WOMEN'S ADOPTION OF FINTECH: DRIVERS, BARRIERS, AND IMPACTS

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Abstract

This chapter explores the adoption of Financial Technology (Fintech) by women, highlighting the transformative potential and persistent challenges faced by women across different socio-economic contexts. Fintech innovations ranging from mobile banking and digital wallets to peer-to-peer lending create new opportunities for financial inclusion, especially for women who have traditionally been excluded from formal financial systems. Drawing upon theoretical frameworks such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), the chapter identifies the key drivers of fintech adoption, including government initiatives, mobile penetration, convenience, and entrepreneurial empowerment. It also critically examines barriers such as digital illiteracy, socio-cultural norms, trust deficits, and affordability constraints. Through global examples and women-centric fintech platforms, the chapter illustrates the socio-economic benefits of digital financial inclusion for women, including increased access to credit, enhanced economic participation, and greater social autonomy. Finally, the chapter offers policy and design recommendations to promote inclusive fintech adoption, emphasising the need for gender-sensitive design, literacy initiatives, regulatory safeguards, and collaborative partnerships. The insights presented aim to guide stakeholders in building a more equitable and gender-responsive digital financial future.

Keywords: *Women's empowerment, Mobile banking, Gender gap, Digital divide, Financial, technology, Economic inclusion.*

Introduction

Financial Technology (Fintech) has disrupted the global financial services industry to a large extent. Fintech is a combination of technology with financial services so as to enhance the provision of services and efficiency. It is a catch-all term that can encompass mobile banking and digital wallets, peer-to-peer lending, crowdfunding, robo-advisors, blockchain-based services. These developments have made banking to be more convenient, accessible, and affordable and thus narrow the divide between established banking institutions and people without access to formal economic systems.

Nevertheless, in spite of these developments and possibilities, the use fintech acquisitions by women is inversely low relative to that of men. There are numerous socio-cultural, economic, educational, and technological factors which can be regarded as a cause of this digital gender divide. To offer an example, women in most areas are denied the right to owning a mobile phone, do not know how to operate them, and can hardly be identified due to the lack of official identification in a system that allows one to enter into a digital economy platform. Moreover, they are less likely to get involved in fintech services as society tends to follow the norms, they have lower incomes, and they cannot be economically autonomous.

Not only is the need to tackle these disparities a gender equity concern, it is an economic investment. By supporting women to more actively participate in the digital economy, we can ensure economic involvement, self-sufficiency and social empowerment. Hence, there is a need to determine the critical variables that promote or inhibit the use of fintech by women so that both progressive financial services and successful policy measures could be built. In this chapter, the authors discuss the complex world of female adoption of fintech. It starts by reviewing some theoretical frameworks on explaining technology adoption behaviours, after which, it analyses the main drivers and barriers among women. It identifies effective interventions and forums through global and regional case studies that have enhanced women in handling fintech. The chapter ends with a list of practical recommendations to policymakers and developers of fintech, and economic organizations as a step towards a more inclusive and gender-equal digital economic future.

2. Theoretical Frameworks for Technology Adoption

The following models depict women's fintech adoption behaviour.

2.1 Technology Acceptance Model (TAM)

The current research paper is an exploration of the Technology Acceptance Model, created by Davis in 1989, which is considered to be one of the most influential theories of new technologies adoption. It proposes that there are two major perceptions that influence technology acceptance; perceived usefulness (PU), or how an individual feels that using a given system will help him/her be a better performer and perceived ease of use (PEOU) or how an individual feels that using the system will not be cumbersome. PEOU is of paramount importance to women, especially females with marginalised or low income backgrounds. The women less exposed to technologies or those who have limited access to digital-based devices are more likely to approach fintech services when these services have an intuitive user-friendly interface that demands limited digital literacy. Fintech providers should, therefore, focus on the ease of design, training and building confidence so that it is accepted by more people.

2.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT model by Venkatesh et al. (2003) is more elaborate because it contains the four major determinants, including performance expectancy, effort expectancy, social influence, and facilitating conditions. Performance expectancy is the stance that the application of technology will improve performance on the job or in life and it is strictly related to the course of ease of use. Social and effort expectancy, like the perceived ease of use (PEOU), does acknowledge the importance of societal/peers expectation on behaviour especially in patriarchal societies where the women tend to make decisions based on the opinions of family and community members Facilitating conditions entail availability of essential infrastructure and support systems which if in place allow the technology to be used effectively. The availability of mobile connectivity, digital literacy initiatives, financial education, and support systems that are grounded within the community become critical in the case of women and fintech. All these constructs can be used to better understand why and how women use fintech and what aspects of it are getting in the way of being more inclusive.

3. Drivers of Fintech Adoption Among Women

3.1 Economic Inclusion and Government Initiatives

The government has been critical in engaging economic inclusion through different schemes particularly the women who were historically locked out of the formal system of banking. In India the PMJDY The Pradhan Mantri Jan Dhan Yojana has been a game changer in the sense

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that it has seen millions of women opening zero balance bank accounts. Such accounts are normally tethered with Aadhaar (national biometric ID) and mobile numbers, and this facilitates ease and efficient direct integration with fintech services. In addition, the issue of putting direct benefit transfers (DBTs) in the account of women has made them economically more independent. Other countries like Pakistan and Nigeria are showing similar attempts like the Ehsaas programme in Pakistan and the National Economic Inclusion Strategy in Nigeria which contribute to the increased access of women to digital options in the economic sector.

3.2 Mobile Penetration and Accessibility

This is due to the availability and affordability of mobile phones that has dramatically enhanced accessibility of economic services by women, particularly in low and middle-income countries. Women have fundamental means of accessing benefits of mobile money especially to send and receive payments, save money, and access to microcredit services through mobile money platforms, such as M-Pesa in Kenya. Women in the rural centers also benefit since mobile-based fintech applications do not involve them moving long distances to reach the banking branches. Although the mobile gender gap continues to exist, projects which include supplying subsidized mobile devices and digital skills development are contributing to the bridge and grow the usage.

3.3 Convenience and Cost Effectiveness

Fintech services are highly convenient since it allows constant access to financial services and products such as funds transfer instantly at any time, paying bills on the internet, savings, insurance, and investing. To the women taking care of households, caregiving, and usually informal income activities, this flexibility is their lifeline. Moreover, fintech lowers the cost of transactions as opposed to banking, especially when it comes to small values. PoP (Peer-to-peer payment applications), neo banks, and digital wallets eradicate inter-mediary cost, and unnecessary red tape processes, which will make the economic services cheaper and more accessible to women belonging to economically weak groups.

3.4 Entrepreneurial Empowerment

Access to credit has always been a major challenge to women entrepreneurs mainly because they lack the collateral or credit history or even the formal employment attachment. There are digital lending platforms like Kiva (global), Rang De (India) and Kredit Bee (India) which provide microloans specific to the requirements of women entrepreneurs. The alternative credit scoring based on mobile usage pattern, transaction history and social behaviour are used to determine creditworthiness in these platforms. Also, numerous fintech systems provide comprehensive services integrated with inventory management, e-commerce onboarding, and financial literacy, therefore, empowering females and making micro and small companies start and develop. Fintech has emerged as a game changer when it comes to the financial empowerment of women because it is eliminating a form of dependency on informal moneylenders in favour of more business independence.

4. Barriers to Fintech Adoption

4.1 Digital Literacy and Education

Poor digital literacy is among the greatest obstacles that act against women integration into the fintech space. No matter how powerful the digital tools may become, many women, and, specifically, women in underserved communities, do not have basic digital skills that enable them to use smartphones and navigate fintech applications. UNESCO (2020) also claims that access to a smartphone is 30 percent lower among women in rural India than men, and even when they have access to it, they usually require the assistance of the male members of their families. Interfaces unfamiliarity, language barrier, and fear to not make financial errors are also another reason that women stay away to use digital financial services. Unless specific efforts are made to teach and assist in this area, this disparity will maintain the tendency to undermine the objectives of inclusiveness in fintech.

4.2 Socio-Cultural Restrictions

It is always the case that cultures and societies would limit the mobility, autonomy and decision-making powers of women, and this restricted their accessibility to technology and financial instruments as well. Women should have authorization by male guardians before they can use mobile phones, or open financial accounts in many conservative areas

These excruciating restrictions are grounded and propagated by the traditional roles placed onto women, which implies that women cannot find and utilize the fintech solutions on their own. In the Mobile Gender Gap Report created by GSMA (2022), the effects of socio-cultural norms and safety issues are also mentioned as discouraging women to engage in digital financial activities.

4.3 Trust and Cybersecurity Concerns

There is a great thing about many women, particularly those who use fintech as new users, who are worried about security and safety of their economic data. They are afraid of being scammed, defrauded, or tricked therefore they fail to utilize the online platforms. What is more, the absence of personal guidance and the level of customer support reduces trust. According to OECD (2020), women tend to be less confident when solving issues caused by technology or how to recover the lost money, thus being less willing to use fintech tools. It is important to instill trust in the users, by implementing clear data policies, safeguarding against fraud, and good customer support.

4.4 Affordability of Devices and Data

The issue of economic limitation is a big challenge. A large number of women belonging to low-income performing families cannot afford smartphones, data packages, or the maintenance rates. Due to prioritisation given to the household expenditure on basic requirements, investments made on technology are most of the times made at the sidelines. Moreover, despite having access to a device, it is often shared by the whole family so that it is rarely used regularly and privately. Such programs as subsidising phones, free data vouchers, and local digital access centres owned by the community can alleviate this load and stimulate a higher presence of women in fintech.

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5. Applications of Women-Centric Fintech Solutions

5.1 M-Pesa in Kenya

M-Pesa that was introduced by Safaricom in Kenya has become a standard of measuring the success of mobile money services especially in uplifting women. The user has the capacity to deposit, withdraw money, transfer money and purchase goods and services through a mobile device via the platform. This has transformed the lives of women of the countryside, who have been unable to obtain remittances of relatives in urban areas, safely manage money outside a conventional financial institution, as well as borrow a small amount through mobile phone directly. A group study conducted by Suri and Jack (2016) showed that the growth of M-Pesa has had the effect of getting about 194,000 households in Kenya out of poverty with many women headed households among them. The research has identified the gender-sensitive nature of the platform in that women were more inclined to using M-Pesa to save and run household finances than men.

5.2 SEWA Bank in India

Economic empowerment combined with fintech has been in the forefront of the Self-Employed Women Association (SEWA) a trade union of women workers in India, poor and self-employed. SEWA Bank was opened in 1974; it is the second bank in India to incorporate digital transformation by collaborating with fintech providers to provide services like mobile banking, mobile-based transaction alerts, and economic literacy classes. The designers of such services possess impeccable knowledge of the needs peculiar to women and furthermore, they have devised such expert services with multilingual interface and navigation, training program such as community-based training. This has helped SEWA to enable thousands of women in the organisation to help them become comfortable with technology to better manage their finances hence resulting in increased saving, effective handling of their credit and development of their business aspects.

5.3 Women-Focused Fintech Startups

New generation of fintech-based start-ups targeting women and their financial needs are coming to the fore. LXME is a woman-only financial platform in India, that provides women with mutual fund investments, financial planning on the platform, and accessible and understandable education resources. It aims at enabling the Indian women to be in control of their finances by promoting economic literacy and financial independence. Ellevest is an online investment platform and is a woman-owned investment company in the United States. It addresses the gender-specific adverse effects that a female population experiences in the accumulation of wealth through pay disparities, career breaks through personalised Investment portfolios, retirement prepare and financial coaching. Both platforms have been able to demonstrate gendered design and marketing to boost women adoption of fintech solutions by tailoring the service to suit their life objectives, financial behaviours and women-specific challenges.

6. Impact of Fintech on Women's Empowerment

6.1 Economic Participation

Fintech has empowered women in terms of their engagement in the economy; they are now freer in managing their own finances. This involves earnings management, savings plans initiation, financial products investment as well as being able to make self-economic decisions on household economic decisions. Women are able to invest more in household income, in education of their children, and micro-businesses due to a possibility of more active participation even when using digital financial tools. It enhances their livelihood and it also assist in the development of the economy by utilizing the potential in the women as they have not utilized the potential in the women in the work force and the business.

6.2 Improved Access to Credit

Women without formal credit histories are now gaining access to economic credit because of digital lending platforms that utilise non-traditional sources of data such as mobile phone usage patterns, utility bill payments and social media behaviour. Not only does it help enhance the quality of life of these people but it also contributes to the growth of the economy since it utilizes the unutilized human resource of women in employment and venture. The Fintech process has enabled such women to take loans on time without necessarily giving a security, thus assisting business growth, spending in emergencies, or financing in education.

6.3 Social Inclusion

Financial services are relevant in the development of women as they improve their social status and recognition. Fintech provides digital inclusion to women in making decisions within households and communities, making them more confident and enhances their social networks. The World Bank (2022) observes that economic inclusion is associated with an increase in gender equity, autonomy, and autonomy with regard to their sensitivity to domestic abuse. Integration of women into economic systems also promotes the intergenerational empowerment where younger women and girls rest and model on females of their families and communal who have been empowered economically since the age of their pre-teenage years.

7. Policy and Design Recommendations

7.1 Digital Literacy Campaigns

Women, especially those in underserved, rural communities, can also be given priority in digital literacy programs by the governments, NGOs and learning institutions. Visual materials and trainers who are local would help transmit information effectively on the operation of fintech tools and the safety and autonomy with which women can use these tools to the target audience through vernacular materials.

7.2 Gender-Inclusive Product Design

Fintech organisations can focus on inclusive design, such as coming up with user interfaces that are straightforward, easy to understand and culturally conscious. Voice-based navigation, the inclusion of regional languages, and visual learning tools are some of the features capable of making apps very usable among women with low levels of literacy.

7.3 Partnerships for Device Access

Alliances among fintech organisations, telecommunications firms and the government can aid in the mass distribution of reasonably priced smart phone and subsidised internet packages. The shared digital kiosks or hubs that can be implemented in villages with the help of public-private partnerships will enable women to resort to fintech services without themselves owning the devices.

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7.4 Data Protection Regulations

Enforceable and firm data protection provisions can be enforced to develop trust among the female users. Fintech platforms can be transparent regarding sources of information of the user, where on how their data is stored or used. Regulatory systems are possible and recourse is available to users in fraud cases, misuse, or data breaches and in the specific case customer support skills have the training to support customers in vulnerable groups.

Conclusion

Fintech offers an opportunity to close the gap of gender in economic inclusion which is transformative. Fintech presents agile and transformative opportunities to support and enable fair access to economic services as it has the potential to strengthen women economically, socially as well as personally. Nevertheless, the quest to inclusive fintech adoption is yet to be fulfilled. Structural inequalities, digital illiteracy, socio-cultural norms, and safety concerns remain to be rather formidable barriers. This necessitates a complex and multi-stakeholder approach in undertaking this with policymakers, fin tech companies, civil societies and institutions of learning.

Inclusion needs to be entrenched at the core of the digital economic solutions in order to maximize the potential offered by fintech. This can be achieved by designing products and services sensing unique needs of women, building enabling ecosystems that can support infrastructure and education, and building strong regulations to safeguard and empower female users. Going forward, a gender-intentional fintech development will ensure not only the adoption of the technology among women but also yield much economic growth, poverty alleviation, and ensure social equity across the globe.

References

1. Davis, Fred D. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." *MIS Quarterly*, vol. 13, no. 3, 1989, pp. 319–340.
2. *Digital Empowerment Initiatives*. Self-Employed Women’s Association (SEWA), 2021.
3. *Empowering Women in the Digital Age*. Organisation for Economic Co-operation and Development (OECD), 2020.
4. *Financial Inclusion in India*. Reserve Bank of India, 2020.
5. *GSMA Mobile Gender Gap Report 2022*. GSMA, 2022, www.gsma.com/mobilefordevelopment/resources/mobile-gender-gap-report-2022.
6. Jack, William, and Tavneet Suri. "Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution." *American Economic Review*, vol. 104, no. 1, 2014, pp. 183–223.
7. Suri, Tavneet, and William Jack. "The Long-Run Poverty and Gender Impacts of Mobile Money." *Science*, vol. 354, no. 6317, 2016, pp. 1288–1292.
8. *Gender Equality in Education and Technology*. United Nations Educational, Scientific and Cultural Organization (UNESCO), 2020.
9. Venkatesh, Viswanath, et al. "User Acceptance of Information Technology: Toward a Unified View." *MIS Quarterly*, vol. 27, no. 3, 2003, pp. 425–478.
10. *Women and Digital Financial Services*. International Finance Corporation, 2021.
11. *Women, Business and the Law 2022*. World Bank, 2022.