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DIGITAL FINANCIAL INCLUSION AND WOMEN ENTREPRENEURSHIP: A CONCEPTUAL MODEL OF MOBILE BANKING ADOPTION

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ABSTRACT

Now a days women entrepreneurs have now been recognized as a driving force for the economies of many countries where women entrepreneur successfully contributed to job opportunity and improved the quality of life. Women entrepreneurs, especially single mother entrepreneurs, have gone through countless obstacles and lowest point in their personal life experience, which transformed them into independent and successful women. This study examines the role of digital financial inclusion in enhancing women's entrepreneurial activities in Bangladesh by developing a conceptual model based on mobile banking adoption. Despite the rapid growth of mobile financial services, women entrepreneurs still face challenges such as limited access to financial resources, low digital financial literacy, and concerns regarding security and trust. This study identifies five key dimensions of digital financial inclusion: access to digital financial services, usage of mobile banking, digital financial literacy, security and trust, and convenience. These factors are proposed to have a significant influence on women's entrepreneurship, reflected in business growth, income generation, and sustainability. The study adopts a conceptual approach based on a comprehensive review of existing literature and proposes a set of testable relationships for future empirical investigation. The proposed framework provides a structured understanding of how mobile banking can support women entrepreneurs and offers practical insights for policymakers and financial service providers to promote inclusive economic development in Bangladesh.

KEYWORDS: Digital Financial Inclusion, Mobile Banking Adoption, Women Entrepreneurship, Financial Access, Digital Financial Literacy, Bangladesh

JEL Classification : G21, O16, L26, O33

1. INTRODUCTION

In the world Bangladesh is currently one of the most populous countries, ranking eighth globally (Bureau, 2017), and is recognized as an emerging economy within the South Asian region. Despite this progress, the country continues to lag behind several other member states of the South Asian Association for Regional Cooperation (SAARC) in terms of digital infrastructure development In

recent years, however, digital financial inclusion has gained considerable attention as a key catalyst for socio-economic advancement in developing nations, particularly through the rapid growth of mobile banking services. With increasing mobile phone and internet penetration, Bangladesh has experienced a significant transformation in access to financial services driven by digital innovation. Mobile financial platforms such as bKash, Nagad, and Rocket have played a crucial role in bringing unbanked populations into the formal financial system, thereby enhancing financial participation and reducing reliance on traditional branch-based banking. These services have been especially effective in reaching marginalized groups, including women, who often encounter barriers such as social norms, restricted mobility, and limited access to formal financial institutions (World Bank, 2018; Rahman et al., 2021).

Women in Bangladesh contribute meaningfully to both formal and informal economic activities, particularly through entrepreneurial initiatives that support household income and national economic growth. Nevertheless, women entrepreneurs continue to face several challenges, including limited access to credit facilities, inadequate financial knowledge, and structural constraints that impede business development. Conventional banking systems have not sufficiently addressed these issues, as high transaction costs, physical distance to banking facilities, and strict documentation requirements tend to disproportionately disadvantage women. Consequently, women's participation in economic activities remains below its full potential, and financial exclusion persists as a major concern (Asongu & Odhiambo, 2019; Suri & Jack, 2016).

Also, digital financial inclusion through mobile banking presents a viable and effective solution in this context. Mobile banking enables users to conduct financial transactions via digital devices, reducing dependence on physical bank branches and offering flexibility in terms of time and location. This convenience is particularly beneficial for women entrepreneurs who must often balance business responsibilities with household duties. Furthermore, the use of mobile financial services enhances financial independence, improves efficiency in business transactions, and creates opportunities for income generation and broader market engagement (Kabir & Ma, 2022; Muthiora, 2015).

2. LITERATURE REVIEW:

2.1 Access to Digital Financial Services

Digital financial inclusion refers to the extent to which individuals can obtain and utilize formal financial services through digital channels. The emergence of mobile banking has significantly improved access to financial services, particularly for marginalized and underserved populations, by eliminating barriers related to geographical distance, limited physical banking infrastructure, and high transaction costs (Demirgüç-Kunt et al., 2018). In many developing economies, access to mobile financial services has played a crucial role in increasing financial participation, especially among women who often encounter socio-cultural restrictions and mobility limitations (Asongu & Odhiambo, 2019). In the context of Bangladesh, mobile financial services have expanded financial accessibility by allowing individuals to engage in financial transactions without requiring direct interaction with

traditional banking institutions. This increased accessibility has contributed to broader financial inclusion and has opened new opportunities for economically disadvantaged groups to participate in financial activities (Rahman et al., 2021). Furthermore, improved access to digital financial services enables women entrepreneurs to overcome structural barriers and integrate more effectively into the formal economic system.

2.2 Usage of Mobile Banking

While access to digital financial services is important, the actual utilization of mobile banking platforms is critical in realizing the benefits of financial inclusion. Mobile banking usage encompasses a wide range of activities, including digital payments, money transfers, savings, and access to credit facilities. Regular use of these services enhances individuals' ability to manage financial resources more efficiently and supports better financial planning among small-scale entrepreneurs (Suri & Jack, 2016). Empirical evidence suggests that frequent engagement with mobile financial services is positively associated with improved business performance, increased resilience, and enhanced financial stability, particularly among women entrepreneurs in developing regions (Aker & Mbiti, 2019). In Bangladesh, the growing use of mobile banking has enabled users to streamline both personal and business financial management, reduce dependency on cash transactions, and improve overall financial discipline (Kabir & Ma, 2022). Consequently, higher levels of usage contribute significantly to strengthening entrepreneurial activities and promoting economic empowerment.

2.3 Digital Financial Literacy

Digital financial literacy represents the knowledge, skills, and competencies required to effectively use digital financial tools and services. It plays a fundamental role in determining the extent to which individuals can benefit from mobile banking and other digital financial platforms. Individuals with higher levels of digital financial literacy are more capable of navigating mobile applications, understanding financial products, and making informed financial decisions (Lusardi & Mitchell, 2014). Conversely, limited financial literacy remains a major barrier, particularly for women in developing countries, preventing them from fully utilizing digital financial services and contributing to persistent gender disparities in financial engagement (Van Rooij et al., 2011). Additionally, prior research indicates that financial literacy not only influences adoption but also strengthens the relationship between mobile banking usage and entrepreneurial outcomes. Women entrepreneurs with better financial knowledge are more likely to leverage digital financial services effectively, leading to improved business performance and sustainability (Fatoki, 2018). Therefore, enhancing digital financial literacy is essential for maximizing the benefits of digital financial inclusion.

2.4 Security and Trust

Security and trust are widely recognized as critical factors influencing the adoption and continued use of mobile banking services. Users are more inclined to engage with digital financial platforms when they perceive them as secure, reliable, and capable of protecting sensitive financial information (Gefen et al., 2003). However, concerns related to fraud, unauthorized access, and data privacy remain

significant obstacles to adoption, particularly in developing countries where awareness and protective measures may be limited (Alalwan et al., 2017). Trust becomes even more crucial for women users, who may exhibit higher levels of risk aversion due to limited experience with formal financial systems and fear of financial loss (Kim et al., 2009). Research suggests that the implementation of robust security features, transparent communication, and effective regulatory frameworks can significantly enhance user confidence and encourage greater adoption and usage of mobile banking services (Zhao et al., 2018). Strengthening trust in digital financial systems is therefore essential for promoting sustained engagement and supporting women's entrepreneurial activities.

2.5 Convenience / Ease of Use

Convenience, defined as the ability to conduct financial transactions easily and efficiently at any time and from any location, is a key determinant of mobile banking adoption. Digital financial services offer significant advantages over traditional banking by reducing the need for physical visits to bank branches, thereby saving both time and cost for users. Ease of use, which reflects the simplicity and user-friendliness of mobile banking applications, further enhances user acceptance and engagement. Prior research highlights that technologies perceived as easy to use are more likely to be adopted and utilized consistently (Venkatesh et al., 2012). Mobile banking services provide flexibility and accessibility, enabling users to perform financial activities with minimal effort, which increases overall satisfaction and usage frequency (Curran & Meuter, 2005). For women entrepreneurs, convenience is particularly beneficial as it allows them to manage financial transactions alongside household responsibilities, thereby improving efficiency and productivity (Muthiora, 2015). As a result, convenience and ease of use play a significant role in facilitating the adoption of mobile banking and supporting entrepreneurial development.

3. RESEARCH GAP

Despite the widespread expansion of mobile financial services in Bangladesh, there remains a notable lack of empirical research exploring the connection between digital financial inclusion and women's entrepreneurial activities. Most existing studies tend to concentrate on general adoption behavior or overall economic outcomes, while limited attention has been given to understanding how mobile banking specifically affects the entrepreneurial performance of women within a financial inclusion framework. Examining this relationship is essential for policymakers, financial institutions, and development stakeholders who seek to design effective strategies that foster gender-inclusive economic development. In response to this gap, the present study develops a conceptual model that investigates the influence of key dimensions of digital financial inclusion—namely access to digital financial services, usage of mobile banking, digital financial literacy, security and trust, and convenience on women's entrepreneurship in Bangladesh. By addressing these relationships, this study contributes to the growing body of knowledge on financial inclusion and women's entrepreneurship. It provides meaningful insights that can support policy formulation and practical interventions aimed at empowering women entrepreneurs. Furthermore, the proposed framework highlights how digital financial tools can help women overcome structural constraints, improve business performance, and

achieve greater economic empowerment. Ultimately, this study offers a foundation for future research while contributing to the development of a more inclusive and supportive entrepreneurial ecosystem in Bangladesh.

4. METHODOLOGY

This study employs a conceptual research design to develop a framework explaining how digital financial inclusion through mobile banking can influence women's entrepreneurial activities in Bangladesh. As a conceptual study, it does not involve primary data collection or empirical testing; rather, it is grounded in a comprehensive review of existing literature drawn from peer-reviewed journals, international reports, and other credible academic sources.

A systematic literature synthesis approach was adopted to identify and examine relevant studies related to mobile banking, digital financial inclusion, and women's entrepreneurship. Academic sources were collected from well-established databases, including Web of Science, Scopus, ScienceDirect, SpringerLink, JSTOR, and Google Scholar. Through this process, key constructs of digital financial inclusion—namely access to digital financial services, usage of mobile banking, digital financial literacy, security and trust, and convenience—were identified based on their consistent presence in prior high-quality studies (Suri & Jack, 2016; Alalwan et al., 2017; Lusardi & Mitchell, 2014; Kim et al., 2009; Curran & Meuter, 2005).

The selected literature was critically analyzed and synthesized to determine the relationships among variables and to establish linkages between the independent variables and the dependent variable, women's entrepreneurial activities. This approach aligns with established conceptual research methodologies that aim to develop theoretical frameworks for future empirical validation (Eisenhardt, 1989; Okoli, 2015; Suseno & Abbott, 2021; Webster & Watson, 2002). The proposed model illustrates how digital financial inclusion, facilitated by mobile banking, can enhance entrepreneurial outcomes for women in Bangladesh. Furthermore, the framework provides a foundation for future quantitative or mixed-methods research to empirically test and validate the proposed relationships.

1. Proposed conceptual framework and hypothesis development.

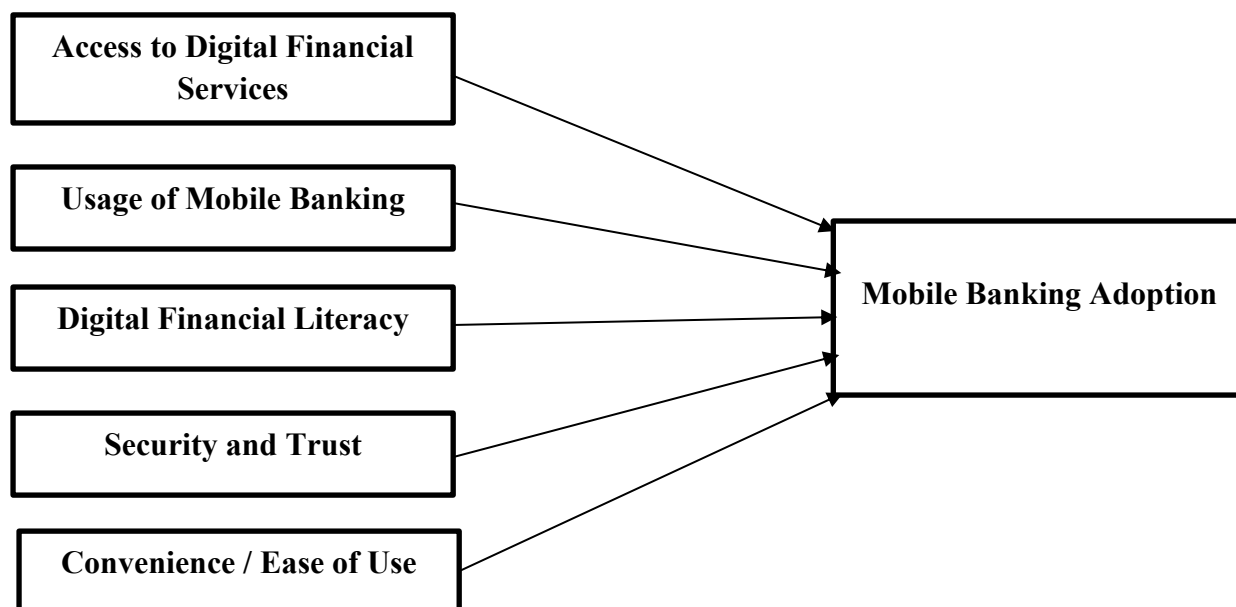


Figure 1: Conceptual Framework

Proposed hypothesis development

H1: Access to digital financial services positively influences women entrepreneurship.

H2: Usage of mobile banking positively influences women entrepreneurship.

H3: Digital financial literacy positively influences women entrepreneurship.

H4: Security and trust in mobile banking positively influence women entrepreneurship.

H5: Convenience and ease of use positively influence women entrepreneurship.

6. CONCLUSION AND FUTURE RESEARCH DIRECTION:

This study presents a **conceptual framework** examining how digital financial inclusion through mobile banking can support women's entrepreneurial activities in Bangladesh. The framework identifies five key dimensions—access to digital financial services, usage of mobile banking, digital financial literacy, security and trust, and convenience—that collectively have the potential to help women overcome socio-cultural and structural barriers, improve business performance, and achieve greater economic empowerment. By outlining these relationships, the study contributes to the literature on women's entrepreneurship and financial inclusion, providing a structured perspective on the role of mobile financial services in promoting gender-inclusive economic participation. Although the

proposed framework offers valuable insights, it requires empirical testing. Future research should consider using quantitative, qualitative, or mixed-method designs to validate the hypothesized relationships, with attention to different contexts such as rural and urban settings. Longitudinal studies could examine the long-term impact of mobile banking on women's business growth and financial independence. Moreover, future studies might investigate additional factors, including socio-economic status, cultural norms, and entrepreneurial experience, as potential moderators or mediators that influence the effectiveness of digital financial inclusion for women.

Overall, the framework provides guidance for policymakers, financial institutions, and development organizations on enhancing digital financial services, improving literacy, ensuring security, and offering convenient solutions to strengthen women-led entrepreneurship and support inclusive economic growth in Bangladesh.

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