brac

DIGITAL FINANCIAL SERVICES PLAYBOOK

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Foreword

Fifty years ago, BRAC began its journey in Bangladesh, aiming to help rural citizens resettle and rehabilitate in a newly liberated nation. Over the years, BRAC grew exponentially, becoming one of the largest and most diversified NGOs worldwide. Despite challenges, the goal remained simple: providing services to those in need, particularly women, empowering them to lead dignified lives. BRAC touched various sectors, including microfinance, health, education, migration, skills development, and extreme poverty. Frugal innovation became BRAC's signature in the global development sector.

From 2013 to 2023, digital financial services in Bangladesh underwent significant transformation. Mobile money and other digital services increased financial inclusion, bridging the gap between formal institutions and the unbanked population, particularly in remote areas. However, a persistent gender gap remained, with women facing unique challenges accessing and benefiting from digital financial services.

BRAC focused on designing inclusive financial products and delivery mechanisms that took into account the socio-economic realities of men and women, particularly those with limited access to formal financial services. Our pursuit of meaningful and sustainable financial inclusion has always centred around women, as their empowerment can create a ripple effect on their families, communities, and future generations.

The Digital Financial Services (DFS) Playbook serves as a testament to BRAC's unwavering commitment to financial inclusion, poverty alleviation, and women's empowerment in Bangladesh. As we share our experiences, insights, and learnings from the past decade, we hope this playbook inspires and guides organisations on their journey to harness the power of digital financial services for a more equitable and prosperous world.

Thank you for your support.

Asif Saleh
Executive Director, BRAC

Preface

BRAC's commitment to alleviating poverty and promoting equity made financial inclusion a priority since its inception. With women representing a significant portion of the global unbanked population, particularly in Bangladesh, addressing these challenges was crucial to fostering financial inclusion and breaking the cycle of poverty.

Empowering women financially was shown to increase household expenditure on food and education, encourage savings and investments, and improve development outcomes for future generations. The Bill and Melinda Gates Foundation (BMGF) shared this vision with BRAC, and the partnership aimed to advance financial inclusion by expanding low-cost digital financial services while promoting gender equality.

The 'Innovation Fund for Digital Financial Services' project, a unique partnership between BRAC and BMGF that started in 2013, sought to increase innovation in digital financial services and enable BRAC to adopt it at scale. This project aimed to help the Bangladeshi population, particularly those with limited access, better understand and benefit from mobile money, as well as develop new services and products made possible by this technology. Amid all this, the financial inclusion of women was kept at the very core.

Drawing from the decade-long journey of driving financial inclusion through digital financial services, BRAC presents the DFS Playbook. This compilation of experiences, insights, and learnings serves as an invaluable resource for organisations embarking on their own digital transformation journey. We hope that the lessons and stories contained within inspire you to embrace the possibilities that digital financial services can offer while keeping the needs and realities of your clients at the forefront of your work.

KAM Morshed
Senior Director
Advocacy, Innovation, Migration, BRAC

What this playbook is

The Digital Financial Services (DFS) playbook comes from the people at BRAC who work with women in the last-mile communities of Bangladesh. Together, we present BRAC's ten-year-long journey of driving financial inclusion through digital financial services in Bangladesh. This playbook is an anthology of lessons, of failures and successes, of setbacks and solutions, and of stories—lots of them! It does not claim that digital financial services are a silver bullet for achieving total financial inclusion, nor does it provide any quick fix in driving up the usage of financial tools by the communities unbanked from traditional financial systems. This is a glimpse into our journey, which has been full of trials and tribulations, as well as progress and successes. Throughout this long journey, we constantly sought to improve our methods around how to serve people better. In doing so, we let our clients guide us.

We hope that it serves as a starter guide for organisations new to digitising their finances and linked services.

How to read this playbook

This playbook aims to cater to both generalists and specialists, ranging from general readers to fintech experts, development professionals, policymakers, as well as donors working in the global financial inclusion sector. We hope organisations embarking on the DFS journey will benefit from our experiences, fintech professionals will get tips to better serve women, and government bodies will make policies to encourage, ease, and accelerate DFS usage among people unbanked in their countries. We welcome you to be critical of our approaches and hope that you enhance them for the greater good.

How we developed it

To develop this playbook, we tapped into BRAC's institutional memory—its people. We interviewed stakeholders of digital finance at BRAC—clients, field staff, mid-level managers, head office staff, strategic partners, and more. We sought pre- and post-digitisation stories. We asked how the idea came to be, how it was piloted, what the challenges were, what worked and what did not, and finally, how to better serve our clients. We studied documents spanning from 2012 to 2022 to understand the initial vision, trace the timeline, and walk through the implementation processes.
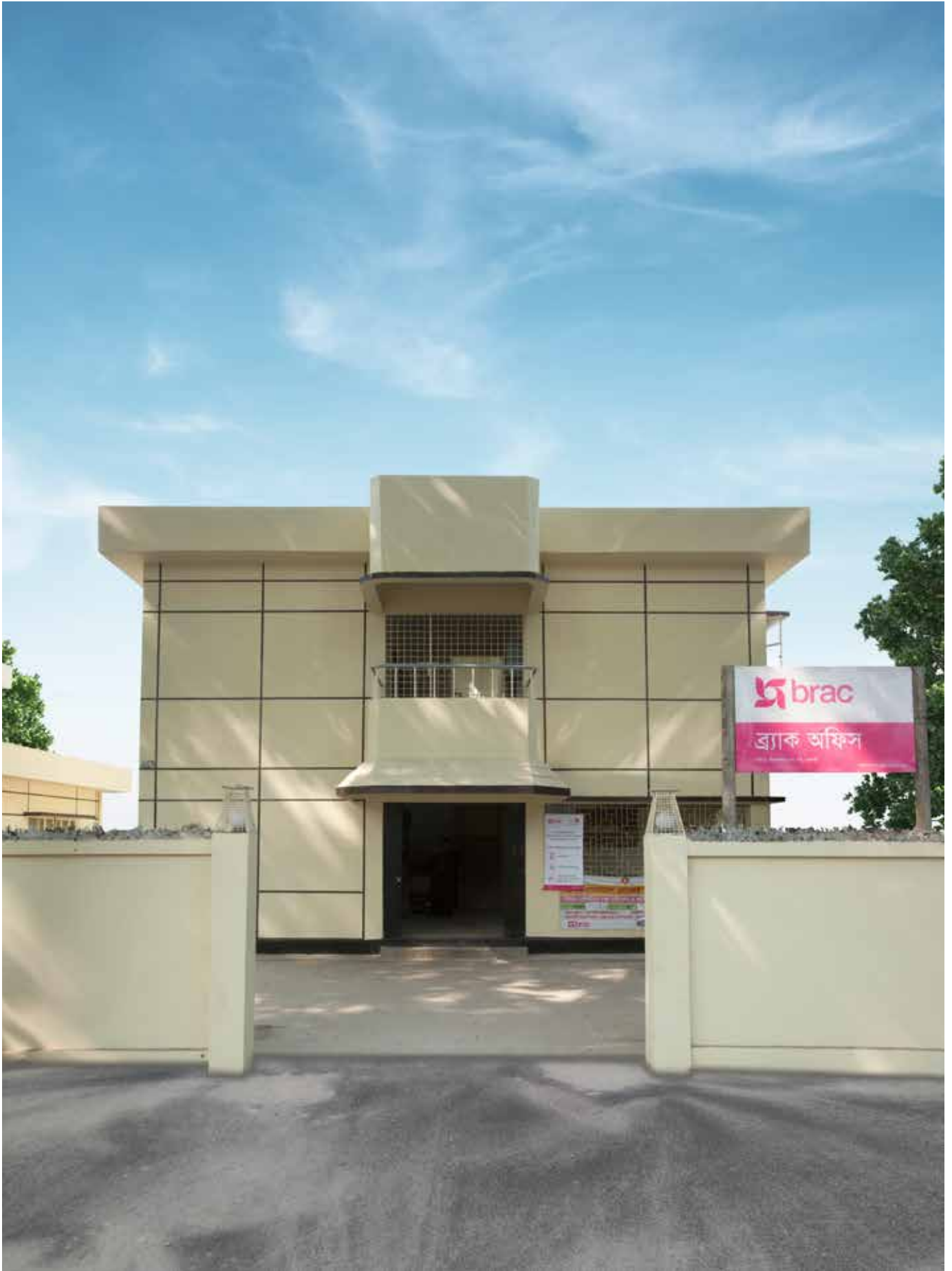
INTRODUCTION

Fifty years ago, when BRAC started its journey in Bangladesh, the goal was to help rural Bangladeshis resettle and rehabilitate in a newly liberated country. With passing years, BRAC grew exponentially and became the largest and one of the most-diversified non-governmental organisations in the world.

The road to growth was full of challenges, experimentation, and a great many leaps of faith. Nonetheless, the goal remained simple: providing services to people in need, especially women, as they realised their own potential to lead empowered and dignified lives. In serving the people of Bangladesh and beyond, BRAC touched many sectors, including microfinance, health, education, migration, skills development, and extreme poverty. It formulated unique yet easily scalable development models. The socio-economic reality of Bangladesh meant that any viable development model had to be frugal and easy to adapt. Frugal innovation, hence, became BRAC's signature in the global development sector.

Unbanked Population

40% Poorest

↓ ↓

56% **44%**
Women Men

Financial inclusion

BRAC's work with communities facing poverty and inequity made financial inclusion a priority area since the beginning. Half the global unbanked population come from the poorest 40 percent of their economies[1], and women comprise 56 percent of them[2]. The scenario is similar in Bangladesh, if not worse.

The fact that financial services – formal or semi-formal – have largely been inaccessible for people facing poverty, keeps the vicious cycle of poverty running. Three compounding factors contribute to this: low income, irregular cash flows, and the rigid nature of financial instruments. Women's situation, in this case, is more acute. They tend to earn less and more sporadically than men which traditional financial institutions identify as high credit risk behaviour. Then comes the issue of incompatibility. Financial products offered often fail to match the needs of people with limited income and literacy, with complicated fee structures, lengthy procedures, and high costs. This very combination of absence and incompatibility then restricts people from accessing appropriate financial tools to improve their lives. Hence, for BRAC, pursuing financial inclusion became integral to poverty alleviation.

Pursuing meaningful and sustainable financial inclusion also had to keep women at the centre. Not only do systemic inequities disproportionately affect women, but women are also uniquely positioned to change household economic conditions for the better. Sir Fazle Hasan Abed recognised their potential early on—"women are the managers of poverty, in the sense that women managers poor households,

looking after the children, their food, their needs. If the managers of poverty are women, why not also managers of development?"

Both anecdotal experience and research support his hypothesis: when women have greater control over income, household expenditure on food and education increases.[3] Additionally, women are more likely to save and use those savings to invest in their own businesses and in a better future for their families.[4] There is a spillover effect too: when women are more involved in the economy, development outcomes and productivity are enhanced for the next generations[5].

Bill and Melinda Gates Foundation (BMGF) shared a similar vision with BRAC. One of BMGF's programmes, Financial Services for the Poor (FSP), aims to advance financial inclusion by expanding the availability of low-cost digital financial services. In doing so, they seek to advance gender equality and ensure that women partake in the benefits of financial inclusion. Given the extensive networks of payment streams that exist within BRAC and because these payment streams are directly connected with people at the grassroots in Bangladesh, the collaboration between these two organisations held enormous potential. Both aligned under a similar vision that the existing gap could shrink with inclusive financial product design and delivery that take socio-economic realities of men and women into account, especially of the latter who have limited access to formal financial services.

[1] Global Findex Database 2021

[2] Global Findex Database 2021

[3] https://www.imf.org/external/pubs/ft/fandd/2012/03/revenga.htm

[4] https://www.cgdev.org/publication/mindful-saving-exploring-power-savings-women

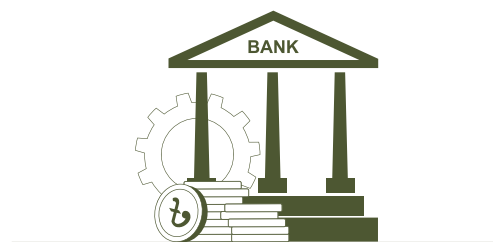[5] https://www.imf.org/external/pubs/ft/fandd/2012/03/revenga.htm

Mobile money

Mobile money—an umbrella term for the delivery of digital financial services over mobile platforms—seemed an excellent entry point. Global evidence shows that it can effectively address challenges faced by formal financial institutions—distance, time, and expense—by shifting transactions online. By reducing the barriers of geography and infrastructure, mobile money simplifies financial transactions and creates flexible services for people historically excluded from financial services. The logistical prospects were high as well: in 2012, 92.12 out of 155 million[6] people in Bangladesh had mobile subscriptions, while approximately 45 percent were unbanked and 39 percent were underbanked.[7] An increasing mobile subscription rate meant people could link their digital wallets with their mobile phones to send, receive, and withdraw money anytime and from anywhere without having to visit a bank or an ATM booth.

92.12 Million

45% Unbanked

39% Underbanked

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[6] http://old.btrc.gov.bd/content/mobile-phone-subscribers-bangladesh-may-2012#:~:text=The%20total%20number%20of%20Mobile,the%20end%20of%20May%2C%202012

[7] https://www.bb.org.bd/pub/research/sp_research_work/srw1903.pdf

Cash was getting the job done but it had limitations. It was expensive, insecure, hard to track, and subject to theft and fraud – significantly more than digital money.

What also incentivised us to adopt mobile money was its positive correlation with Women's Economic Empowerment (WEE). At BRAC, we consider women as the key drivers of development. We design development interventions to have gender-transformative impact to further the cause of women's empowerment and gender parity and there was no exception here. Direct mobile money disbursement provides women with a certain level of privacy and autonomy to reinvest funds according to their needs and priorities. From our experience, we have seen that when women become financial decision-makers, household savings increase, and labour force participation improves. Women's usage of mobile money also contributes to an improvement of their household's earning potential and future well-being.

However, it is not a silver bullet solution. To unlock the full potential of mobile money, it must be linked with important services such as savings, credit, and insurance. We foresaw some challenges: low phone ownership among clients with low income, low financial and digital literacy, weak cellular and electricity coverage, and a DFS ecosystem in its infancy. We embraced those, nonetheless.

Direct mobile money disbursement provides women with a certain level of privacy and autonomy to reinvest funds according to their needs and priorities.

For BRAC, adopting mobile money meant an opportunity to do more with less. Cash was getting the job done but it had limitations. It was expensive, insecure, hard to track, and subject to theft and fraud – significantly more than digital money. Maintaining records of millions of client payments in cash was time-consuming, as it was susceptible to human error. Moving and storing cash was risky too—both for us and our clients. Hence, we needed an upgrade that would make operations efficient, add more value to money, and allow us to divert more resources to those in need. Most importantly, an upgrade that improves the quality of lives of our clients, 96 percent of whom are women.

Innovation Fund for Digital Financial Services

It is against this backdrop that BRAC and BMGF entered into a unique partnership under the "Innovation Fund for Digital Financial Services" project. The project aimed to increase innovation in mobile money by seeding a diverse set of projects that prepare BRAC to adopt mobile money at scale. Through this project, BRAC wanted Bangladeshis to better access and understand the benefits of mobile money – especially the ones at the grassroots with limited access otherwise. It was also an opportunity to develop new services and products that mobile money makes possible. The operational efficiency was a plus.

The fund launched with an interactive 'Innovation Fund Challenge'. It was a call for ideas: How can BRAC improve its service provision by introducing mobile money into its programmes? The winning ideas would be selected for piloting and if the pilots were successful, they would eventually be scaled. There were music videos and flash mobs to generate enthusiasm among staff. From around a hundred ideas, seven ideas were selected in the first year and then another seven the next year.

Since then, mobile money has become an essential tool in BRAC's financial inclusion mission. To embark on this journey, BRAC partnered with bKash, a Mobile Financial Services (MFS) provider in Bangladesh.

Innovation Fund ideas

Idea	Relevant department	Mobile money application	Potential benefit from mobile money
Digitising lunch token	BRAC Head Office	Collecting daily payment for lunch from staff with mobile money	• Reduces human intervention by cutting down daily cash collection • Reduces crowding at the token counter • Reduces food waste
(Nearly) Cashless branch	BRAC Integrated Development Programme (IDP)	Digitise conventional cash streams at a branch office	• Reduces trips to collect money from clients and deposit to bank • Enhances operational efficiency • Reduces the risks associated with carrying cash
Mobile micro-insurance	BRAC Microfinance	Enable clients to pay micro-insurance premiums through mobile money	• Enhances access to micro-insurance products for people with otherwise limited access
School tuition fee payment	BRAC Institute of Educational Development (IED), Brac University	Enable parents to pay monthly tuition fees through mobile money	• Reduces travel time and costs for parents • Reduces teaching staff's involvement in fee collection, leaving them with more teaching time • Provides parents with flexible payment options • Enhances transparency around financial transactions
Adolescent savings	BRAC Adolescent Development Programme	Save digitally with the help of mobile wallets in adolescent savings groups	• Increases youth's access to financial products • Introduces adolescents to digital finance at an early age • Enhances their financial awareness
Mobile payment for Community Health Workers (CHWs)	BRAC Health, Nutrition, and Population Programme	Digitising the incentive payments to a portion of CHWs	• Expedites the process of distributing incentive payments • Reduces the risks associated with carrying cash
Mobile disaster relief funds	BRAC Disaster, Environment, and Climate Change Programme	Establishing a disaster relief fund and a mobile voucher system enabling clients to buy goods that BRAC reimburses via mobile money	• Enables Bangladeshi citizens to quickly contribute to disaster funds • Reduces the time needed to distribute goods in emergency cases by creating a provision for digital reimbursement

Small steps, big changes

One of the winning ideas, digitising lunch tokens, came from one of our support staff, Mohibul Islam. Initially, this is how the lunch service at BRAC's office canteen would operate: support staff from each floor used to collect cash for the next day's lunch, deposit it at the canteen, and then hand tokens to individuals accordingly. All of it had to be completed within a certain timeframe and the process relied heavily on human intervention.

Mohibul proposed a digital version – what if support staff are paid with digital money instead of cash for lunch tokens? A colleague from the BRAC Technology department, Akram Haider, came forward to build on the idea—what if individual mobile wallets are connected to the staff portal? What if the portal allows people to book their own lunch tokens? That would eliminate the involvement of support staff and free up their time for more important tasks. The old system did not allow the staff to sell their pre-booked token if they did not need it anymore, which resulted in massive wastage of food. An internal analysis found that the waste was worth BDT500,000 per year.

So, the idea of digitising cash collection found itself a bigger goal—a complete elimination of human intervention in the lunch token booking process and a reduction of food waste.

The technology team proceeded by connecting mobile money accounts to individual staff profiles on the employee self-service portal, My Desk application. Staff could see their account balance and book lunch tokens for the next day. With a further tweak, they could even cancel and exchange the next day's token.

The details had to be fine-tuned: there was still a certain timeframe within which one had to book their lunch. If someone missed buying a token during that period, they could buy it from a colleague. Initially, staff had to constantly check the portal to see if anyone was selling a token and it had to change. That led to developing the system to accommodate pre-booking, with a notification for the person waiting if there's a token on sale. Additionally, the cash transfer from one staff wallet to another was also automated in case of exchange between colleagues. For staff who were not linked to the staff portal, such as support staff, a kiosk was set up through which they could buy lunch tokens in a minimal time. With digitisation, human intervention in the lunch booking process came down to nearly zero and with the exchange system, food waste was reduced significantly.

Developing the whole system required only a few investments: a computer, some printing booths, and a kiosk. The system so far has been running smoothly for nearly eight years.

» This remains an example of small innovation bringing big changes within an organisation. It is also a story of collaborative effort— Mohibul had the idea but limited means to execute it. With Akram and Mohibul putting their heads together, the idea grew bigger and eventually created a ripple effect across the organisation.

Challenges abound, impact too

Mobility is restricted in many areas of Bangladesh due to geographical location and climatic challenges. *Saddam Bazar,* located in a riverine island in the south of Bangladesh is one such area where life and livelihood are strongly dictated by tides, where the Integrated Development Programme's very first cashless intervention was introduced.

Introducing mobile money in *Saddam Bazar* was a herculean task. There was no mobile money agent in *Saddam Bazar* at the time, meaning no option to cash in and out. In fact, bKash did not have any formal distribution channel there, due to the absence of a consumer base. Phone ownership was low. Among women, it was even lower. Even if women had access to a phone, they were often restricted from using it. Electricity was scarce and cellular networks scarcer. To make things more difficult, the literacy rate was also very low. In addition, the understanding and use of the English language was very low, which became a prominent challenge, since the options and instructions of bKash were written in English. The idea of women owning a mobile wallet and handling finances was not well received either. BRAC officials faced questions from the community: women don't have money, nor do they understand how to manage finances. The chances of losing money through digital transactions were perceived as high. Why should one use mobile money then?

Faced with uncertainties, frontline staff wondered why such a remote area had been chosen to begin with. One reason could be: if mobile money worked in such remoteness, it could work in many other areas, possibly all of Bangladesh.

Mobile money did actually take off in *Saddam Bazar*. Since the nearest bank a is two-hour drive away, mobile money provided seasonal migrants with an easier option to send remittances to their families. Women learned to use mobile money and market opportunities increased with more people transacting in bKash. Mohammed Salahuddin, who was the first bKash agent in the area, is a case in point. When he started as a bKash agent, he had to travel 10 kilometres in an area with broken roads and transport infrastructure just to collect cash from the nearest bKash distribution centre. It was time and resource-consuming, and the risk of theft was high.

>> His efforts eventually generated a market demand sufficient enough for bKash to begin full-fledged agent service in the area. Within a year, Salahuddin registered a record number of clients for which he even won an award! bKash provided financial support to upgrade his shop and his profits currently range from USD50-80 per month. With many more agents operating in *Saddam Bazar*, the DFS ecosystem keeps growing in one of the most remote areas in Bangladesh.

Digitising school fee payment and salary disbursement

One of the three ideas that we decided to scale was digitising tuition fee payment in BRAC schools. Surprisingly, the idea came from multiple people at BRAC and the pilot design was further developed by the Institute of Educational Development (IED), Brac University.

This was a digitisation plan with high potential. School teachers were visibly happy to not be burdened with cash payments. Not being involved in the fee collection process also gave the teachers more time to invest in teaching. As for parents, many seemed relieved that they did not have to pay through their children anymore, some of whom reportedly used the money to buy toys and snacks on the way to school. Furthermore, no one's physical presence was required in the schools for the payments, as they could now be made from home or work.

However, there was some hesitation around this new method of payment. Parents and teachers had numerous questions around how it works and any associated costs, what would happen if the transaction was not successful, and how they could get a receipt for fee payment. We answered all their questions and trained both teachers and parents on mobile money.

Then in 2016, 1,400 parents from two BRAC schools in Tangail and Gazipur registered with bKash as part of BRAC Education programme's (BEP) pilot of digital financing to pay school fees to the social enterprise schools. Teachers' honorarium was also sent via bKash.

We encountered some challenges, especially because some parents did not have access to mobile phones. However, there were positive results too—some parents preferred to pre-pay months of school fees at once while teachers could cash-out their salary anywhere.

> The success of the pilot resulted in the accumulation of BDT 560 million (equivalent to USD 6.5 million) in school fees and disbursement of BDT 4.17 billion (equivalent to 49 million) in teachers' salaries through bKash. The lessons of this pilot further helped during the Covid-19 pandemic when BEP scaled their operation across Bangladesh.

Digitising microfinance products

Of all the BRAC programmes, Microfinance was the first to start incorporating digital financial services in their operations. In 2012, Microfinance piloted payment of Deposit Pension Scheme (DPS) instalments via bKash. It was quite audacious, given that mobile financial services providers had just entered the DFS landscape in Bangladesh.

Since then, many of their financial products and corresponding services have been digitised. For instance: they have replaced the traditional "passbook" for instalment collection with a smartphone application to instantly record payment information and view transaction history. They have recently piloted SMS-based access to financial transaction history, without having to use the "passbook." They are also piloting a digital claiming process for their credit-shield insurance product, whereby the time required to settle a claim will reduce significantly. The programme also operates seven mobile-based branch offices in Southeast Bangladesh to reduce the difficulties of long-distance travel for clients living in remote and hard-to-reach areas.

» Within BRAC, Microfinance remains an example of building a digital architecture around DFS products. This is one way in which clients are increasingly becoming attuned to digital services.

BRAC-bKash partnership

For socially driven digital financial services, choosing an MFS partner with similar vision is of paramount importance. This similarity in the vision is why BRAC chose bKash as a partner among others in the market. Much like BRAC's goal of poverty alleviation, bKash also aims to intervene in the space of financial inclusion. Additionally, bKash had a stronger agent network than other MFS providers which could help BRAC to reach its clients in remote parts of Bangladesh.

Even with shared visions, partnerships need calibrations. The BRAC-bKash partnership was no exception. bKash, operating in a complex regulatory and technical environment, had to ensure a smooth running of millions of transactions daily whereas BRAC prioritised equipping clients and providing services to them in an accessible manner. Achieving the optimum outcome would be possible only when both the entities come together with their individual strengths – bKash overseeing the operational side and BRAC designing and taking services to clients at the grassroots and preparing them for the digital shift.

In terms of operationalisation, there were decisions to make around the costs of digital transactions. For example: who pays the transaction charges? An additional surcharge may discourage the clients, although cash transactions are often costlier than digital ones. If BRAC was to pay the additional fee, programmes had to absorb the fees, possibly increasing the operational costs. The cost had to make sense for BRAC programmes, clients, and the service provider. Hence, negotiation with bKash became necessary.

The fact that mobile money projects across BRAC programmes were still in incubation made it difficult to arrive at a uniform rate of transactions. In addition, projects differed vastly from one another to impose a uniform rate. Such intricacies meant costs had to be decided from case-to-case basis, which required BRAC and bKash to maintain an open communication and share information at all times.

Building and nurturing the partnership did not end here. Moving forward, different programmes discussed their challenges with the MFS provider—such as lack of agents or network coverage in remote areas. Sometimes it was useful feedback for them, and in some cases, they could help fast-track things. Engaging with bKash also helped them to understand the challenges we were facing. They helped by conducting training sessions for our staff and expediting account opening for our clients.

When BRAC programmes embarked on the journey to go digital, bKash with BRAC, simultaneously reached remote corners of the country. One of the prominent examples being the Integrated Development Programme's nearly cashless branch. In a remote island of *Hatiya,* where people barely knew about mobile money and digital transactions were almost non-existent in 2014, bKash and BRAC worked hand in hand—one created distribution channels and another helped create a market. Another example ⬈ is how bKash grew with the BRAC Education Programme. By digitising almost a quarter of a million students' tuition fee payments in 8,695 schools, BRAC created an active base of mobile wallets in one stroke. Until 2019, BEP had opened 216,856 bKash accounts. Only 11,978 parents, accounting for 5.52 percent of the whole, had bKash accounts before BRAC's intervention.

Timeline

2012   BRAC Microfinance introduced loan repayment through mobile money

2013   BRAC and BMGF partnered to explore mobile money's potential in enhancing financial inclusion

2014   Innovation Fund Challenge generated 14 ideas from which 7 ideas were piloted

2015   The remaining 7 ideas were piloted

2016   Introduction of Customer Service Assistants (CSAs) across IDP and Microfinance programmes

Introduction of DPS payments through bKash in Microfinance

2017 Scaling of school tuition fee payment through mobile money in BEP

2018 IDP and BEP achieve 100 percent digitisation

2019 Exploring prototypes around increased control of women's finances, increasing her confidence and ease, and giving her relevant use-cases with IDEO

2020 Emergency cash transfer during the Covid-19 pandemic across BRAC programmes

2021 Hosted internal Community of Practice (CoP) among new practitioners to catalyse wider use of DFS at BRAC
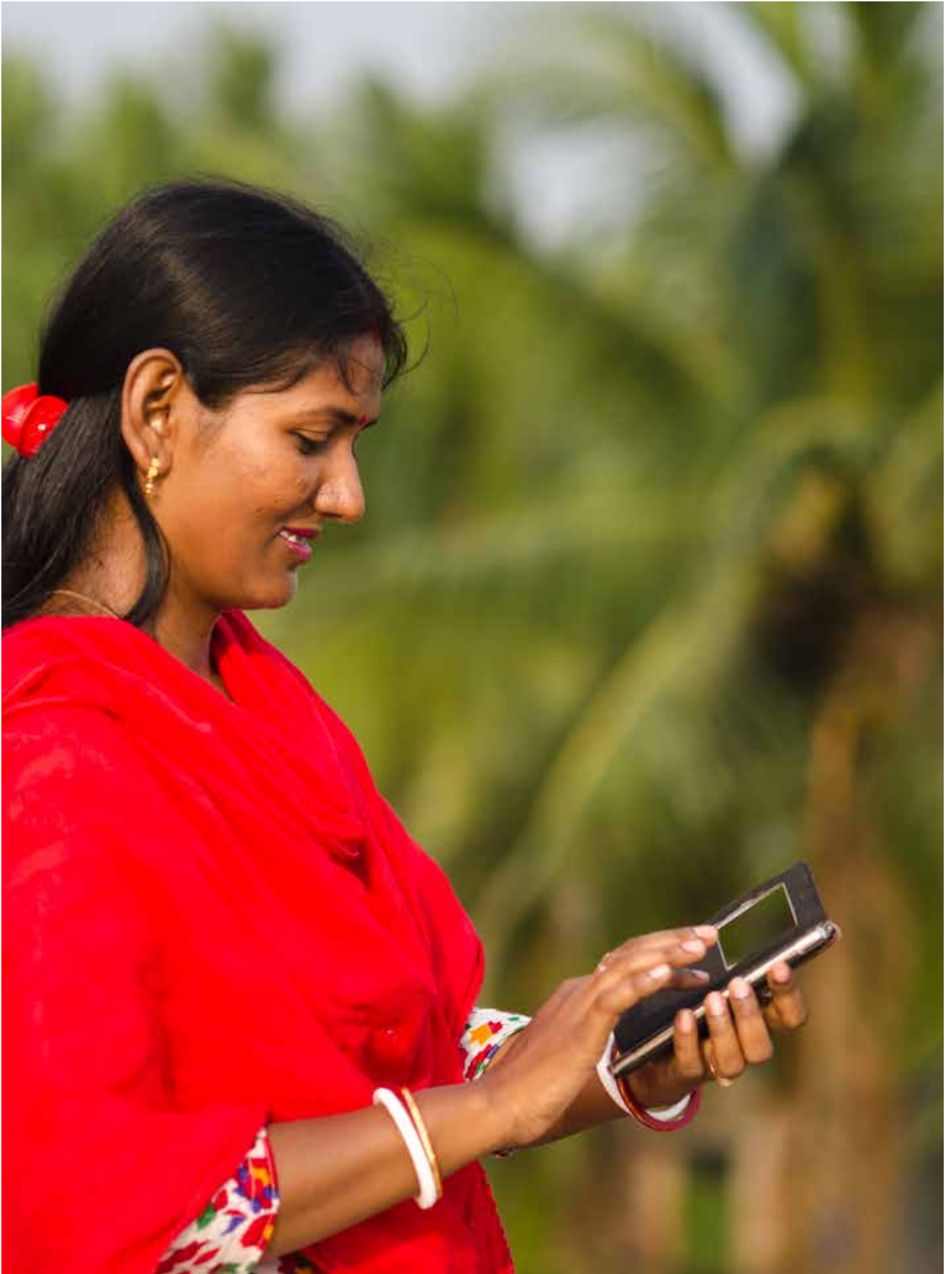
2022 Designed and tested a board game to teach digital financial literacy to younger generations

BRAC's frontline employees have played an instrumental role in fostering a cashless ecosystem. A BRAC employee, Mainul Islam ⬀, says he gets requests from people, who are not BRAC clients, to help them learn bKash during his small group meetings with parents—"I had started with only the parents. Now everyone wants to learn. There weren't so many bKash agents around before. The situation has changed."

Sharmin Sultana ⬀, a parent in one of the BEP schools, taught her husband Ibrahim to transact in bKash, something she learnt in BRAC meetings herself. Ibrahim is a businessman who would spend hours commuting to banks, which has now been reduced due to a regular use of mobile money. Especially so since his vendors have started using bKash as well!

brac **bKash**

এখানে ব্র্যাকের সদস্যরা
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বিকাশ একাউন্ট খুলতে পারবেন

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IMPLEMENTING MOBILE MONEY PROJECTS: GETTING THINGS DONE

In the following section, we share the steps we have followed and questions we have asked in implementing mobile money projects across Bangladesh. However, with some necessary disclaimers first!

At BRAC, we conduct pilots with the philosophy to learn what works best for the individuals at the grassroots. There are a few things we keep in mind before embarking on the piloting journey:

- We determine what we are testing for, and what we are not testing for. Establishing these parameters in advance is helpful not only to understand the success and failure of a pilot, both of which should be embraced warmly for the significant learning they come with but also to manage expectations.

- We do not expect pilots to answer *all* the questions. For instance, we can probably find out how ready clients are for a digital solution at the grassroots, what problems we can potentially face in scaling up, and if it is actually scalable on the ground.

However, questions about cost-benefit analysis would not be appropriate at the piloting stage for reasons like a short-term increase in costs due to parallel systems running, the organisation carrying end-user fees, or acquiring new technology in the pilot stage.

- We talk about our piloting experience—critically, at length, and at all levels starting from the leadership to the frontline. Pilots offer insights about necessary policy and system changes. Some pilots allow staff an in-depth understanding of the system which leads them to innovate solutions. Getting the best out of pilots is possible when concerns are shared and questions are asked. Maintaining an honest conversation helps to refine the idea so that they perform better at scale.

Mapping out activities

Our first step was to identify the pain points in cash payment and collection activities currently available. We asked ourselves: what problems do our clients face in cash payments? What problems do our staff face in cash collection and deposit? Does mobile money have the potential to solve the problems and mitigate risks associated with cash transactions?

We learned that the existing method of cash payment was time and resource consuming. For example, branch office accountants had to manually record information about cash transactions. They had to count the money, match it with the record, and check for torn and fake notes. Meanwhile, clients had to stand in the queue for deposits to be counted and receipts to be written out. Once daily transactions were completed, accountants rushed to deposit the cash within bank hours. Mobile money, in this case, simplifies the process by digitising the cash stream and saving clients' time.


Consulting the clients

In the next step, we talked to our clients—to understand their awareness of mobile money and how it can better serve them.

We asked them how convenient cash payment was for them. They shared that cash payments are time-consuming—it often involves a visit to the branch office which could very well take a rickshaw or a boat ride, then waiting in the queue to deposit the money took some more time, followed by another ride to get home. Then we asked them what they would do instead if they did not have to pay in cash anymore? For some, it meant not having to skip work and for some, not leaving their children in someone else's care. Our next question was if they would give mobile money a chance. They expressed scepticism—how would it work? What if they send their money elsewhere mistakenly? Why is there an additional fee? One by one, we addressed all their questions. We told them that mobile money works quite like a bank—if someone has an account, s/he can save, send, and receive money. That we will assist them through the process so that they can transact confidently. Also, the additional fee helps run the system and compared to hidden costs of cash, it is almost always cheaper. A demonstration and some practice payments later, clients started warming up to it.

Later on, when we digitised the school fee payment process, we still expected some level of resistance from the parents to go digital. However, we were in for a surprise. The parents felt positive about it—some took the opportunity to pay several months of tuition fees in advance while some preferred to pay it digitally rather than handing money over to their children.
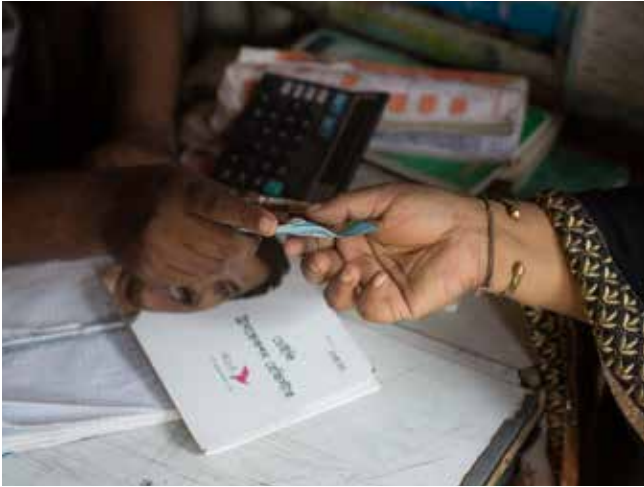
In both cases, we learnt what our clients were thinking. Information from this step helped us determine the next ones—how we prepare, train, and support them in the mobile money journey.

Generating enthusiasm among staff

While designing and before implementing any project, we find it imperative that the relevant staff are completely engaged in it. It can happen only when staff acknowledge and believe in the potential of the idea being introduced.

The Innovation Challenge served that very purpose. With the contest, BRAC Social Innovation Lab not only curated unique and pragmatic ideas, but also sparked a conversation about mobile money within

BRAC. Two ideas particularly helped staff to grasp the daily usage of mobile money: one was sending staff airtime through bKash. The idea came from a close observation—field staff from remote areas often had to visit distant marketplaces to recharge their phones. With mobile money, staff could save time and transportation costs. Another idea was implemented at the BRAC Head Office: digitising staff lunch payments. Ideas such as these demonstrated the practical uses of mobile money at a personal level, whereas, BRAC programmes were also deliberating on ways in which mobile money can better support their projects. The fun elements such as flash mobs and music videos about mobile money grabbed BRAC staff's attention too. Posters, hung at strategic locations around BRAC, served as constant reminders of the call for innovative mobile money ideas.

The Innovation Challenge served that very purpose. With the contest, BRAC Social Innovation Lab not only curated unique and pragmatic ideas, but also sparked a conversation about mobile money within BRAC.

Deliberation, along with fun-filled activities, helped in two ways: it generated enthusiasm among staff and helped identify their concerns regarding operationalising mobile money projects. For example, at IDP, there was initially some scepticism about digitising a remote branch—that in-person visits often

fail to collect cash, would it not be worse if the cash collection turns digital? Moreover, field staff at *Saddam Bazar* themselves were not comfortable transacting in digital money by then. IDP leadership and mid-level managers duly addressed these concerns: the journey will be difficult and full of setbacks, but it will be a right step toward financially including women. IDP staff were eventually moved by the opportunity to pioneer mobile money at BRAC, to help drive the digital financial inclusion of women and the potential it holds for the future.

They saw their benefits too: Conducting business-as-usual in such a remote area was time and resource-consuming. They had to spend a significant time in transit—collecting cash from clients and depositing it within the bank hours—that too in an area where life is dictated by the tide-tables. Counting cash correctly was another issue. Mobile money, implemented correctly, could make all these time-consuming tasks easier.

Designing training for the staff

Once BRAC staff embraced the idea, it was their turn to present mobile money and its uses to millions of BRAC clients spread across Bangladesh. To that end, BRAC ensured rigorous training for its staff. These trainings were conducted by programme leadership and mid-level managers as well as trainers from bKash.

Training took different forms across the programmes. One thing was common: rather than relying on agents and technical support resources of the MFS provider, we wanted our staff to provide both technical and customer support as and when clients required.

Frontline staff were taught about the basics of mobile money—how it works, scopes of usage, financial inclusion and consumer protection aspects of it. Initially, clients had to visit bKash agents to open mobile money accounts. Later on, BRAC staff were trained to open accounts for clients, facilitate the change of PINs, and teach clients how to perform transactions safely.

BRAC has about 2100/700 ☐ CSAs who have so far opened 254,082 accounts. The task is anything but easy.

Sirajum Monira, a CSA in Rajshahi, tells us about her daily tasks: collecting and compiling client's data in English, uploading their National Identity (NID) cards and colour photographs, and filling out the forms correctly. She says, "I can't afford to make mistakes in the forms. People get called back if there is any mismatch. So, I start early to keep a cool head."

CSAs also help clients with account security issues. Despite being preventable, one of the pain points remains clients losing money to scammers after disclosing their PINs over the phone. Munira believes this is one of the reasons why clients lose interest in mobile money.

Some customer-facing roles were also created to expedite the account opening services. In 2016, BRAC created the role of Customer Service Assistants (CSAs) across its Microfinance, IDP and Education programmes to provide clients with account opening and troubleshooting services. CSAs and Project Staffs were trained to collect NID cards and colour photographs, and to complete the paper-based Know-Your-Customer (KYC) forms on behalf of the clients. With trained staff filling up the forms, mistakes in KYC forms were reduced significantly, resulting in a faster registration process. Once wallets were approved, the CSAs worked with clients to finalise account opening, including PIN set-up. Before the introduction of CSAs, mobile money agents would often set up PINs instead of teaching women how to do it themselves, discouraging independent usage and compromising security. CSAs, on the other hand, were skilled at helping clients create PINs that they can easily remember. They were also briefing clients about safe digital transactions—not to share their PINs with anyone under any circumstances. After developing the CSA app to troubleshoot problematic issues for clients, the process became even smoother.

Field officers often improvised to help women remember important numbers. For example: some women struggled to remember the bKash Unstructured Supplementary Service Data (USSD) code, *247#. Field officers reminded the clients that there are 24 hours a day and 7 days a week, and one might reach the star (*) if they use a really tall ladder (#)!

Observing the clients closely also helped field officers to craft new tricks and tips. When women reported forgetting their phone numbers, field officers observed they could actually easily remember the prices of a chicken, a goat, or a saree. Then they narrated a story with the rest of the digits:

"Imagine 42 days ago, you bought a saree worth 356 taka and a goat worth 899 taka. With the first three digits, what does that make? XXX42356899! That's your phone number."

For those who cannot read, field officers often used mnemonic—remembering an idea with a pattern of letter—to help navigate the bKash menu. They made up a word with the first letters of the services offered and that helped women remember the sequence of the services offered. Quite like the formula we use to remember the order of operations for math—PEMDAS for Parentheses, Exponents, Multiply, Divide, Add, and Subtract.

Preparing clients for the digital transition

It was time to take the leap! We expected a fair amount of scepticism from our clients but the latent demand for mobile money is what surprised us. Our clients were hesitant but not dismissive of DFS usage. Once we demonstrated how mobile money could be used to make lives easier, they quickly caught up. We talked to mothers who regularly visited schools to pay their children's tuition fees, sometimes leaving their non-school going children at their neighbour's. With mobile money, they did not have to leave children or spend time commuting. Instead, they could save on transportation costs by paying digitally. We spoke to borrowers living far from the nearest BRAC branch office. They no longer had to spend hundreds in transportation fees to pay their loan instalments. For some,

saving their hard-earned money from male family members was a priority. We showed how they can save in their mobile money accounts without anyone knowing. Once they found uses of mobile money in their daily lives, they were interested to learn further.

We learnt some vital lessons at this stage. For people to warm up to a new idea, they need to see its relevance and value that it would add to their lives. Our clients may not know the "know-hows" of mobile money but only they know how best it can help them. Our work was to listen to them and understand their needs and concerns. Only then could we demonstrate the ways in which mobile money could ease their lives.

Training clients how to use mobile money

The next step was to design a training session that works for everyone. With clients from all literacy levels with varying aptitudes for technology, designing a training session that works for everyone seemed challenging. Two things helped us: constant communication with clients as to what's working for them and what's not, and then following through with their feedback. Here are the steps we followed:

a. Finding out what's (not) working out:

Initially, BRAC clients used to receive a one-off training on mobile money when BRAC officials paid them a visit. No additional support was available. This style of training failed to generate long-lasting results and BRAC soon realised that only a rigorous training and robust support system can help women become active DFS users. Based on this, IDP developed a five-day training module. Divided into 45-minutes sessions, this training was always delivered in the local dialect with locally contextualised stories. Women learnt about basics of mobile money, costs of cash, mobile money services, and consumer protection during these sessions.

b. Using a mix of pedagogical tools:

In training women from varying literacy levels, we found that using a wide range of pedagogical tools was particularly helpful. It started from scratch—women with no literacy were taught letters and numbers with the help of chalk and slate. Those who never operated a phone before were handed feature phones to familiarise themselves with button functions. Learning was gamified too—women were asked to send each other a token amount of money through bKash and the first successful payee would be called "bKash *apa*." This really helped tackle technophobia and instil a sense of confidence in women. We then tagged the fastest learners with 2/3 other peers to assist their learning process. In this way, bKash *apas* were helping other women even beyond the training sessions!

c. Introducing visual content:

BRAC programmes provided a range of visual contents to aid women's learning process—posters, process cards, flip charts, stickers, comic strips, and leaflets. BRAC Microfinance team, for example, introduced a process card that shows how to use bKash step-by-step. It also detailed the payment instructions along with the relevant branch office wallet number. On the back of the card, clients could keep track of their savings too. BRAC Education Programme came up with a student card—a guiding piece provided to all the parents to follow during digital transactions—that contains student information, merchant ID, process and guidelines on transactions.

Day	Content [↗]
Day 1	• The story starts with a fictional character called *Marjahan* who used mobile money to better her life • Narrates how *Marjahan* buys airtime, sends money, makes payment, and receives remittance with mobile money • Teaches the basics of mobile money
Day 2	• Explains how time, costs, and energy can be saved with mobile money • Teaches how to pay instalments through mobile money to avoid standing in long queues • Talks about consumer protection—why PIN code must be kept a secret and how mobile wallets can keep money safe
Day 3	• Explains how bKash accounts can be opened and the documentation required for it • Explains how bKash accounts can be activated within 72 hours of submitting the documents
Day 4	• Explains how to have a safe and reliable mobile money experience • Reminds to check with CSAs and PSs if any issue arises • Warns not to share their PIN codes with anyone
Day 5	• Introduces to bKash services • Displays how to pay tuition fees and loan instalments

BEP's student card detailing fee payment process
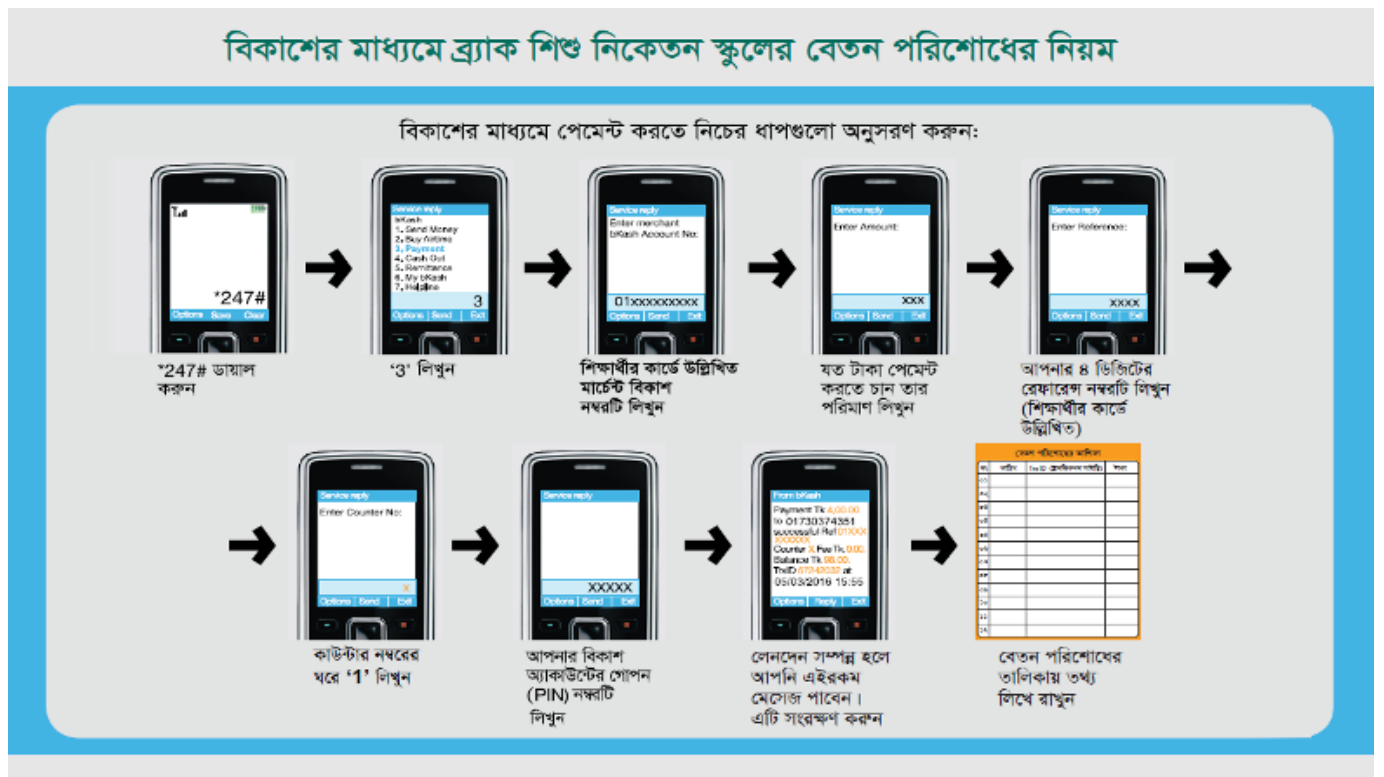
Making financial inclusion fun to learn: Is gamification the answer?

To make financial inclusion more exciting to learn, BRAC with KRAFTZ, a Bangladeshi game development company, partnered to make a board game about it. We wanted to develop a game that is entertaining and accessible for both adults and adolescents, one that combines behaviour change elements and motor function typologies. The game had to teach at least five things: paying, receiving, saving, investing, and protecting mobile money.

The game follows a narrative: four friends have saved a certain amount of money in a piggy bank together. They all have plans on what to do with the savings, but the money is not enough. So, they devise a game. They would compete in order to reach their goals first before the others. The die roll represents the friends being able to demonstrate their need and withdrawing from the fund or from amounts other friends have withdrawn but haven't found use for yet. We tested the game. Turns out, an increased level of difficulty and some risks and rewards, the game can deliver the lessons intended!

After a few tweaks, we tested the game in a secondary school. We found out that the children were picking up on the behavioural cues and were able to correctly answer basic questions about mobile money use. Not only did the students want to play on, but they also wanted to play it with their parents. However, some of the cash-in options were not suitable outside the urban areas, which we addressed later on and field-tested again. This time, we hosted small tournaments of a preliminary round, a semi-final, and a final to understand the differences in adoption between players who played the game once vs those who played twice vs those who played thrice vs those who had a turn facilitating the game. To our delight, preliminary results show high rates of adoption of our nudges and complex strategies developing by the third playthrough. While we wait for final results, we are planning ahead: we plan to distribute this game to secondary schools and want to hold a longer-term evaluation so we can refine this game to best deliver financial inclusion lessons!

Building a support ecosystem

Hands-on teaching was really helpful but it was still not enough. Many women were still nervous about technology, and the fear of losing hard-earned money sat deep in them. They felt more comfortable learning from their family members and peers, rather than strangers in the market. Hence, building a strong support ecosystem around DFS usage became necessary—one that provides not only technical support but also boosts women's confidence in performing mobile transactions.

a. Creating a local support network:

Women were still facing problems with opening accounts, sending money, and were getting locked out of their mobile money accounts. Traditional customer care would not work in this case—calls can be expensive and complicated. Not everyone could explain the problems they were facing over the phone, let alone provide NID numbers and transaction history. Introducing CSAs created a strong base of support, in addition to already existing teachers, health workers, and field officers.

CSAs were trained to provide expert help whereas teachers and health workers served as trusted community figures whom women could reach out to almost any time.

b. Boosting the existing proxy ⬈ networks:

A fear of technology and a lack of self-confidence made many women rely on their proxy network, made up of people they know and trust—husband, children, neighbour, and even local agents. A common scenario is women going to local agents to perform Over-The-Counter (OTC) transactions. Another is students using their parents' mobile money accounts to pay their tuition fees. Although help is readily available and mistakes may not be frequent, the fear of security risks like scams, phishing, and unauthorised charges run deep in these networks. To make these networks safer, BRAC tapped into clients' immediate support networks. Group meetings now often include clients' partners and school-going children so that they can support each other better. Field officers also reported explaining how mobile money works to adolescents when they pay clients a visit.

Even with comprehensive training, our clients struggled with opening accounts and seeking customer care. They still had to visit local markets for mobile money services and markets can be intimidating—chaotic and full of strangers. It involved hours of commuting and conversing with a bKash agent, who would probably stand too close to her, making her feel uncomfortable. They did not have time to teach how to send money to a new DFS user. In addition to expediting the registration process, CSAs also helped circumvent this crowd. With women able to open bKash accounts in the nearest BRAC branch office, the commute was shorter and interactions comfortable. Women no longer had to queue for hours. BRAC staff were available at short notice to introduce mobile money, even ready to visit a client's backyard for further assistance.
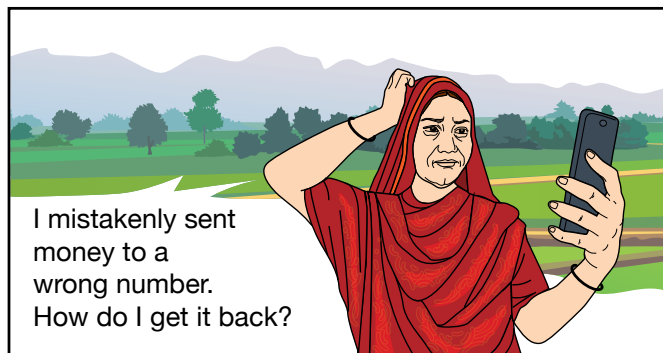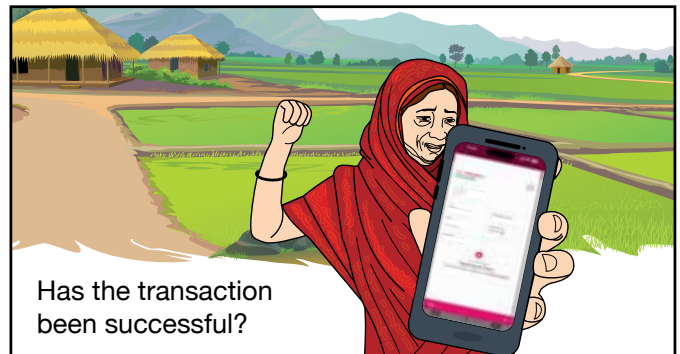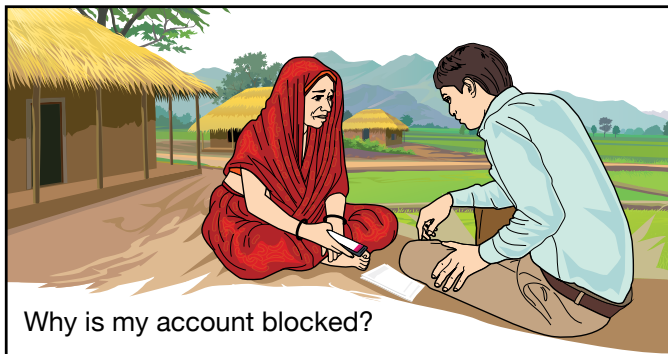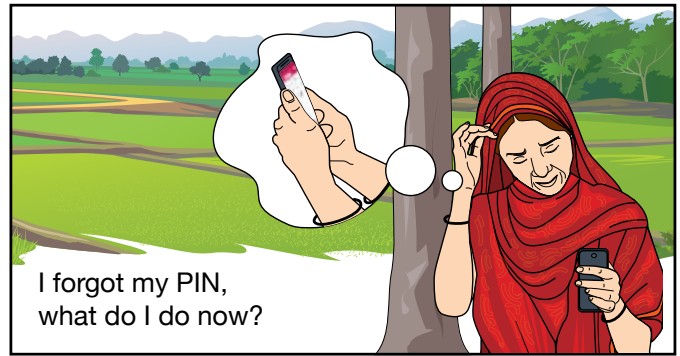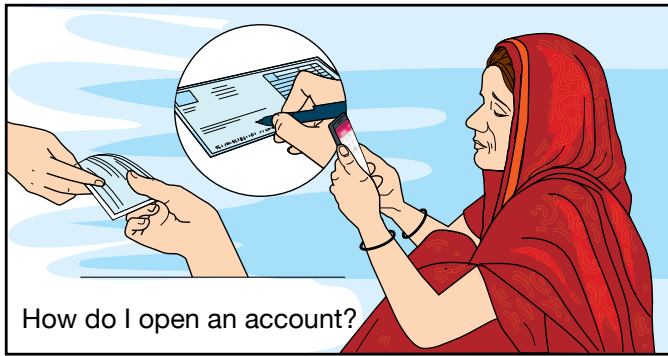
Decisions to make

Will DFS usage be voluntary or mandatory?

In the entire process, deciding whether DFS usage will be voluntary or mandatory was an important decision. There are limitations and benefits on both sides. Making DFS usage mandatory helps drive up adoption and enhance operational efficiency, whereas requiring people to use DFS comes with its own ethical concerns, especially when there are costs associated. A case in point remains our 2012 Microfinance pilot where we saw a 100 percent uptake rate when DFS usage was made mandatory. However, it was possible only because clients bore no additional costs for it—bKash waived all fees and provided free SIM cards.

It might not always be doable. Whenever it wasn't, we found keeping the payment option flexible more comforting for clients. Another option is to gradually transition out of cash. Once our clients saw mobile money was more convenient than cash, they eventually adopted it. For example, our secondary school fee payment started on a voluntary basis, but participation among phone-using parents now stands at 100 percent.

Who pays the additional costs?

It is a question that needs to be addressed on a case-by-case basis while implementing mobile money projects.

People perceive cash to be free (which it is not), hence, a cash-out or transaction fee makes them hesitant about using mobile money. Depending on the sizes, frequencies, and limits of transactions and the distance of the branch office, the acceptable "costs" to clients vary from project to project.

From what we saw, if the deposits were small and clients had to make a trip to the branch office which costs them time and money, they preferred to pay through bKash, despite an additional fee. Given the transaction fee was much smaller than what would cost them in transportation and in time, they were happy to pay digitally. It stands true for our *Dabi*[8] clients, whose monthly instalments are relatively small and who often cannot make it to in-person meetings where loans are collected. However, same cannot be said for

our *Progoti*[9] clients, whose monthly instalments are over the bKash cash-in limit and who stand to pay a bigger transaction fee.

At the organisational level, there were important questions to ask about fee structures: can we afford to carry all fees on behalf of our clients? Is it sustainable? Will paying the usage fees for a limited time period increase uptake or will it discourage them once we stop subsidising?

Answers vary from case to case. At BRAC, mobile allowances are sent through bKash and since buying airtime through bKash is free, neither BRAC nor staff incurs any cost. However, when it comes to salary disbursement, costs associated are much higher. Again, there are exceptions—organisations are willing to incur some costs when the prospects of generating revenues are high. In our recent donation campaigns, we widely accept mobile money as it enables us to reach people who would not be able to contribute otherwise. Even after paying the collection fee, the potential for generating more funds makes it worthwhile!

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[8] Dabi: Microloan package ranging from USD 100-1,000, given exclusively to individual women who are served by the village organisations.
[9] Progoti: Microenterprise loans ranging from USD 1,000-10,000 given to entrepreneurs of both genders to support and help expand existing small enterprises which are too small to qualify for credit from mainstream banks.

Piloting checklist

Listed below are questions we have considered while piloting mobile money projects at BRAC. The lists are neither exhaustive nor applicable to all the organisations and their clients. However, in all our mobile money projects, these questions have guided us in the right path.

Piloting

Organisational Needs: Can mobile money optimise and secure financial transactions in my organisation?

What are my organisation's pain points with cash transactions?

- Different cash streams

- Inconvenience of collecting and distributing cash

- Time and resource consuming

- Excessive human intervention

- Security risks of transporting cash

- Fraud/corruption

- Record-keeping

- Added costs from third-parties

Client Needs: Does mobile money help my clients? Are they ready to adopt it?

Who are my clients?

- What percentage use mobile phones?

- What percentage are already using mobile money?

- What percentage use other financial services? What are those?

- How frequently do they transact via formal and non-formal financial institutes?

- Do they receive regular stipends and assistance?

What are my clients' pain points with cash transactions?

- Time and resource consuming

- High degrees of in-person involvement

- Security risks

- Financial stability

- Need control over their finances

- Added costs from third parties

Logistical and Financial Concerns: What external factors might impact my project's success?

- What are the regulatory barriers?

- What are the documentation requirements?

- Who pays the transaction fees? Can it be reduced/eliminated?

- Do clients have documents required to open mobile wallets?

- Does the MFS provider have adequate agents in the project area?

What strengths are we looking for in an MFS provider?

- Similar mission and vision

- A strong agent network

- Low transaction costs

- Geographical coverage

- Strong customer care

- Reliable network

Towards scaling: Lessons learned

Lessons	Challenges	Solution
Better understanding of women's needs and concerns can generate organic and long-term DFS usage	• The misconception that women are neither good with finances nor technology • Seeking support from male strangers can be intimidating and is often met with condescension	• Finding avenues where mobile money penetration can better serve women and incorporating human-centred designs • Developing women-led registration and customer support models for mobile money services
Staff buy-in is as essential as training, together they can make or break a mission	• Scepticism, paired with the uncertainties of introducing a new idea, can be daunting	• Building a movement: generating enthusiasm and understanding about mobile money among staff
Training must cater to women from all levels and must be boosted with a strong support system	• Same learning approach does not work for everyone • Learning does not always translate in practice	• Using a wide range of pedagogical tools and hands on learning helps • Beyond training, all kinds of formal and informal support system should be strengthened
Identifying and addressing pain points in the piloting stage can smoothen the road to scale	• Organisational burden of collecting cash and maintaining manual records remain high in areas where mobile money cannot solve real problems	• Incentivising clients helps in early adoption of mobile money, but it must be contextualised • Developing centralised web systems to monitor transactions and resolve financial errors centrally
A multifaceted approach is essential while reviewing cost structures	• "Acceptable" costs differ depending on client groups • Short- and long-term effects of incurring costs varies from project to project	• Keeping payment options available can be comforting while clients reason with additional costs • Costs can be incurred if there's a potential for long term positive changes

Scaling checklist

Below are some questions we asked ourselves at the scaling stage.

Client preparedness:

- Have clients benefitted from mobile money?

- What are the common obstacles they face?

- Who are likely to be the early adopters?

- How to sustain and drive up the uptake rate?

- How to develop client capacity better?

- How to identify and address problems that clients encounter?

Organisational preparedness:

- What are the possible policy barriers (organisational/national)?

- Do all or majority of the programmes benefit from the digital transition?

- Does the leadership have a clear vision for scaling?

- Do the staff believe in the potential of mobile money? Do they use it themselves?

- Do the staff have enough incentives to achieve ambitious results?

- Are the staff adequately trained?

- Do we have a culture that encourages ideas and feedback?

- How do we plan to manage internal changes?

- Have we developed a clear distribution of roles and responsibilities?

Technological preparedness:

- Is it technologically possible?

- Can the manual system be automated?

- Does our data management toolkit need upgrading?

- Are required equipment and technology available?

- Do we have adequate internal and external resources to maintain the technological solution?

- Does the cost of technology make sense for scaling?

- What is the backup plan?

Financial preparedness:

- Do we have sufficient funds?

- What are the priority areas of scale?

- Can the costs and resources be shared? How so?

Partner preparedness:

- Does scaling benefit our partner(s)?

- Can transaction costs be reduced/ eliminated at scale?

- Who can we possibly collaborate with?

- Is there scope to co-design solutions?

- Can there be a new incentive or support system for agents?

- What national policies are in favour/against?

Learning management:

- What mechanisms do we use to capture and iterate learning?

- Do we have enough space to quickly absorb changes?

- What is our preferred knowledge sharing mechanism?

- What are the qualitative and quantitative indicators that will capture results?

Challenges faced

Once we started scaling, fresh challenges started surfacing. Some we expected at this stage, but some were unforeseen.

Challenge	Lesson	Solution
Field staff struggled to communicate the relevance and futuristic appeal of mobile money to potential clients effectively.	Complex messages get misinterpreted easily, even lost, while moving down the management line.	Communication materials were made simple, consistent, and easily relatable in the context of targeted locality.
With expert CSAs becoming programme organisers, new recruits took the KYC rejection rate as high as 28 percent (July, 2017).	Scopes of vacuuming down the management line should be assessed and filled regularly. Training the new recruits with full rigour is equally important.	Training sessions and refreshers were held, and follow-up calls were made to prepare the new CSAs quickly and bring down the rejection rate.
CSAs prioritised fulfilling the target of account opening rates over keeping the old ones active.	Incentivising structure must accommodate all core priorities.	The incentive structure is being remodelled to ensure keeping accounts active becomes a priority.
Opening mobile wallets was not "free" in reality, as it includes costs of a colour photograph and a photocopy of NID cards—often burdensome for people living in poverty.	Introducing Electronic Know Your Customer (e-KYC) can eliminate the need for physical documents.	With the introduction of e-KYC, the cost has come down to nearly zero.
The absence of a strong DFS ecosystem means clients are often reduced to using it only for payment at BRAC, which discourages people from adopting mobile money in remote areas.	The absence of a strong DFS ecosystem limits mobile money usage no matter how adept users are.	With the DFS ecosystem growing in Bangladesh, we are hopeful for this particular scene to change BRAC and bKash are also exploring more options on how mobile money could be integrated into our clients' lives.

Introducing additional technology

From our piloting and scaling experience, we practically observed how DFS tools, paired with additional technology, can unlock a multitude of benefits. Sometimes, successful integration of mobile money itself requires additional technology (e.g.: accounts software, mobile payment platform, SMS portal etc.), and at other times doing so simply enhances operational efficiency. Also, onboarding new technology does not have to be expensive. Below are five lessons that we have learnt from our operations:

01 Benefits of mobile money go beyond client use cases

While mobile money has an array of benefits in daily lives for clients, in terms of operations, it is merely a tool that simplifies and refines financial transactions. However, an interesting by-product generates from the very interaction between digital information systems and mobile money: *data*. For example: we started to input CHW activities digitally so that the system can calculate and pay their incentives automatically. Once their performance data became available digitally, the system turned out to be more accountable and transparent.

02 Additional tools can maximise such benefits

Once manual operations have been digitised and new data sources have been identified, capturing the benefits of the new data might require technological solutions. For instance: when BRAC schools transitioned from cash to digital money, the school administrators could access the data from wherever they were, creating an easier way to detect financial flaws and irregularities. For this, BRAC had to provide a laptop and a spreadsheet software without which operations around mobile money would still be manual for them. Another example is adding a kiosk for support staff to buy their lunch tokens from at BRAC Head Office. Interestingly the kiosk was designed by BRAC Technology division when ideated by a BRAC employee and built from scratch at a much affordable rate than retail markets.

03 Technology can aid the capacity development process

External technology can build capacity of clients and staff alike, which we utilised at BRAC. When we introduced CSAs as mobile money agents, we found them struggling to address the problems clients regularly faced. To help them better, we developed an android app with step-by-step instructions in Bangla that detailed the issues clients commonly faced.

04 Boosting relevant infrastructure can break barriers

Often unexpected barriers hinder the existing technology to operate at full capacity, which we can circumvent by boosting the infrastructure around it. When we introduced IDP's very first cashless branch at Saddam Bazar, *Hatiya*, electricity coverage was scarce which meant mobile phones regularly ran out of batteries leaving clients unable to use mobile money. BRAC addressed this by building charging stations for people in that locality.

05 Technology can slow down operations

Adding technology might help with achieving project goals, however, it can often slow down the process. If, for example, a software needs to be developed from scratch, it can add to staff workload and slow down the launch of a project. At BRAC, we almost missed the launching timeline of digital lunch tokens simply because the software had to be developed from scratch and linked to the staff portal. However, looking back at how successfully it has been running, taking an additional day or two would have been completely worthwhile. Organisations embarking on the mobile money journey will most likely have to make such a decision—whether the delay is worthwhile will vary from case to case.

Building a CSA app

The motivation behind building the CSA app was to help CSAs provide clients with necessary services such as: account opening and unblocking, changing PINs, verifying NID numbers, updating information, and accessing transaction history. While building the app, we prioritised two things: user friendliness and simple interface. We onboarded two partners: the app developer, mPower and the MFS provider, bKash.

The process was far more complicated than just developing an android application. The reason: providing these services—which usually are done by bKash agents—required a full access to bKash systems which CSAs did not have. This required the app developer to work meticulously on the back end. However, the work on the front was equally important. We reminded our partners: not all our CSAs are tech-savvy, although you might be deceived seeing their prowess!

The app served us well. What optimised it further is the introduction of e-KYC in the registration process. In addition to rectifying errors, it could take photos and embed them in the account opening application, as is required in the e-KYC process. With paper-based KYC, the app would have failed to deliver its best. However, there were some glitches—it timed out while viewing transaction histories and did not work offline. After redesigning, the app worked both online and offline. It also has a feature to save filled-out forms so that CSAs can attend urgent requests first and then work on the forms when they are relatively free. If clients have any emergency requests, CSAs can submit it online to receive answers within half an hour.

>> Introducing the CSA app has enabled us to provide clients with faster services, while simultaneously supporting our staff with minimal human involvement.
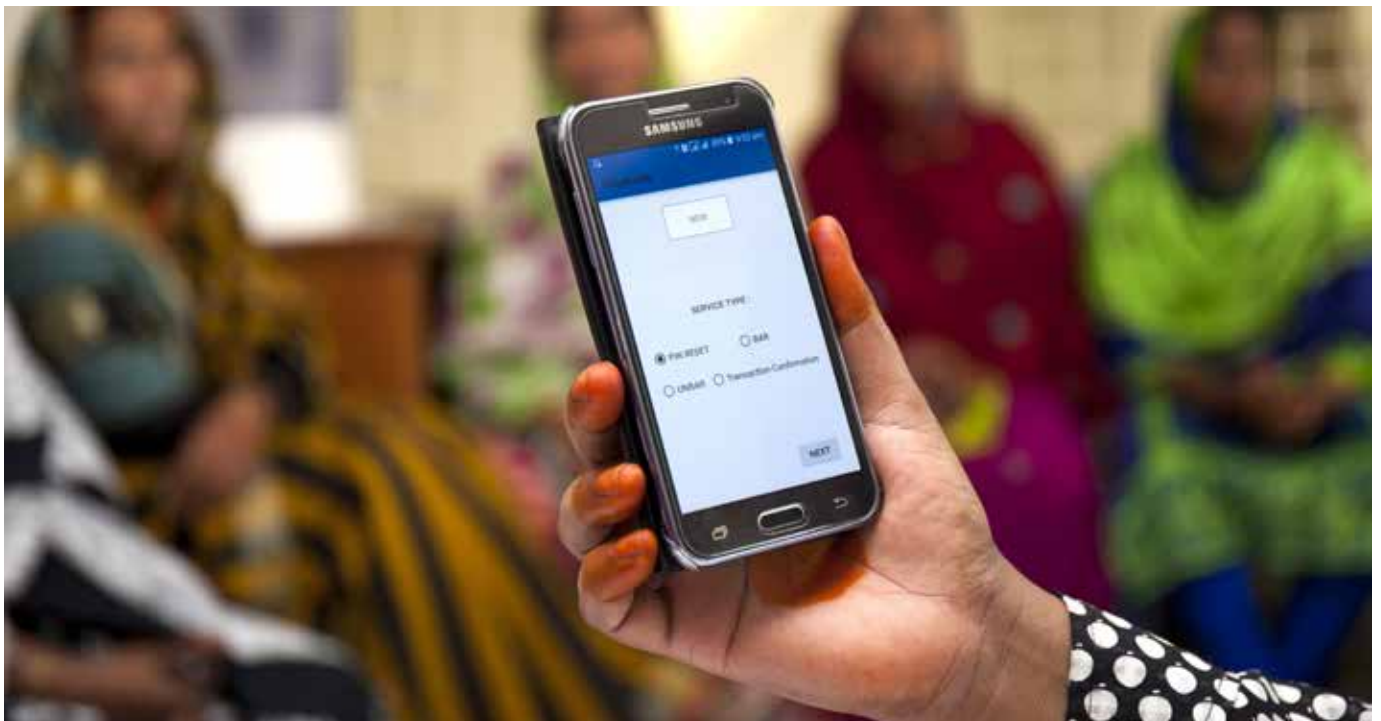
Creating reference numbers

In the digital payment system, the tiniest of details matter a lot. Unique reference number is one such detail.

In BRAC Microfinance programme, loan and savings instalments are identified with clients' account numbers. Once the payment is made, the data is updated accordingly.

BEP, on the other hand, experimented with reference numbers. Initially, the reference number for tuition fee was the registered phone number of a parent. This system had a high rate of identification errors due to typing mistakes and sending fees from a different number. Then the reference number was redesigned to combine corresponding branch number, student's roll number, and school name etc.

» In both the programmes, fees and instalments were initially sent to one central wallet which made the identification process cumbersome. After creating one wallet per branch, the identification errors reduced significantly. Even when errors occurred, it was relatively easier to track down the sender.

USSD over an app?

In introducing mobile money to the grassroots, we found USSD—a text message-based communication mechanism between clients and mobile payment platforms—more advantageous than smartphone applications.

Reasons are multifold: Parts of Bangladesh still suffer from weak cellular coverage while mobile internet penetration rate across the country stands at 28 percent (GSMA, 2021) ⬈. Paired with low smartphone adoption rate (18.5 percent), high costs of internet, and inadequate digital literacy, app-based MFS appeals only to a small segment of the population.

» Our initial findings are in line with global experience. Globally, smartphone applications that connect users with MFS providers through the internet exclude most people living in poverty (CGAP, 2015) ⬈. Certainly, USSD is not without limitations: customer experience is not entirely smooth, and sessions can abruptly drop raising costs. Smartphone applications are not to be vilified either. With simple interfaces, they are certainly efficient and less prone to transaction errors. However, considering accessibility, security, costs, compatibility with handsets, and ease of deployment for the MFS provider, USSD remains one of the best available options to serve clients with low income.

SUCCESSES

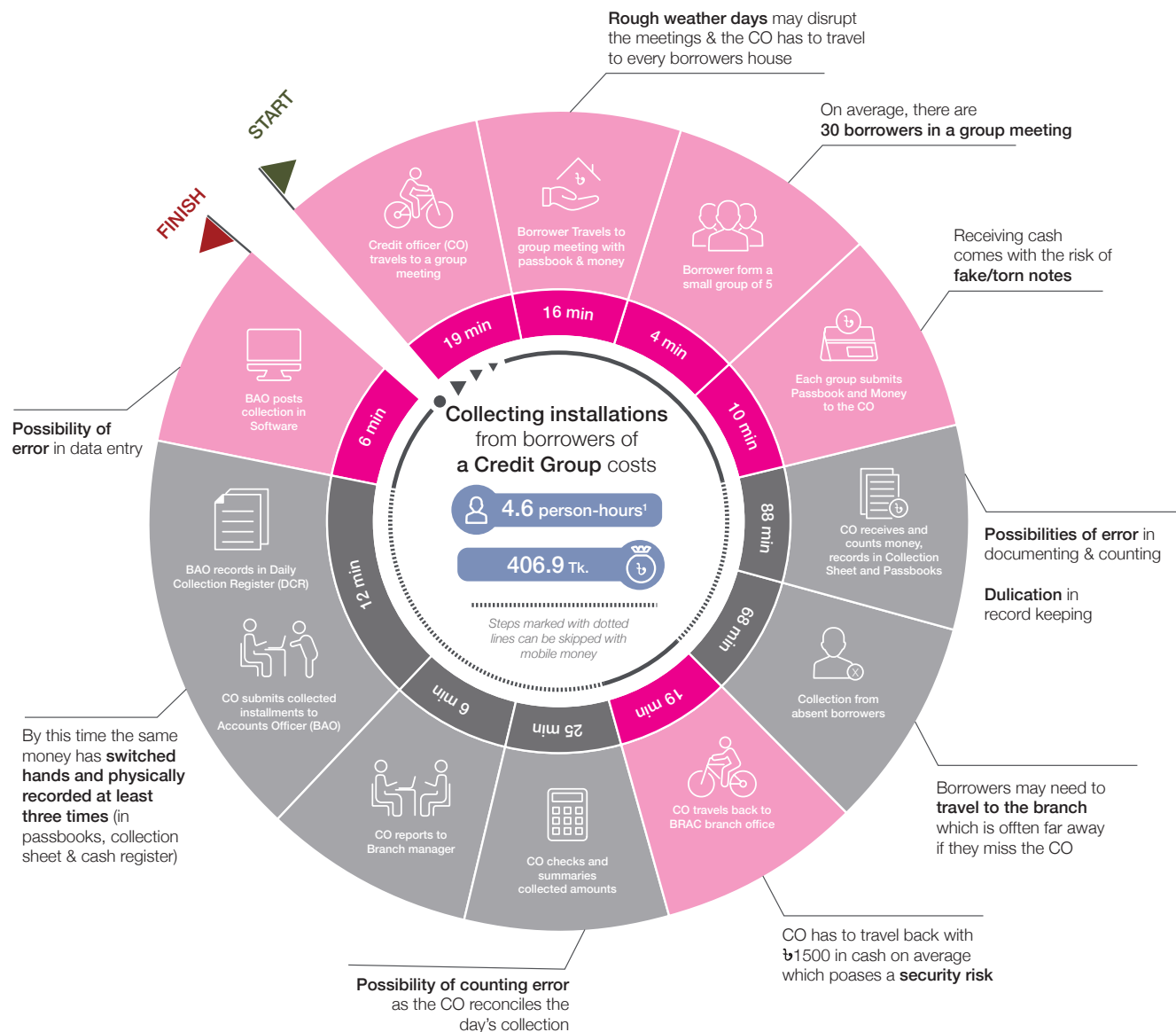# Operational efficiency across all BRAC programmes

Incorporating mobile money in payment streams has made our operations at the Head Office and fields more efficient and faster than before. With cash collection and payment moving online, costs have been reduced significantly, saving time for both staff and clients. At an organisational level, such cost efficiency means an added value to money which enables an organisation to reach more people with their services. The efficiency has been wide-ranging project-wise. At the Head Office, digitising the booking process of lunch tokens has cut human intervention to nearly zero, reducing the workload of the support staff. IDP staff and clients, working in hard-to-reach areas with weak infrastructure,

have benefitted significantly from a reduction in commute time and transportation costs. For example: collecting cash instalments from one credit group required 4.6 person-hours whereas mobile money successfully brought it down to 1.2 person-hours. As for BRAC Health, Nutrition, and Population programme (HNPP), an early pilot indicates that digitising the incentives paid to CHW and volunteers has brought down the payment time from 41 to 11 days. In the education front, teachers have been able to dedicate more hours to teaching once freed from the hassles of cash collection, counting, and documentation.

Improved connectivity in hard-to-reach areas

Connecting remote and hard-to-reach *char* (riverine islands) and *haor* (wetland basins) areas better has been one of mobile money's successes. Although in-person visits between clients and frontline staff are tremendously helpful and strongly recommended, payment visits had no substantial gain other than paying, receiving, counting, and documenting the instalments. Additionally, these visits meant hours of commute through broken roads and costly boat rides, often in adverse weather. Our clients could benefit from saving

this time and money, and mobile money did exactly that. The circulation of digital money in *char* and *haor* areas through bKash was also a bonus as it generated more business in the locality and boosted the local economy. Statistics say the same: the number of bKash agents increased from 383 to 2851 in 6 sub-districts—*Hatiya, Khaliajuri, Derai, Itna, Baniachong, Subarnachar*—from 2015 to 2019. Such progress points to a wider circulation of money in the local system.

Rough weather days may disrupt the meetings & the CO has to travel to every borrowers house

On average, there are **30 borrowers in a group meeting**

Receiving cash comes with the risk of **fake/torn notes**

START

FINISH

Collecting installations from borrowers of **a Credit Group** costs

4.6 person-hours[1]

406.9 Tk.

Steps marked with dotted lines can be skipped with mobile money

19 min — Credit officer (CO) travels to a group meeting

16 min — Borrower Travels to group meeting with passbook & money

4 min — Borrower form a small group of 5

10 min — Each group submits Passbook and Money to the CO

88 min — CO receives and counts money, records in Collection Sheet and Passbooks

88 min — Collection from absent borrowers

19 min — CO travels back to BRAC branch office

25 min — CO checks and summaries collected amounts

6 min — CO reports to Branch manager

12 min — CO submits collected installments to Accounts Officer (BAO)

BAO records in Daily Collection Register (DCR)

6 min — BAO posts collection in Software

Possibility of error in data entry

By this time the same money has **switched hands and physically recorded at least three times** (in passbooks, collection sheet & cash register)

Possibility of counting error as the CO reconciles the day's collection

CO has to travel back with ৳1500 in cash on average which poases a **security risk**

Borrowers may need to **travel to the branch** which is offten far away if they miss the CO

Dulication in record keeping

Possibilities of error in documenting & counting

Overall comparison

(for 1,27,975 group meetings held in one month)[2]

	Cash	VS	Mobile money	Difference
Person-hour	585 thousand		122 thousand	463 thousand
Cost[3]	521 lakh		111 lakh	410 lakh

Positive shift in financial behaviour

In the last ten years, we have witnessed a positive shift in our clients' financial behaviour. Low-income people, almost always, are innovative and efficient in the ways they spend and save money. They were able to unlock more benefits with the help of mobile money.

Women themselves reported a significant shift in the ways they save. For example, many who kept money in rice pots, in knots of their sarees and scarves, and in clay saving pots started depositing it in digital wallets. Tasked with household budgeting and financial transactions—paying rent, bills and fees, buying goods and services, and receiving remittances—women soon found ways to integrate mobile money in their daily lives.

Azmira Khatun, a BRAC client in *Rajshahi*, tells us how her life became easier with the bill payment option in bKash: "Earlier, we had to stand in long lines to pay the [electricity] bills.

Now I can just do it from home." We have met women micro-entrepreneurs who receive their payment and female students who pay their tutors via mobile money. When asked why, they shared feeling comfortable and a sense of security using it—that their transactions were private and the option of savings was also much appreciated.

It was evident that what mobile money offered went beyond convenience. It upheld women's agency and enhanced control over their finances. It came with safety and privacy, making them confident and independent. All these were key to bringing a positive shift in their behaviour.
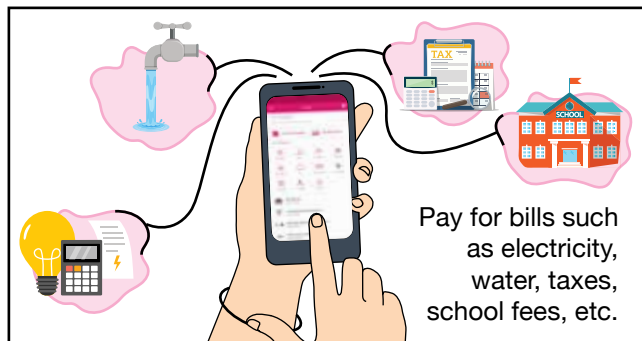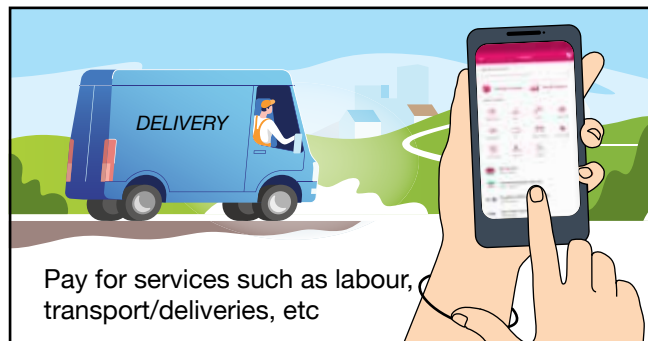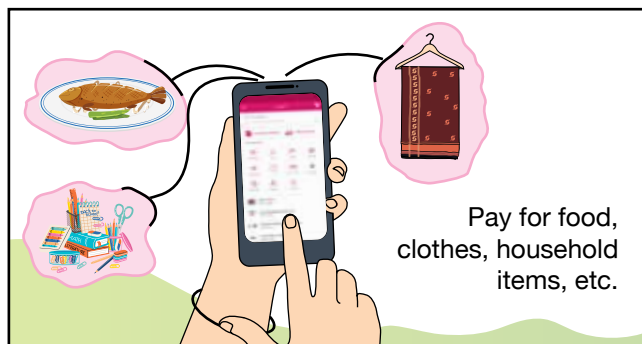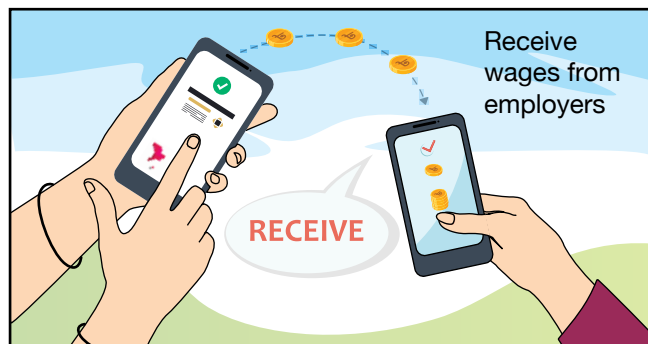
Improved financial inclusion

When we embarked on our mobile money journey, we expected some level of ripple effect. However, we did not anticipate the extent and form the collective impact has taken in reality.

Looking back, women have left powerful imprints in their communities while being accustomed to mobile money themselves. When a woman adopts mobile money, she introduces it to her immediate network—family, friends, and neighbours. They support each other in learning how to pay and receive digital money and relay

information about new financial products. They find ways to navigate the challenges of mobile money and share their strategies with others. All these efforts have eventually encouraged hundreds and thousands of peopl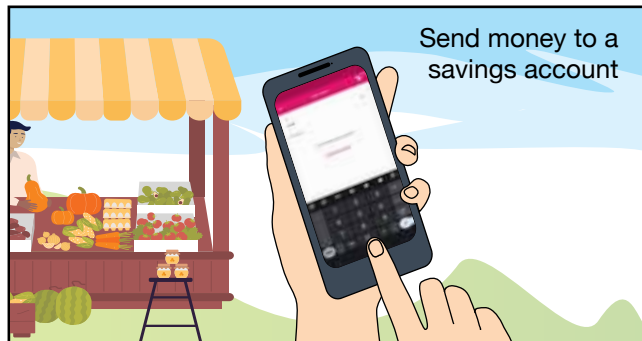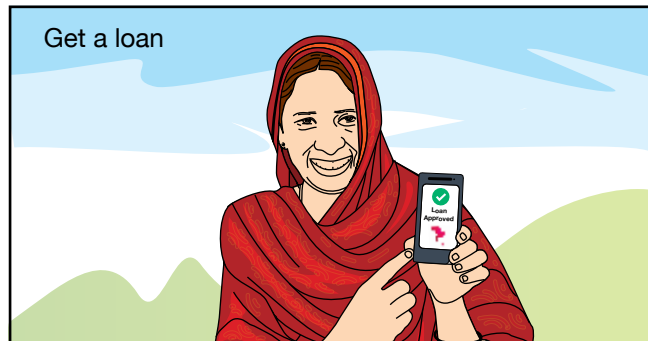e to adopt mobile money. Women have acted as local change-makers and drivers of economic growth, albeit unknowingly. Their collective effort has in turn generated economic opportunities by widening access to financial services. Now imagine women creating such waves in every district across the country—they are making the impossible, possible, every day.

Why do Bangladeshi women use mobile money?

Send money to a family or relatives

SEND MONEY

Receive cash assistance from government or development organisations

Get a loan

Send money to a savings account

Buy airtime

RECEIVE MONEY

Receive money from family and friends

Receive wages from employers

RECEIVE

Pay for food, clothes, household items, etc.

DELIVERY

Pay for services such as labour, transport/deliveries, etc

Pay for bills such as electricity, water, taxes, school fees, etc.

CHALLENGES

Multiplier effect of limited literacy

Using mobile money requires reading and numeracy skills, or basic literacy. A persistent lack of literacy among the most disadvantaged women has prevented them from using DFS independently and effectively. To put it in context, Bangladesh has an average literacy rate of 74.66 percent, while for women the rate is 72.82 percent. When it comes to people with low-income and the ones residing in remote and hard-to-reach areas—where a majority of our clients come from—the rates drop significantly lower.

However, the stakeholders working in the DFS ecosystem recognise the multiplier effect of limited literacy in women's usage of DFS. Limited literacy, paired with inadequate financial and digital knowledge, runs a vicious cycle of excluding women from financial activities. A significant portion of women we work with report not knowing how to use their phones and what services they can access through them what is also at play is

an inherent distrust towards unfamiliar digital services, especially when it involves finances. Many women do not feel confident using digital services and opt for cash instead. Challenges multiply with the limited level of financial literacy. Lack of knowledge about what financial services are available and suit their needs prevents our clients from making healthy financial decisions.

BRAC is working with clients to improve this situation. For instance: BRAC Microfinance's village organisation meetings have been conducting financial literacy training for decades. In mobile money training sessions as well, we provide basic numeracy skills along with some level of financial education. Our field staff, in their interaction with clients, also brief about the positive effect financial literacy can leave in their daily lives. With the Government of Bangladesh (GoB)'s focus on digitised finances, we hope more channels for financial and digital literacy training will open up.

Low phone and mobile wallet ownership among women

Tied strongly to low literacy levels is low phone and wallet ownership among women. Bangladesh, a mature mobile money market, still sees an alarming gap of 19 percentage points in phone ownership between men (84 percent) and women (65 percent). It remains the second highest gender gap among low- and middle-income countries (LMICs) - the average gap in phone ownership currently stands at 7 percentage points in these countries. At BRAC, ultra-poor clients have the lowest phone ownership. It is mainly a combination of social barriers and affordability issues that prevent women from owning mobile phones.

From our experience, we have seen that women who do not own phones are mostly the ones without mobile accounts. But they are also the ones who would significantly benefit from using mobile money. The gender gap is stubbornly present in wallet ownership too—women are behind by 52 percent. The combination eventually drives dependency—women with no mobile phones and mobile money accounts tend to be dependent on family members, relatives, and agents to use mobile financial services.

While the situation looks grim, it is improving. With COVID-19 shifting financial transactions online and ease in the registration process, there has been a hike in women opening mobile money accounts. The gender gap is shrinking but not at the pace we would like—from 2018 to 2021, mobile account ownership in women nearly doubled, rising from 11 to 20 percent. With DFS-friendly policies in place and constant work on social barriers, we hope the situation improves throughout the country.

Existing gender norms

Over the years, we have seen social norms bending and reshaping around DFS usage. Back in 2012 when Microfinance first introduced loan instalment payment via bKash or even in 2016 when IDP started the first cashless branch in *Hatiya*, the mobility and access of low-income women to financial services were largely curbed by gender norms. A woman visiting a local market to make a digital transaction where she's required to interact with an unfamiliar man was not welcome in many cases. Sometimes women reported male family members discouraging, if not prohibiting, them from using mobile money. According to these men, women neither understood financial matters nor technology—both are better left with men, especially when the chances of losing money were high. In early DFS adoption cases, we observed women limiting themselves from trying out new technology. The hesitancy was understandable—norms and barriers that we find difficult to navigate had shaped their lives for decades. What we knew already became even clearer to us: without changing gender norms, women's financial inclusion cannot be achieved, and such transformation needs decades of work.

Now, nearly a decade later, we find gender norms and barriers slowly shifting to accommodate women's DFS usage, not only in the projects within BRAC but also across the country. For instance, RMG workers—most of whom are women—now receive wages and make payments digitally. Not only is the number of women using mobile money increasing, but the number of female mobile money agents is also on the rise. The credit goes to none other than women themselves—for constantly challenging boundaries and dissolving them.

Dormant and dependent DFS usage

Dormant and dependent usage of mobile money is one of our current challenges. Although more women have mobile wallets now, financial inclusion goes beyond that and extends to active and independent usage of financial services and tools appropriate for individual needs. Active usage of mobile money among women has been limited for many reasons: lack of use cases, a fear of technology, lack of confidence, and limited literacy levels. In Bangladesh, a significant portion of women use mobile wallets to buy airtime and receive money, or simply to cash-out. A fear of technology, along with a lack of confidence in using digital services, contribute to passive usage. For instance: many of our clients ask their children to make payments for them or seek over-the-counter help from agents, even after learning how to perform a digital transaction. While we understand some might need more training than others, we encourage them to transact independently. Another way we try to reduce passivity is by presenting use cases. As more avenues of mobile money open up, we hope dormant usage comes down.

Active usage of mobile money among women has been limited for many reasons: lack of use cases, technophobia, lack of confidence, and limited literacy levels.

Limited awareness about consumer protection

With mobile money transactions spiking, security risks are on the rise. The increase in scams, phishing, swindling, unauthorised access and charges has concerned client groups and MFS providers alike. Our field staff shared some of the common cases of fraudulent activities. In many cases, agents were actively involved in defrauding the clients. Many fraudulent agents registered new accounts with generic PINs such as 0000 or 1234. Clients are also known to share PINs with agents while transacting or cashing out. Those agents then used these PINs to access the accounts and steal the money.

There is a booming industry of mobile money fraudsters as well. Scammers often target users with low digital safety awareness and make lucrative offers over phone calls which the user can access only after transferring a certain amount of money. There are other variations

of this as well: falsely informing people of a sickness or an accident in the family to ask for money.

We have been trying to counter these fraudulent activities with awareness messaging and constant sensitisation, along with the MFS provider bKash. Our training sessions include a module exclusively focused on consumer protection and digital safety, while field officers regularly share cases of fraud with clients to help them remain alert. Frontline staff like CSAs and CHWs also share how to practise digital safety. During the COVID-19 pandemic, we could see the collective impact of awareness campaigns and constant reminders — clients shared digital safety tips with each other in their communities. Such personal level communication made relatively fewer people to fall prey to this breach in protection.

Cost of mobile money

Cost is a critical barrier in the uptake of DFS. Although cash is not free and there are risks associated with it, people are generally hesitant to pay the additional costs mobile money comes with. There are layers of monetary and non-monetary costs. In terms of monetary ones, financial products come with a price as they need to be viable. Costs of delivering the products can be high. There are maintenance costs from the MFS provider's side. If costs associated with the digital financial product are high with limited or no subsidies available, pricing it down gets difficult. As for non-monetary costs, mobile money is certainly more efficient than cash payments. However, it is not free. Transactions may fail

due to liquidity constraints, network issues, and lack of cash. Especially, in remote areas with weak cellular coverage and insufficient client base, these problems can occur more commonly. As discussed before, there are security risks as well. The combination of monetary and non-monetary costs then rises enough to discourage clients from using mobile money. However, we recognize that there is no alternative to lowering costs when it comes to providing digital financial services for people with limited resources to avail financial services. We constantly work towards lowering the costs, but a viable solution would require collaboration from all stakeholders working in the DFS ecosystem.

DFS ecosystem in infancy

When BRAC started incorporating mobile money in its operation, the DFS ecosystem in Bangladesh was in its infancy. Even if we encouraged our clients to use mobile money beyond BRAC, options were scarcely available. That meant clients were reduced to using DFS only for payment purposes at BRAC, which alone did not incentivise them to switch to digital finances. Another problem was the lack of interoperability. Regulations around MFS were not mature enough and that translated into limited operability within different financial transaction systems, if at all. A rigid and premature DFS ecosystem slowed down our efforts to drive DFS usage in the initial days.

However, we are happy to report that this particular scene has changed drastically, especially during the pandemic. Thanks to supportive policies at play, MFS interoperability is gradually improving in turn strengthening the DFS ecosystem in Bangladesh.

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Barriers to having a mobile money account in Bangladesh, GSMA (2022)

| Relevance	
Preference for cash	32 percent
Alternatives to transfer money	28 percent
Friend/Family has MM account I can use	31 percent
Use OTC	30 percent
Lack of Money	25 percent
Knowledge and skills	
Do not know how to use mobile money	34 percent
Difficulties using a handset/might make errors	31 percent
Literacy	27 percent
Affordability	
Affordability	19 percent
Access/enablers	
Unreliable network	21 percent
Lack of access to agents	18 percent
Lack of access to electricity	18 percent
Lack of necessary documentation	20 percent
Safety/security	
Safety and trust	27 percent
Do not trust agents	20 percent
Other	
Mobile money agents do not have cash	19 percent
Family does not approve	13 percent
Other	18 percent
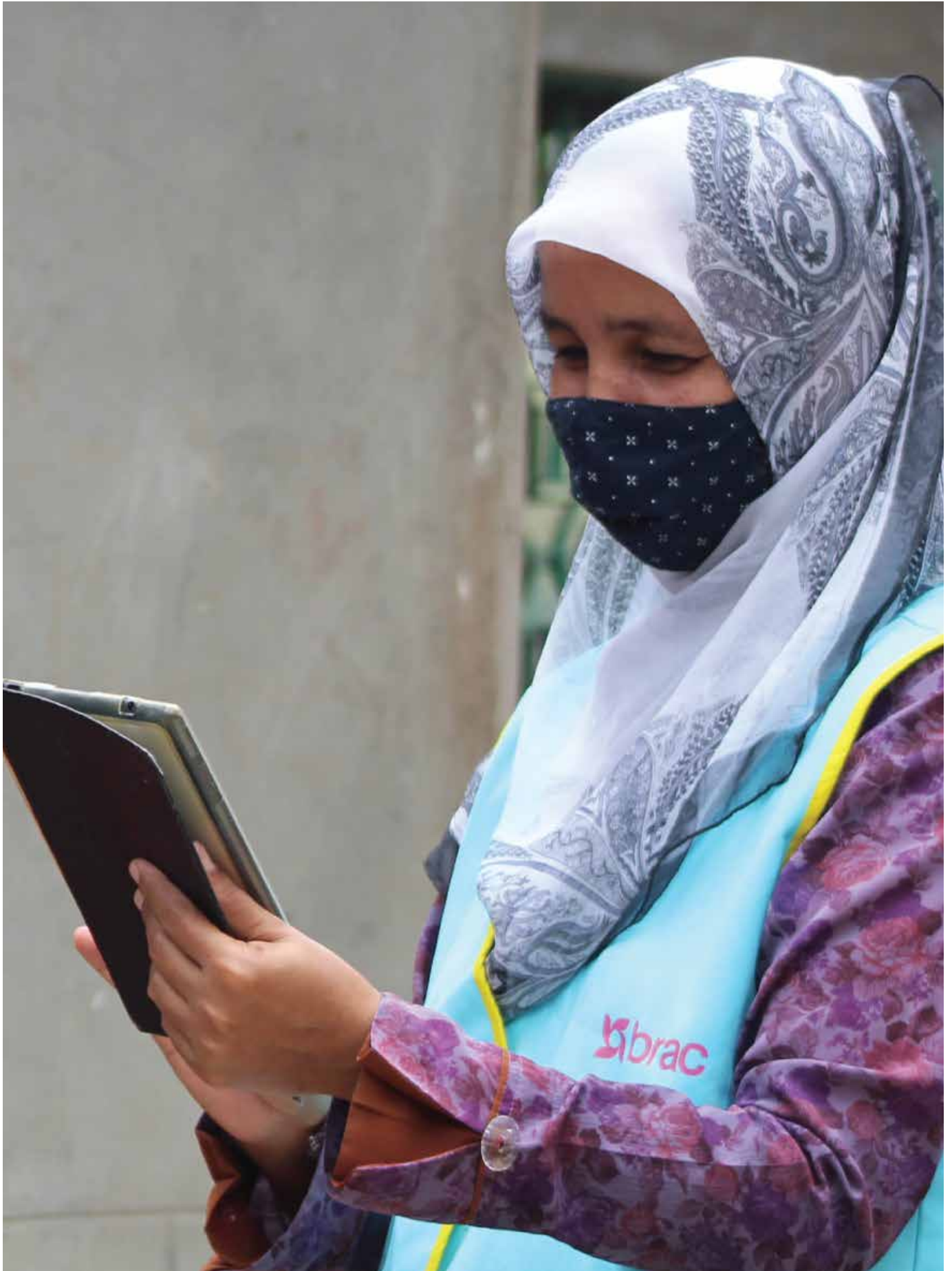
DFS DURING THE COVID-19 PANDEMIC

Covid-19 pandemic started as a public health crisis, before it metamorphosed into a humanitarian one.

Especially in Bangladesh, where 9 out of 10 jobs are in the informal economy, it did not take time for hundreds of thousands of people living on the edge of poverty to get pushed below the poverty line.

With the unique nature of this crisis, the preferred way of delivering social assistance shifted from in-person to digital. Among our programmes, clients of Ultra-Poor Graduation (UPG) programme opened 46 percent of the wallets, IDP clients 34 percent, Bangladesh Society for the Change and Advocacy Nexus (B-Scan) clients 31 percent, and Microfinance clients 29 percent.

Delivering social assistance In-person to Digital.

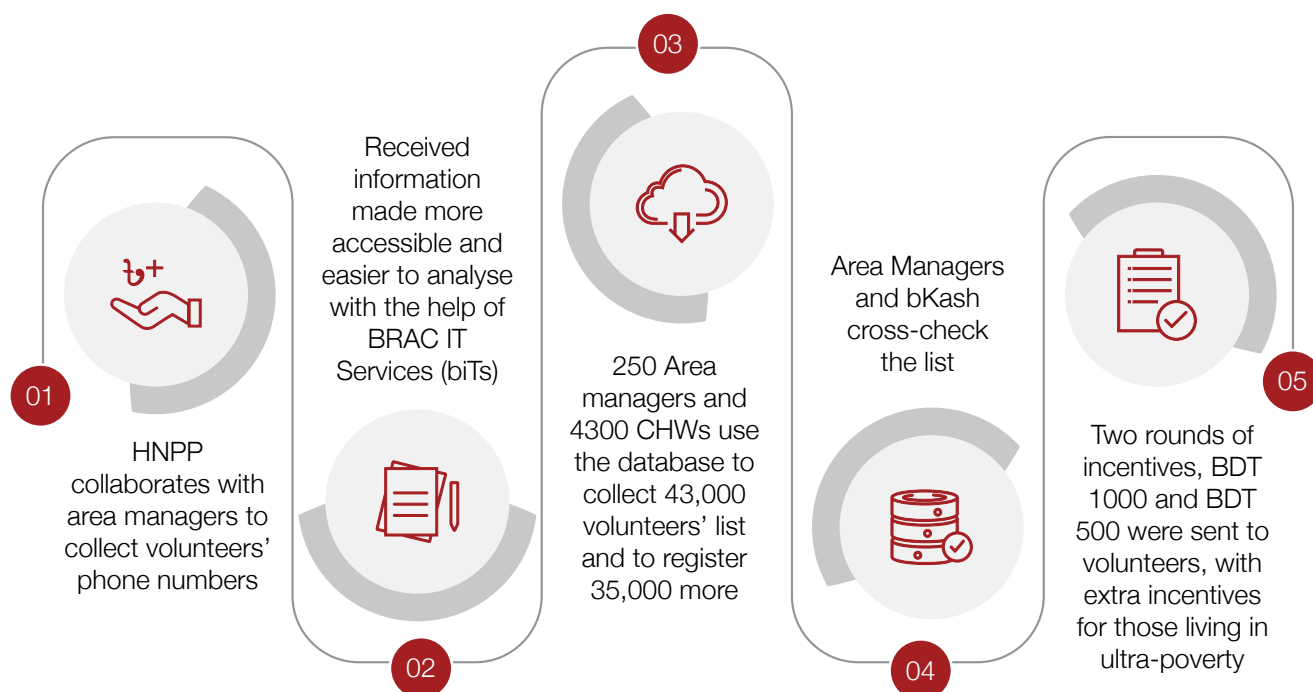| UPG	IDP	B-Scan	Microfinance
46%	34%	31%	29%
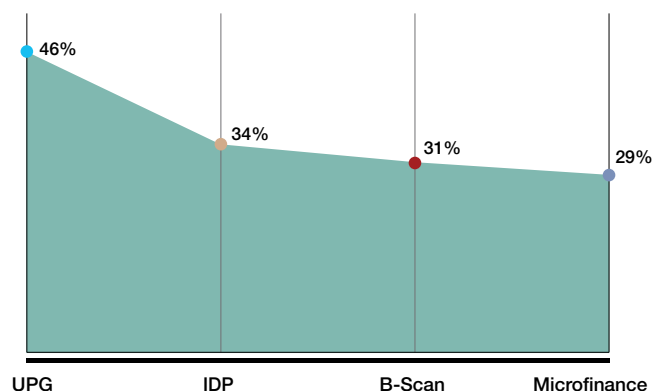
Digitising health worker incentives

Community Health Workers (CHWs) and volunteers act as trusted sources for health-related information, pregnancy care, over-the-counter medicines, and health referrals for individuals at any locality, who otherwise may not have access to healthcare services. They provide door-to-door services to women and receive a performance-based incentive. With the Covid-19 pandemic, CHWs temporarily lost their income before they could start raising awareness, teaching families about hygiene practices, and helping the government identify the virus—as guided by the HNPP.

The impact on income was particularly hard, as most CHWs depended on small incentives they received from BRAC. To keep afloat, they not only needed their usual earnings, but also emergency cash assistance.In response, HNPP digitised their payment system to send incentives and two rounds of emergency cash support via mobile money to 50,000

CHWs and volunteers across the country. What helped was previous piloting experience of payment digitisation and the already existing architecture around DFS at BRAC.

Like other mobile money projects, one of the critical barriers of this digitisation was low phone ownership which resulted in an even lower mobile money account ownership among CHWs. Tackling this barrier could be possible since CHWs could still access mobile phones through their family members. Soon, with the help of local bKash agents and BRAC staff, CHWs opened new mobile wallets and received training on mobile money. A network of 50,000 women began receiving their incentives through bKash. It did not take time for them to warm up to mobile money once they started receiving payments—they came faster, travel distance and time dropped significantly, and the process seemed safer to them than carrying cash.

Steps of digitising CHW payment

01
HNPP collaborates with area managers to collect volunteers' phone numbers

02
Received information made more accessible and easier to analyse with the help of BRAC IT Services (biTs)

03
250 Area managers and 4300 CHWs use the database to collect 43,000 volunteers' list and to register 35,000 more

04
Area Managers and bKash cross-check the list

05
Two rounds of incentives, BDT 1000 and BDT 500 were sent to volunteers, with extra incentives for those living in ultra-poverty

Although operational efficiency was one of the goals, the effects of this digitisation go beyond. During the Covid-19 pandemic, our trained CHWs—equipped with personal protective equipment and armed with information and sanitation products—reached more than 35 million households across Bangladesh. Not only were they informing millions of women about do's and don'ts of Covid-19, but they were also sharing the benefits of mobile money, transforming the way healthcare payments are done at the grassroots. This served as a great opportunity to extend and engage millions of households in financial inclusion through trusted women from their own communities. We believe, through replicating this model, the global network of 4 million CHWs could theoretically reach billions of households to not only talk about health, but also financial inclusion. After all, health and financial inclusion are integrally linked and serve as key factors in improving the conditions of life.

Digital Microfinance

In March 2020, at the beginning of the pandemic, all the branches of BRAC Microfinance closed to avoid public gatherings and following guidelines from the Microfinance Regulatory Authorities to shut down loan instalment collection and disbursement. With the lockdown in effect, our field staff could neither visit door-to-door nor hold village meetings, leaving clients in need of credit or savings refund without support.

It was then that Microfinance decided to roll out merchant wallets at all 2581 of their branch offices to enable clients to pay instalments and receive savings refunds through mobile money. Due to lockdowns, the Microfinance programme could not train staff and clients in-person rather resorted to refreshing their existing knowledge. Staff were taught the basics—account opening, cash-in, payments, and about consumer protection. They were given dialogue scripts to follow during their conversation with clients over the phone. Field staff and mobile money agents teamed up to onboard clients seamlessly and provide them mobile money services. It worked—from July to December 2020, these wallets collected over USD 500 million through more than 8.5 million transactions. At the peak of the lockdowns, around 60 percent of clients sent their loan instalments digitally.

Wallet Collected
> USD 500 million

Transactions
8.5 million

Loan instalments digitally.
60 percent of clients
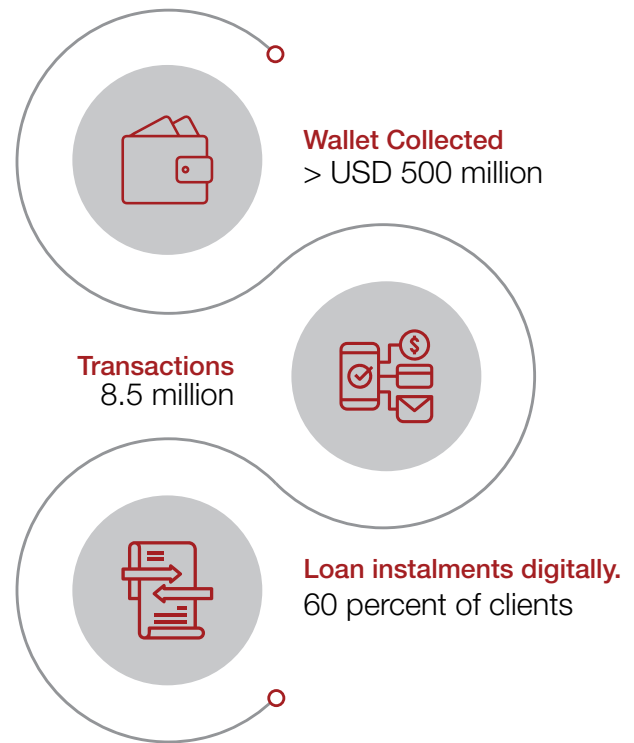
BRAC Microfinance team then went on to support the Ultra-Poor Graduation programme and Water, Sanitation, and Hygiene programmes in digitising their instalment collection, enabling them to access life-saving financial services during this emergency.
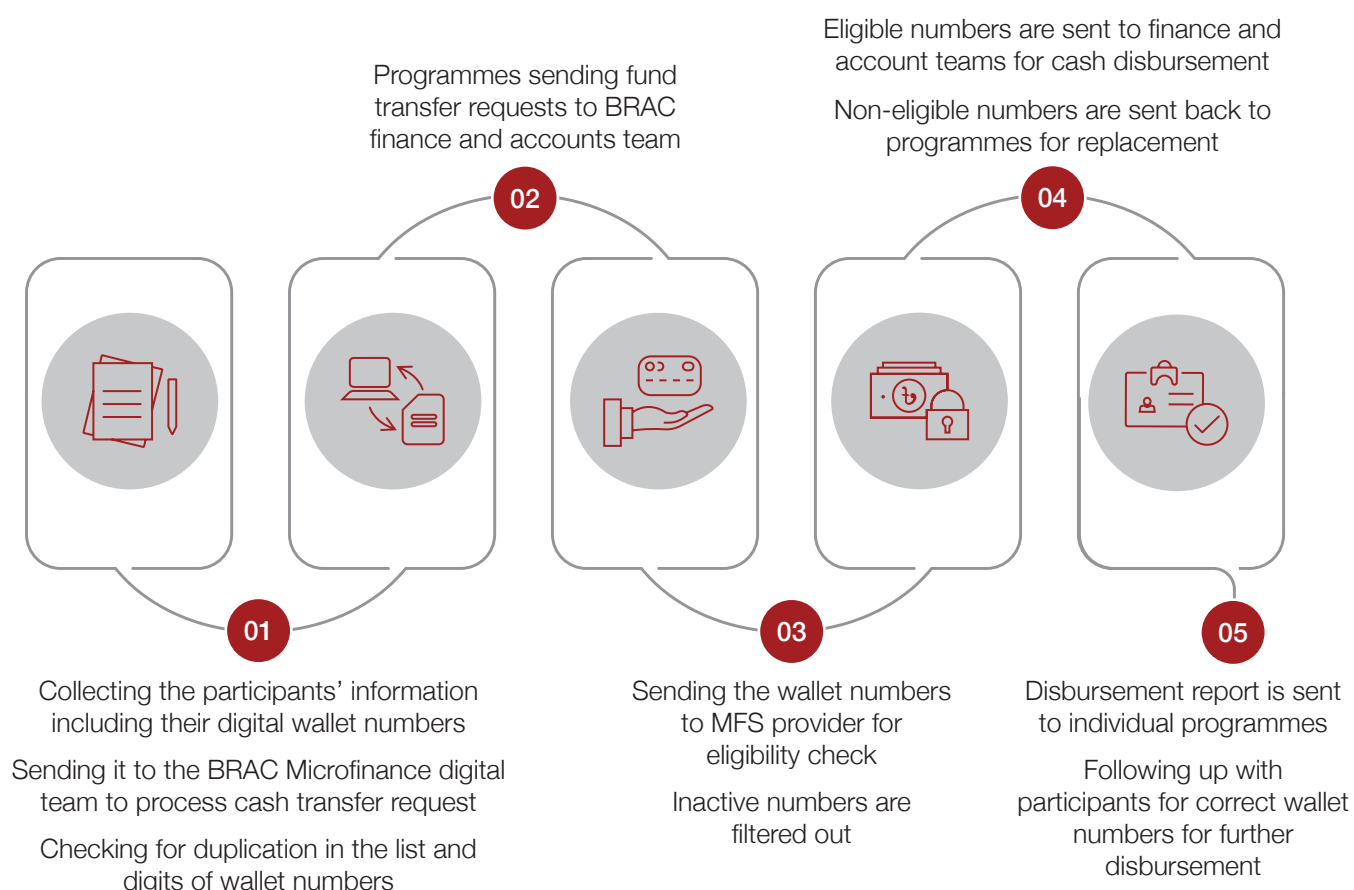
Emergency cash transfers

With households living in extreme poverty reporting an income drop of 73 percent from February to April 2020, Emergency Cash Transfers became a must. The liquidity of cash was much cherished at a time when people were struggling to meet a wide range of basic demands.

BRAC Microfinance, with eight years of mobile money implementation experience, started a rapid assessment to test the feasibility of cash transfers with a small group of participants across the country. It brought in positive results, while highlighting gaps such as limited access and knowledge about bKash to be addressed before scaling the cash transfers.

BRAC Ultra-poor Graduation Programme then took up the task of the onboarding process through their frontline staff. With the help of fourteen other programmes, BRAC successfully provided BDT 1,500 cash support to more than 700,000 households across Bangladesh in multiple rounds from April 2020. In doing so, BRAC Microfinance team developed an effective process to help BRAC programmes disburse emergency cash transfers digitally to the population struggling to meet their daily needs. While the system still has some manual components, it has achieved what it set out to do.

Steps taken for emergency cash transfers

Programmes sending fund transfer requests to BRAC finance and accounts team

02

Eligible numbers are sent to finance and account teams for cash disbursement

Non-eligible numbers are sent back to programmes for replacement

04

01

Collecting the participants' information including their digital wallet numbers

Sending it to the BRAC Microfinance digital team to process cash transfer request

Checking for duplication in the list and digits of wallet numbers

03

Sending the wallet numbers to MFS provider for eligibility check

Inactive numbers are filtered out

05

Disbursement report is sent to individual programmes

Following up with participants for correct wallet numbers for further disbursement

Home school piloting

With the school closure lasting for weeks due to lockdowns, it was clear that classes should be shifted online, and teachers' honorarium should be sent on time. The solution was evident: digitising payment and teaching systems. Although the BEP team had to move quickly to start scaling, early experience of piloting tuition fee payment and salary disbursement digitisation gave them just the confidence needed.

Within a few weeks, BEP started their "home-school pilot" scheme whereby the teachers taught three to four students in a 20-minutes long conference call using their low-cost feature phones. This arrangement not only helped students to continue their education, most of whom remain highly prone to dropout, but also helped improve their mental health through consistent interaction with peers. As for teachers, the digital transition was not difficult—they received their honorarium with an additional cash transfer to cover their phone bills through bKash. It came as a relief as they could sustain their lives during a public health crisis.

Urban food assistance programme

With hundreds and thousands of people losing their jobs during the Covid-19 pandemic, food security was in jeopardy. The need for maintaining physical distance made it difficult for the government and other organisations to distribute food in-person.

In this situation, BRAC Urban Development Programme (UDP), along with the World Food Programme (WFP), found a suitable mechanism—a blockchain-based application called 'Building Blocks', to revamp aid distribution by introducing a DFS-based food assistance programme among the urban communities living in poverty. With this technology, two such communities in Dhaka received BDT 3000 for 10 consecutive months via bKash to purchase the items they required from a catalogue of pre-approved food items from 30 specified stores from the community. With QR codes containing their personal details and mobile wallet numbers, their expenditure across food groups was tracked. Based on the expenditure patterns, they received an additional 25 percent bonus in the following month to encourage them to buy nutritious food.

During onboarding, UDP reached participants through mass awareness campaigns and provided leaflets highlighting the processes, rewards information and food groups, and QR cards containing their personal details. The shopkeepers and their staff also received training on how to maintain smartphone-based sales register. They also received nutritional awareness to help customers buy the right food items. The shopkeepers benefitted from this—their customer number rose from 50 to 250/300 daily, which incentivised them to be a part of this project even in the future. This initiative ensured healthy food for 7607 people for 10 months starting from October 2020 to July 2021.

Common challenges and solution

Across all our operations during the pandemic, we faced some common challenges and eventually worked out possible solutions for them. We have listed some below:

Challenges	Solution
With mobile wallets registered under family/friend's phone numbers, wallet owners at times used the money without informing the clients about receiving the payment.	BRAC established direct communication with the client before and after receiving the payments through frontline staff to ensure proper receipt.
A small segment of women had limited access to mobile phones.	These clients were paired with trusted contacts upon verification by frontline staff.
Transactions often bounced back despite being verified as the accounts would be blocked due to inadequate usage or multiple log-in attempts with the wrong PINs.	Backlogs were met with by colleagues involved with disbursement during each transfer wave.
bKash agents left for home closing their shops due to the lockdown.	With the lift of restriction over MFS agents, the situation improved.
Fraud calls were on rise with a spike in digital transactions.	BRAC revamped public awareness campaigns. As a result, cash grant participants were aware of it from the very beginning.

COVID-19's effects were certainly devastating, but it came with an unexpected boon in the DFS ecosystem of Bangladesh. In April 2020 alone, 300,000 Bangladeshis opened wallets with different MFS providers. Of which two-thirds were women, shrinking the gender gap. The boost was sparked by DFS friendly policies at the national level. Economic stimuli were designed to incentivise digital payments—not only were Ready-Made Garment (RMG) workers paid through mobile money, but factories were also offered low-interest loans to pay wages when making digital payments. Additionally, the Bangladesh Bank made registration easier for RMG workers—those who lacked NID numbers could open wallets with their workers' identification information. Furthermore, mobile money services were recognised as essential services by the government. With a DFS-friendly environment, more organisations utilised the DFS architecture surging the DFS usage record to an all-time high.

Conclusion

Digital financial services have undoubtedly unlocked an array of pathways to promote financial inclusion for disadvantaged people in Bangladesh. A decade ago, when BRAC set out for its DFS journey, the ecosystem was far from mature, and regulations were anything but robust. Only a few organisations, if any, were working with mobile money. Clients were somewhat sceptical about what BRAC was trying to achieve with a digital payment system. The scenario has changed drastically in the last ten years. Women and men at the grassroots have embraced mobile money for daily usage, and with several organisations working to promote financial inclusion, the DFS ecosystem has also grown stronger. As for national policies, Bangladesh Bank in recent years, has formulated DFS-friendly regulations so that people with limited access to traditional financial services can better access financial products to improve their lives.

Two things are clear from BRAC's decade-long experience: mobile money, linked with necessary services, holds enormous potential for women's economic empowerment; and that people at the grassroots are ready to make the digital transition if provided with essential resources and a support system. The ambitious targets that BRAC set for itself as part of the "Innovation Fund for Digital Financial Services" project has already been achieved. We have come far, but we still have a long way to go.

Bangladesh continues to see a stark gender gap in financial access, even with remarkable growth in recent years. Women are behind by 19 percentage points compared to men, while the global average stands at 9 percent. Correcting this situation demands strong collaboration among relevant actors—government, fintechs, non-governmental organisations, women's rights activists to name a few. By leveraging each other's strength the ecosystem can not only strengthen itself but also effectively target the root causes of the unequal access.

Digital financial literacy is one of the primary areas that needs immediate attention. Another persistent challenge has been high transaction fees and limited interoperability in the mobile money platforms. Regulators need to explore ways to lift transaction fees and limits, and relax policies so financial transactions can take place among a wide range of service providers. Fintechs need to craft gender transformative services. Most importantly, mobile money must be linked with essential services to cater to popular needs. As for BRAC, we aim to work tirelessly until financial inclusion has been achieved.

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Finally, we would like to thank our readers, who we hope will find this playbook informative and useful. We believe that it will serve as a guide for organisations looking to digitise their finances and linked services and contribute to the greater goal of financial inclusion.

Last but not least, we would like to extend our heartiest appreciation to the BRAC Social Innovation Lab and our design partner RR Donnelley, who worked tirelessly to bring this playbook to life.

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BRAC

Resources

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02. Activating a Network of 4 Million: Community Health Workers are Key to Fighting COVID-19 – Here's How They Can Accelerate Financial Inclusion

03. Adopting Mobile Money: Lessons Learned

04. Back in the U.S.S.D.': Most Smartphone Owners—Especially Women—Don't Use Apps for Financial Services

05. Bangladesh's COVID-19 Response Is Taking Digital Finance to New Levels

06. BEP: Flipchart on Digital Literacy and Orientation

07. BEP: Presentation on Digitisation

08. BRAC Microfinance programme Brief

09. Bridging the Digital Gender Divide in Financial Inclusion

10. Bridging the Gap in Financial Inclusion

11. Can Cash Transfers to Digital Wallets Be a Lifeline During the Pandemic?

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13. Digital Lifeline in a Public Health Crisis

14. Five Moments to Build on Women's Financial Empowerment

15. Global FINDEX 2017

16. GSMA: State of the Industry Report on Mobile Money 2022

17. GSMA: Mobile Gender Gap Report

18. How Can We Build on COVID-19 Progress in Women's Financial Inclusion?

19. IDP: Cashless Branch Presentation

20. IDP: DFS Training Handout

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22. Introducing the Innovation Fund - June 2020: Project Update

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24. Mobile Money: Towards a Cashless Future

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List of acronyms

- **BEP:** BRAC Education Programme
- **BMGF:** Bill and Melinda Gates Foundation
- **CHW:** Community Health Workers
- **CSA:** Customer Services Assistants
- **DFS:** Digital Financial Services
- **DPS:** Deposit Pension Scheme (an instalment-based savings deposit)
- **e-KYC:** Electronic Know Your Customer
- **IDP:** Integrated Development programme
- **KYC:** Know Your Customer
- **BHP:** BRAC Health Programme
- **MFS:** Mobile Financial Services
- **NID:** National Identity
- **OTC:** Over the Counter
- **UPG:** Ultra-poor Graduation
- **UDP:** Urban Development Programme
- **USSD:** Unstructured Supplementary Service Data