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CONTENTS

CONTENTS	iv
From The Editor	
Farida Chowdhury Khan	v
Addressing Labor Productivity for the Sustainability of the Garment Industry in Bangladesh	
Shahidur Rahman, Sabrina Fatema Chowdhury.....	1
Fintech as a Positive Enabler During COVID-19 in Bangladesh	
Nova Ahmed, Anik Saha, Md. Sabbir Ahmed, Ifti Azad Abeer, Anik Sinha, Rahat Jahangir Rony, Syeda Shabnam Khan, Shajnush Amir, Tanvir Hasan, Gazi Fakhrul Islam	16
Bangladesh-Bhutan Preferential Trade Agreement: WTO Compliance and Implications for LDC Graduation	
Shahriar Bin Wares	25
Ethical Encounters: Women, War, and Cinema in Bangladesh	
Elora Halim Chowdhury	37
Book Reviews	
<i>Sisters in the Mirror: A History of Muslim Women and the Global Politics of Feminism</i> Nusrat Chowdhury.....	42
<i>Ethical Encounters: Transnational Feminism, Human Rights, and War Cinema in Bangladesh</i> Firdous Azim.....	44
<i>The Odds Revisited: Political Economy of Development in Bangladesh</i> Haider A. Khan.....	47
<i>My Brac Life: The Becoming of a Development Activist</i> Mustafizur Rahman.....	50

Fintech as a Positive Enabler During COVID-19 in Bangladesh

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Abstract

The COVID-19 pandemic has disrupted every sphere of life and adversely affected low-income and marginalized communities. They suffered due to loss of income and inadequate points of contact for seeking support. This qualitative study covers 313 participants from urban, semi-urban, and rural areas of eight geographical divisions of Bangladesh. Participants from different economic backgrounds were included to better explore the role of financial technology (fintech) during the pandemic. The study shows that fintech improved people's lives in Bangladesh by adding utility through cashless transactions, creating opportunities for innovative business solutions, and serving as a financial institution for marginalized communities. The study also shows that many participants did not have regular access to digital technology and were deprived of the opportunities fintech provides. The study demonstrates how fintech can add convenience to the continuation of life and livelihood during disruptive disasters such as the COVID-19 pandemic and concludes that community outreach is needed to link all walks of society to the internet.

Keywords: Technology, pandemic, financial technology (fintech), COVID-19

Introduction

The COVID-19 pandemic has affected the health, social, and economic aspects of the entire world. Low-income countries were particularly impacted by a complex array of adversities during this time, given various pre-existing global inequalities (Jadoo, 2020; Bowleg, 2020; Tatar et al., 2021). Moreover, women and marginalized communities were among those affected most significantly (Van Barneveld et al., 2020). Low-income communities living in Bangladesh were among those who faced the most difficulty (Mottaleb et al., 2020). Research has addressed the problem they had in seeking monetary support through various social support mechanisms (Islam and Mostafa, 2021), creating a serious burden on them (Rönkkö et al., 2022; Mueller et al., 2022). The challenges were exacerbated in the early days of the pandemic, as a lockdown was imposed by the authorities in Bangladesh. During this time, many workers and employees lost their continuous income sources on a temporary and/or permanent basis (Jahan et al., 2021). Many struggled to find direction as to where and how to seek support (Ahmed et al., 2020; Islam et al., 2020). During this time, technology-enabled financial operations, referred to as fintech, served as a welcome vehicle for cashless financial transactions for many people (Rony et al., 2021).

We present a qualitative study on the access to fintech for communities from diverse economic backgrounds covering urban, semi-urban, and rural regions of Bangladesh. For this purpose, a qualitative study was carried out during the COVID-19 pandemic between December 12, 2020 and January 16, 2022. The study shows that the pandemic has created a positive shift toward fintech access. It explores how fintech opened opportunities to many by creating and supporting communities through the provision of contactless transactions; it also shows how innovative business opportunities emerged based on fintech and other technological platforms; and finally, how fintech has become a financial institution for marginal communities. It also demonstrates how a number of people were digitally disconnected and therefore not able to take advantage of fintech proliferation and the required support interventions at the community level, as well as policy level, and how this may carry into the future.

Literature Review

Many studies in developing nations have addressed the gender gap in access to the internet and technology (Aggarwal, 2020). COVID-19 has recently encouraged individuals to continue their work and other activities online (Kabir, 2020), but many people particularly women, are still without access to technology (Highet et al., 2020). Although COVID-19 encourages individuals to work from home, it is difficult for women to continue focus and be able to work from home when they are also burdened with domestic tasks and other related activities (Kaur and Sharma, 2020). Women in low-income countries use technology at considerably lower rates than males, underscoring the gender-based digital gap (Antonio and Tuffley, 2014). A similar problem exists in South Asian nations such as India, Pakistan, and Bangladesh, where gender-based digital gaps and access limitations are especially evident (Sambasivan et al., 2018).

Bangladesh was placed under a countrywide lockdown at various times during the COVID-19 pandemic (Shammi et al., 2021). At that time, fintech usage rose dramatically. According to Bangladesh Bank, online banking usage increased by 14% (Light Castle BD, 2020). Bangladesh's government has encouraged the use of mobile wallets among low-income populations during the pandemic and, at the same time, Bangladesh Bank has substantially upgraded and digitized its payment system. This was done over the past few years before the pandemic so that the population could avail the benefits of digital payments (Akhtaruzzaman et al., 2019). During the pandemic, the government gave monetary assistance to about five million people using mobile wallets (Rahman, 2022). Around 22 banks launched fintech services to move money from the banks to phones or vice versa (The Daily Star, 2021). However, it has been found that women's engagement in accessing and using fintech services remained low (BRAC, 2021). A few studies, notably in Bangladesh, have emphasized the influence of the pandemic in explaining this lower use, but these studies have not addressed the digital divide in terms of telemedicine (Chowdhury et al., 2021) or fintech (Aziz et al., 2020). During the lockdown, the digitally disconnected population was also subjected to government-imposed limitations and changes (Ahmed et al., 2020). The communities that remained cut off from the internet and technology engaged in a collective manner, helping one another as a group to deal with their debilitating financial circumstance. However, the positive impact of fintech in the context of Bangladesh during the COVID-19 pandemic is underexplored. Our study fills this gap and focuses on how fintech facilitated financial transactions and liquidity to the people of Bangladesh during the COVID-19 pandemic.

Research Method

Presented in Figure 1, our sample includes 313 participants (203 females, 108 males, and 2 transgender people) from different socioeconomic backgrounds from the 23 districts (around 33% of the total districts) of eight divisions in Bangladesh. The study area covers urban (41.21%), semi-urban (25.24%), and rural (33.55%) regions.

The qualitative study followed a purposive sampling method to recruit the participants (Etikan et al., 2016; Bernard, 2002). Statistically representative sampling and making national or subnational quantitative estimates are not among the objectives of the study as it is a qualitative study (Ahmed, 2019). According to Guba and Lincoln (1981), a qualitative study is effective as an evaluator. Therefore, given its design and nature, this study aims to understand the depth of the challenges and opportunities fintech provides to a varied group of participants.

Using the classifications provided by the Pew Research Center (presented in Table 1), we have classified our participants into five different income levels – poor (11.5%), low-income (44.09%), middle-income (23%), upper-middle-income (4.15%), and high-income (2.24%) (Lopez et al., 2022). Table 1 shows the income level of the participants. The details of the sample, including its diversity, are presented in Figure 2. We find that the largest groups were married females, with either substantial or no education, and from low- or middle-income populations

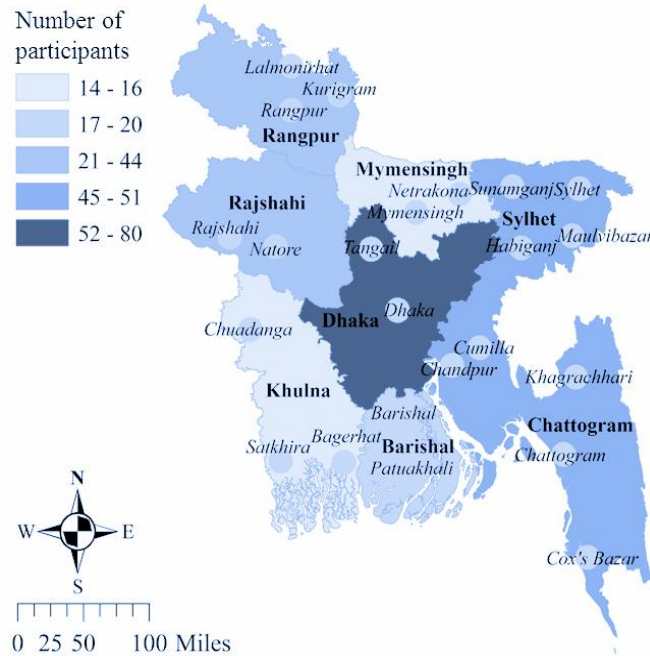


Figure 1: Map of Bangladesh showing where study participants live (Divisions are in bold and districts are in italics).

Table 1: Economic Classification of the Study Participants

Economic Status	Per Day Income (USD) Based on Pew Research Center	Monthly Income (BDT) (Pew Research Center)
Poor	<= \$2	5,088.12
Low income	\$2.01 - \$10	5,113.56 - 25,440.6
Lower- middle income	N/A	N/A
Middle income	\$10.01 - \$20	25,466.04 - 50,881.2
Upper- middle income	\$20.01 - \$50	50,906.64 - 127,203
High income	> \$50	> 127,203

Education Level	%	Gender	%	Age (years)	%	Income Level	%	Marital Status	%
Bachelor's Degree and Above	36.1	Female	64.86	18-29	28.12	Poor	11.5	Married	73.8
HSC	8.63	Male	34.5	30-39	30.35	Low Income	44.09	Unmarried	19.8
SSC	2.56	Transgender	0.64	40-49	22.04	Middle Income	23.0	Widowed	5.11
Below SSC	3.83			50-65	18.85	Upper-Middle Income	4.15	Divorced	0.64
No	41.53			65+	0.64	High Income	2.24		
Education Level		Gender Distribution		Age Distribution		Income Level (Pew Research)		Marital Status	

Figure 2: Sample Characteristics

We conducted focus group discussions (FGD) and individual discussions through a semi-structured questioning style. This allowed all the participants to share stories that could be followed up on further when needed. The participants were open to sharing their perceptions and preferred group discussions which reflected their social mores better (Kim et al., 2008). That is why we chose the FGD method – it allowed us to draw out participants' experiences, beliefs, perceptions, and attitudes (O.Nyumba et al., 2018). The type of FGD was single, referring to an interactive discussion on several topics among a participants group and a research team at the same place (O. Nyumba et al., 2018; Morgan, 1996). However, for the mobile financial services (MFS) agents we talked to, we conducted individual discussions, as they preferred to talk at their shops and without the presence of other MFS agents.

We conducted Offline, Online, and Hybrid FGD and individual discussions, primarily because the pandemic was still going in Bangladesh. For participants who wanted to have an in-person discussion, we arranged discussions in their homes or places that would provide them the most comfort. For participants who had time constraints or were conscious of the COVID-19 safety protocol and had access to the internet, we provided online discussions using Google Meet. Hybrid discussions were a process where one of the researchers was present at the participants' place to conduct discussion, and other researchers joined online through Google Meet. We always maintained social distance and COVID-19 safety protocols in an offline discussion. Also, strict safety policies such as ensuring social distance, and using and providing safety materials (e.g., masks and hand sanitizers) were followed as directed by the Bangladesh Ministry of Health and World Health Organization (WHO, 2021).

We recruited the participants through close connections such as friends, colleagues, relatives, neighbors, and key informants. They helped us connect to desired participants by forming a group of participants who were willing to join the study. The known contacts and key informants were people who locally accepted and trusted in their communities. After recruiting the participants, we went to the participants' living areas to conduct the study. Before our discussions with them, we described the research topic and asked participants about their concerns, preferences, and reservations regarding the study. We ensured that the participants were comfortable with the demography, including gender, age, profession, and religion, of the researchers. The questionnaire was semi-structured, and hence easily understood by the participants. The discussions were audio-recorded with the consent of the participants, so as to minimize data gaps that might impede further analysis. The discussions were 60-180 minutes long, and five researchers participated. One of the researchers conducted the sessions, while the other took notes and helped by asking follow-up questions. The studies were conducted in Bengali, transcribed, and later translated into English.

We performed a content analysis using Altas.Ti (Altas.ti, 2022). The content analysis process was initiated during the first discussion, allowing clearer context-based understanding, and was mutually appraised with the relevant data (Glaser and Straus, 2017). Thematic content analysis, which initiates with the inductive coding method, was followed (Braun and Clarke, 2006; Elo and Kyngas, 2008). This allowed us to identify the key themes from participants' discussions, followed by creating affinity diagrams for grouping, thereby generating major categories. The codebook was discussed among the authors and enabled us to generate the key themes of the findings.

The study was approved by the North South University Institutional Research Board (2020/OR-NSU/IRB/1201). We prepared a consent form in the native Bengali language for the participants, and included research objectives, methods, and permissions on the form. We also sought the consent of participants before the focus group discussions, and each time, the research objectives were explained to the participants for transparency. In this study, the participants had the right to leave the discussion without forfeiting incentives given to them at any moment. The research contents are carefully stored, and only the researchers can access them. We provided BDT 1,000 (USD \$12) as an incentive to each participant. We also provided gifts to the known contacts and key informants. The participants received the incentives with pleasantness.

Findings

The findings of the study show how financial technology has impacted the lives of people during the COVID-19 pandemic in Bangladesh. The research explores three major aspects of value addition - contactless transactions, opportunities for innovative business solutions, and the ability to act as a financial institution for those who are disconnected from formal banking. However, several participants from the study have remained digitally disconnected. Each of these topics are further discussed below.

First, there was a significant impact that fintech had in providing contactless transaction options during the authority-imposed lockdown and social distance restrictions - it supported communities during this difficult time. It allowed immediate emergency support as well as long-term support for many when family members reached out for support for those in need; business owners supported their employees along with making organizational decisions to continue payments through fintech. One participant told us how their relative reached out to them in a situation where the relative had no funds to buy food for that day, and the participant was able to immediately share money using a popular mobile wallet service:

“My niece calls me kaka. She asked, kaka give me 1000 or 2000 taka, I don't have rice at home, please send me whatever you can. At the time, I was able to send 200 to 300 taka, and I sent it to her through bKash.”- Transgender, No profession, Dhaka.

The basic operations of fintech also allowed flexibility and comfort to particularly female users, as explained by a participant:

“When I started to recharge my number using bKash, calls from unknown numbers were significantly reduced. I think when women recharge from mobile recharge shops, there is a large possibility of spreading the number to bad guys. So now I do the recharge by myself with bKash and I don't get any kind of unwanted calls.” - Female, Student, Mymensingh.

The availability of fintech was especially important for people working during unconventional times or having restrictions regarding their place of work. For example, we noted this among launch workers who were working during night shifts. Similarly, female entrepreneurs who were working within various social restrictions discussed the convenience of being able to have online financial transaction options. Moreover, some participants shared how carrying cash on their person added concerns that fintech has easily addressed.

Second, the study also finds there have been innovative opportunities in different professions that evolved during the pandemic and were enabled by fintech. These were mostly used by people familiar with technology, as well as emerging technology users. Businesses in tourist areas that suffered during the pandemic and lockdown initiated post-based product delivery which were paid by fintech. One businessman who sold dry fish in such an area talked about how these businesses survived their difficulties:

“All transportation modes were closed. So, no tourists came. But we survived even then. Allah has driven us somehow. Because we had some sales through phones. We could sell some using parcels as trucks were running. We sent the products through trucks and payments were made through bKash. As we didn't get allowances, we managed in these ways.” - Male, Dry Fish Businessman, Barisal.

Moreover, some entrepreneurs extended their regular services over online platforms that were powered by fintech. For example, a physiotherapist told us how she offered her physiotherapy services online. This appeared to be difficult initially but was later adopted and appreciated by her patients. Similarly, a lawyer shared how she continued to offer her services using online platforms seamlessly during the pandemic period. Many of the participants informed us how they have been able to extend their services using online and offline platforms and have been able to navigate from one to the other.

Third, for the marginal communities, formal financial institutions were unreachable. Our study finds that fintech-based services were used instead and were found to be money-saving by these communities. The participants who are not from marginal communities have also shared the convenience of using fintech over in person banking services considering the long queues, waiting time, and other operational problems.

“If mobile banking does not serve our purpose, then we go for banking. We pay only 1500 Tk, I don't actually need to share my bank account. It's easier to share mobile banking information. It's not like it is not a big reason. For small transactions, mobile banking like bKash, Nagad, Rocket, etc. is convenient.”- Female, Entrepreneur, Rajshahi.

However, there was a significant number of participants (around 20%) who never used any fintech-based services. Moreover, a larger number of participants (around 42%) remained digitally disconnected, never accessing the internet or any internet-based services. It must be noted that the percentage is representative of the sample, and not for the entire population of the country. It reflects the depth of the problem among those recruited for the study. These disconnected communities were marginalized because of their educational background and economic capabilities. Participants shared their priority to carry on their daily lives over adopting such technology. For example, a participant working as a laborer in a paper factory said that *“mobile phones are irrelevant to them”* while another participant working as a launch worker shared how *“mobile phones increase their daily costs”*. We therefore surmise that while fintech services have reduced many operational challenges of formal financial services, they were not an option for many.

Discussion and Conclusion

Digitally disconnected communities are low-income participants with little or no education and needed additional support during the pandemic (McClain, 2021). The findings from our study, focusing on the positive impact of fintech, are in line with another recent study which clearly shows the need for policy intervention to bring such technologies to these disconnected communities (Khera et al., 2021). It is important to ensure the connectivity since most of the Government and Non-governmental support was disseminated during the pandemic through financial technologies, requiring the recipient to have at least a mobile phone (Rahman, 2022; UNCDF, 2022; World Bank, 2022). Moreover, the initial information about pandemic-related safety concerns was disseminated widely across various digital mediums (Khan et al., 2022). Community-centered approaches have been designed and deployed successfully in the healthcare sector for vaccinations (El Arifeen et al., 2013). A similar design could be used for the spread of technology. Community technology booths can be used to connect disconnected members within a locality, for example.

Using technology for development has been criticized as being overly Utopian (Toyama, 2015). However, our study of 313 participants across Bangladesh presents a positive engagement with technology-based services and shows that it can impact development, particularly during a difficult pandemic situation. We hope that the value that technology provides can be extended towards disconnected communities through effective policies that are implemented successfully to engage them within the process of development in future.

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