prevailing preference for cash transactions over credit transactions, and a diminished inclination towards entrepreneurial endeavors (Shahani et al., 2022).

Financial technology firms, commonly referred to as FinTech, are positioned to improve financial inclusion by making sure that their offerings are easily accessible to individuals who have historically been excluded from conventional business models. Pakistan, a developing nation, confronts the issue of a significant portion of its population lacking access to banking services. The emergence of digital financial services via FinTech, combined with the positive embrace of digitalization by consumers, has notably heightened the potential for embracing Financial Technologies in Pakistan (Amin, 2022).

Pakistan demonstrates a substantial shortfall in terms of financial inclusion, underscoring that a significant segment of the population lacks proper access to financial services, which consequently hampers their involvement in the process of economic advancement. The absence of financial inclusion underscores a lack of inclusivity in Pakistan's economic progress. The concept of financial inclusion is associated with empowerment, as the argument goes that individuals can participate in economic endeavors by obtaining credit access. Financial inclusion acts as a strong driver for inclusive growth (Neelam & Bhattacharya, 2022), enabling economically underprivileged individuals to engage in economic expansion and broaden their access to diverse prospects (Zulfiqar et al., 2016). Furthermore, the effective functioning of financial markets requires more than just a sturdy infrastructure – it necessitates an informed client base as well. Given their pivotal role in implementing financial inclusion, financial literacy encompasses the acquisition and comprehension of knowledge regarding financial securities, and products, and their role in facilitating well-informed investment choices. The initiative incorporates diverse components, including financial education and essential information (Chhaidar et al., 2023; Shahani et al., 2022).

METHODS

Within the framework of an exploratory inquiry, the utilization of the case study research methodology exhibits considerable efficacy. Case studies are utilized when there is a requirement for a comprehensive and in-depth investigation of phenomena that are relatively less understood. The utilization of this approach is especially beneficial when exploring unfamiliar ideas, as it facilitates the acquisition of both quantitative and qualitative data (Butt & Khan, 2019). The present study employed a qualitative research framework to attain a comprehensive comprehension of the topic under investigation (Habibah & Bhayo, 2023). The methodology utilized in this framework involves the utilization of in-depth interviews as the major method for data collection. The primary objective of this research is to ascertain the significance of Financial Technology (FinTech) and identify the obstacles encountered by banks providing branchless banking services throughout the implementation of FinTech in Pakistan. This study focuses on the assessment of the influence of financial technology (FinTech) on enhancing financial inclusion, specifically within the unbanked population of Pakistan, with a particular emphasis on microfinance institutions.

The research population consists of individuals to whom the research findings are intended to be relevant, with a particular emphasis on the banking industry. The selection of microfinancing organizations for data collecting encompassed Advans Microfinance Bank, APNA Microfinance Bank, Mobilink Microfinance Bank, NRSP Microfinance Bank, U Microfinance Bank Limited, and Telenor Microfinance Bank Ltd. The study's participants are selected from microfinancing banks and encompass branch managers, franchise owners, and clients affiliated with prominent microfinancing organizations.

RESULTS AND DISCUSSION

The transcription of the interviews was carried out with great care, ensuring precision and meticulousness in accurately preserving the oral discourse. The transcriptions played a crucial role as a primary resource for subsequent studies. To further the visualization of prominent themes and concepts that arose from the interviews, tag clouds were created using web resources. The tag clouds presented here provide a concise visual representation of the frequency and importance of particular terms found within the interview content. They serve as a snapshot, capturing the most prominent thoughts expressed in the interviews. The accompanying conversation is informed by a thorough synthesis of several sources of information, resulting in valuable insights and conclusions. The aforementioned components encompassed in this study consist of the primary interviews that offered direct firsthand viewpoints, the field notes that incorporated contextual observations, and the tag clouds that effectively emphasized reoccurring themes. Through the process of triangulating a variety of sources, a comprehensive and comprehensive comprehension of the subject matter was attained, hence facilitating the provision of a nuanced interpretation of the findings.

It is crucial to highlight that the conclusions have been derived from a rigorous analytical procedure that incorporated not just verbatim excerpts from the interviews, but also the contextual depth provided by the field notes and the visual depiction shown by the tag clouds. The utilization of this integrated strategy enhances the trustworthiness and comprehensiveness of the insights given, hence bolstering the overall validity of the study's conclusions.

Inclusion of Underprivileged Communities

The inclusion of underserved communities inside the realm of financial services has been emphasized by both bank managers and clients, illuminating the substantial impact of fintech in this aspect. The advent of mobile banking applications and digital wallets has emerged as a revolutionary phenomenon that surpasses the constraints imposed by geographical barriers (Parakh et al., 2020). As a result, individuals who live in geographically isolated and historically underserved regions now can avail themselves of essential financial services. The advancement of technology has resulted in concrete advantages for individuals, as exemplified by the case of Customers, "The necessity of undertaking extensive journeys to obtain payment for their merchandise has been eliminated".

The individuals expressed the significance of using financial technology (fintech) in terms of significantly reducing the inconvenience of having to travel considerable distances exclusively to collect payments for their merchandise. The utilization of digital financial tools has resulted in increased convenience, leading to time savings and improved efficiency in executing financial transactions. Furthermore, it is important to note that the influence of this phenomenon goes beyond the scope of individual entities and has implications for the wider economic environment, as emphasized by the findings presented in the research conducted by Bank Managers, "The advent of online lending platforms has introduced a new era of inclusivity for small businesses that were previously marginalized from conventional loan channels".

The phenomenon of empowerment has played a significant role in fostering entrepreneurial endeavors and facilitating the generation of job prospects, thereby fostering economic advancement at a local level.

Cultural Norms and Behaviour

The integration of financial technology (fintech) in Pakistan is significantly shaped by the cultural norms and behavior that exist within its culture. One notable aspect in this context is the prevalent inclination towards cash transactions, as elucidated by findings from Bank Managers. "The issue at hand pertains to the difficulties encountered while migrating to digital payment methods, particularly in the context of joint family systems. In such systems, the communal decision-making process may operate as a deterrent for individuals who are considering the adoption of digital technology".

The cultural predisposition described presents a significant challenge when attempting to shift toward digital payment methods. Digital financial solutions face a hurdle in their smooth assimilation due to the prevalent dependence on physical currency and cash transactions. The impact of extended family structures on fintech acceptance is significant. In these households, there's a collective decision-making process, with the unanimous agreement holding a crucial role in the adoption of novel technology. Such a distinctive approach creates a scenario where one's inclination can be influenced or overruled by the family's perspective, resulting in a notable effect on a person's receptiveness towards digital finance tools. Digital financial integration is molded by multiple factors in Pakistan, with significant attention to family-centered decision-making strategies being just one of them. The impact of Pakistani cultural conduct on fintech adoption is worth mentioning, which encompasses a deep-seated fondness for cash and a powerful focus on trust and security in the intricate landscape of digital financial integration.

Measures for Security and a Regulatory Framework

Incorporating fintech effectively into Pakistan's financial landscape hinges on the development of a strong regulatory framework. Protecting data privacy and consumer rights is crucial, as emphasized by banking leaders who play a key role in ensuring user safety. Balancing innovation while keeping user interests secure presents a critical aspect to consider in this endeavor. “Ensuring user safety means prioritizing data security and protecting consumer rights. The utmost importance lies in achieving a balanced synergy between innovating and safeguarding users”.

Given the dynamic nature of the fintech industry, it is imperative to expand regulatory oversight to embrace not just technology progress but also the fundamental rights of consumers. The user made a significant contribution by proposing the use of frequent audits for fintech companies. The implementation of these audits would function as proactive steps to verify compliance with rigorous security standards and cultivate an atmosphere of confidence. The implementation of such a regulatory structure would not only enhance the robustness of fintech systems but also foster a culture of responsibility and openness within the industry. “Regular audits of financial technology (fintech) organizations are conducted to verify their compliance with established security requirements and to assess the effectiveness of their dispute resolution systems”.

The incorporation of financial technology (fintech) inside Pakistan's financial sector requires the establishment of a regulatory framework that is strong, flexible, and capable of promptly addressing emerging challenges and opportunities. The intricacy of this attempt arises from the need to provide data protection, guarantee consumer rights, promote innovation, and maintain user safety.

Improving Financial Literacy

The promotion of financial literacy plays a crucial role in facilitating the successful adoption of fintech (Agabalinda & Steel, 2021; Siddika et al., 2023). The act of addressing this deficiency in knowledge is crucial in enabling consumers to make well-informed financial choices in the era of digital technology. “There is a disparity in the amount of understanding among individuals concerning the benefits and potential risks linked with the utilization of financial technology solutions”.

The recognition of the importance of education led to the identification of numerous methodologies. Financial literacy workshops, in addition to easily accessible Internet resources, have been identified as useful mechanisms for addressing the informational gap. These outlets provide individuals with the chance to acquire knowledge about the complexities of fintech, grasp its advantages, and realize the necessary precautions for ensuring secure and responsible involvement. Building upon this concept, it is important to acknowledge the significant impact that media and community leaders may have in the distribution and transmission of information. The media, due to its extensive scope, possesses the capacity to disseminate knowledge to the general public regarding the prudent utilization of financial technology, hence fostering a climate of careful and knowledgeable financial engagements. In a similar vein, community leaders possess a distinct role in disseminating information at the local level, thereby developing a fundamental basis of awareness and understanding that permeates through different societal layers.

Gender and Financial Inclusion

The recognition of gender discrepancies in the adoption of financial technology (fintech) brings attention to a significant aspect of digital inclusion.

"Gender biases have been acknowledged as a hindrance that limits women's ability to access technology and, consequently, their involvement with financial technology solutions".

The imperative of addressing this matter becomes crucial in guaranteeing equitable possibilities and economic empowerment for all individuals. The imperative for equitable access to digital opportunities highlights the significance of eliminating barriers relating to gender (Aliamutu & Mkhize, 2024). Facilitating women's access to and proficient utilization of financial technology (fintech) tools is not solely a question of equity, but also a crucial stride in narrowing the gender disparity in economic engagement. Through the dismantling of gender biases and the cultivation of an inclusive milieu, a wide spectrum of persons can actively engage in the financial ecosystem. "Tailored financial education programs have been developed to specifically target and mitigate this disparity, fostering economic empowerment among women".

The proposition of customized financial education initiatives acknowledges the necessity of specific endeavors aimed at enhancing women's economic empowerment. These programs can furnish individuals with both the essential technical skills and the requisite financial information necessary for making well-informed judgments. By providing women with these skills, they may enhance their readiness to interact with fintech solutions and utilize them to improve their financial welfare. The acknowledgment of gender discrepancies in the adoption of financial technology highlights the significance of guaranteeing equitable access and opportunity for individuals of all genders.

The Evolutionary Trajectory of Traditional Banks

In light of the dynamic financial environment, conventional banks are proactively adapting to the shifting landscape by integrating digital platforms into their operational frameworks (Baker et al., 2023). This transformation is aimed at providing improved services and experiences to its clients in an increasingly digitized world. "One crucial approach in the process of adaptation involves fostering partnerships between conventional banking institutions and financial technology (fintech) startups".

With an acknowledgment of the unique capabilities and specialized knowledge possessed by each participating entity, the objective of this partnership is to foster a synergistic environment that facilitates the development of novel and inventive solutions. "An innovative concept - hybrid banking models".

This strategy effectively reconciles the dichotomy between the digital and physical domains through the seamless integration of online and offline services. Hybrid banking models are designed to accommodate a wide array of consumer preferences, hence facilitating a holistic banking experience. This encompasses the advantages of utilizing digital transactions in conjunction with the added security and confidence derived from face-to-face contacts while making intricate financial choices. Hybrid banking models effectively address the many requirements of clients in a contemporary landscape characterized by the coexistence of ease and personalization, through the harmonious integration of virtual and tactile elements.

The Implementation of Incentives for Online Payment Systems

The promotion of greater adoption of online payment systems has led to the exploration of several approaches designed to encourage users. The complex character of promoting digital payment usage is emphasized by many perspectives, which propose diverse tactics for achieving this goal. "The utilization of incentives, such as cashback rewards and discounts, to stimulate user engagement. This strategy leverages the principles of behavioral psychology by providing users with concrete incentives to adopt online payment options. Through their direct impact on users' financial resources, such incentives possess the capacity to effectively shape decision-making behaviors".

Encouraging the usage of online payment methods. Various strategies, such as emphasizing convenience, providing tangible rewards, or investing in education, each serve a unique purpose in influencing consumer views and behaviors. As Pakistan undergoes the process of transitioning towards a digital financial ecosystem, the implementation of these initiatives has the potential to play a crucial role in promoting a wider use of online payment systems.

CONCLUSION

A case study research technique has illuminated FinTech's role in Pakistan's financial sector, particularly microfinancing banks. The study showed FinTech's potential to improve financial inclusion and address marginalized groups' economic issues. However, FinTech adoption faces digital literacy, connectivity, cultural norms, and security obstacles. The proposals focus on FinTech adoption and financial literacy in the digital age. The recommendations start with training programs and workshops to teach people how to use digital platforms confidently. Internet connectivity and power outages are also stressed, prompting telecommunications, government, and financial organizations to invest in stronger infrastructure. The ideas emphasize educational efforts and community participation to change perceptions and develop trust in digital financial solutions, acknowledging cultural norms' impact on FinTech adoption.

The guidelines call for specialized financial education programs to empower women economically and enable confident FinTech use. A hybrid banking strategy that combines digital convenience with in-person contact may satisfy varied financial needs. Financial literacy should be promoted through workshops, internet resources, media campaigns, and community leaders to equip people to make informed financial decisions in the digital age. Finally, adaptive regulatory measures should keep pace with technology to protect users and promote the digital financial sector.

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