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bKash: financial technology Innovation for Emerging Markets

Ishtiaq P. Mahmood, Marleen Dieleman, and Narmin T. Banu wrote this case solely to provide material for class discussion. The authors do not intend to illustrate either effective or ineffective handling of a managerial situation. The authors may have disguised certain names and other identifying information to protect confidentiality.

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In May 2017, Kamal Quadir, the chief executive officer of bKash Limited (bKash), had mixed feelings. Quadir had built one of the most innovative companies in Bangladesh from scratch: bKash was a mobile financial services (MFS) firm uniquely targeted at the bottom, unbanked segment of society. The company now had 26 million customers and was a lead player in the financial technology industry. Quadir had made a positive impact on the lives of countless people, and bKash had gained worldwide recognition for an innovative business model that offered real solutions to the poor. However, getting there had required navigating through a range of challenges that required close collaboration with other players, including telecommunications operators (telcos), banks, non-governmental organizations (NGOs), and regulators.

The journey was far from over. Now that the venture had finally scaled and reached break-even, Quadir wondered what more he could do. The current business model was built on a set of guidelines issued by Bangladesh Bank—the central bank of Bangladesh. However, the model could be undermined by future regulations, as effective innovations frequently ushered in new challenges. How could he strengthen the foundation of his disruptive business to make it more robust? How could the company continue to grow, while maintaining its financial inclusion objective?

Bangladesh: An inclusive economic growth model

With 156 million people[[1]](#endnote-1) crammed in an area slightly less than the size of the U.S. state of Illinois, Bangladesh had long been one of the most densely populated countries in the world. Despite facing various natural and infrastructural setbacks, according to the Asian Development Bank, the country enjoyed a gross domestic product growth rate of above 6 per cent from 2012 to 2016.[[2]](#endnote-2) This number was achieved thanks to strong domestic demand, private sector wages, public investment, an increasing number of women joining the workforce, and higher worker remittances. Over the years, the country also showed significant improvement in the Human Development Index. Between 1990 and 2010, life expectancy rose by about 12 years—from 58 to 70.[[3]](#endnote-3) However, the literacy rate remained rather low at 57.7 per cent.[[4]](#endnote-4)

The country’s garment industry was booming and drew in large numbers of workers, many of them women. With the female workforce poised to grow from 34 per cent to 82 per cent over the next decade, Bangladesh was witnessing enviable advances in female employment.[[5]](#endnote-5) With the fourth-largest Muslim population in the world,[[6]](#endnote-6) Bangladesh also had an estimated 10 million overseas workers, most of them in the Middle East. They sent back remittances representing over 10 per cent of Bangladesh’s annual income.[[7]](#endnote-7)

Like most emerging markets, Bangladesh experienced rapid development in urbanization, including an exodus of youth from rural areas to urban locations in search of better job opportunities. Dhaka, the capital city of Bangladesh, bulged to a megacity of 17 million people in 2014.[[8]](#endnote-8) As a result of urbanization, most emerging markets saw a reduction in rural living standards and an increase in extreme poverty. Bangladesh did not, thanks in part to the efforts of BRAC and the Grameen Foundation, two of the largest NGOs in the world. These organizations facilitated education and entrepreneurship, especially in the rural areas.

The urban–rural gap

Bangladesh had a fairly homogeneous population with close urban–rural bonds. The large population residing in a collectivist society and packed within a geographical boundary of 147,570 square kilometres ensured a steady demand for urban–rural interaction. Bangladesh’s tropical weather, population size, and horizontal terrain gave it certain competitive advantages. The vast, flat lands ensured easy installation of towers and an uninterrupted network, helping the telecommunication industry to thrive and allowing a closely knit and well-connected societal structure. The total number of mobile phone subscriptions reached 129 million at the end of July 2016.[[9]](#endnote-9) The share of mobile penetration was higher than richer developing countries such as neighbouring India or Kenya (see Exhibit 1).

However, in a country with poor infrastructural facilities, widespread illiteracy, and an 84 per cent unbanked population,[[10]](#endnote-10) transfer of money from cities and towns to villages was an issue. People would often travel long distances to pay bills or hand over cash to relatives, which was inefficient and expensive. While urbanization and rural microentrepreneurship generated a demand for easy financial transactions, few players could meet the demand.

One of the options that people had in the early 2000s was using the services of banks. However, there were few incentives for formal banks to venture out to unchartered territories. The reason was partly Bangladesh’s weak infrastructure and partly a lack of the right type of technology that could reach the poor. While banks were highly compliant as far as regulation was concerned, they did not cater to the basic needs of the low-income population looking for an easy, efficient, and cost-effective financial service.

Highly process oriented, and barely accessible, banks did not attract much volume in terms of mass money transfer. The power distance between formal banking employees and common uneducated people, as well as regulatory compliances continued to be key barriers to using bank services. The processes and formalities required for setting up bank accounts were complicated for common illiterate or semi-literate people. Moreover, given the kind of overhead costs involved in setting up a bank structure—along with security, employees, logistics, and utilities—banks did not find it financially feasible to extend services beyond urban and suburban areas. This left a major chunk of the Bangladeshi population unbanked.

Another option people had was sending money through the Bangladesh Post Office. This required a trip to the nearest post office. Although easier than using the services of a bank, the formalities were still rather complicated for common people. The number of post offices was limited, and access points were inadequate.

Alternatively, people could use a passenger bus company that had expanded its services to transfer money. The company adhered to none of the bank regulations, and the money transfer process worked in a way similar to that of the post office.

The final option senders had was relying on family and friends. While this was an effective method, both sending and receiving parties had to depend a lot on friends and family members’ schedules, not to mention their reliability. This option proved to be not only inconvenient but also risky.

Overall, sending money to family members was either expensive, complex, or insecure. It prevented opportunities from trickling down and empowering people at the lower levels of society where most people relied on cash transactions. The lack of equal opportunity to access financial services left poor people at a disadvantage. For instance, students pursuing education away from villages had to rely on inefficient means to obtain college fees from parents, such as spending time travelling back and forth. Aside from time spent, carrying cash around posed real dangers from robbery. Finally, less than ideal flows of cash to and from the urban areas created opportunity costs for the poor.

The inequality in terms of access to financial services had attracted the attention of the Bangladesh central bank, which put “financial inclusion” on the agenda. The central bank realized that macro-level monetary policy was ineffective without micro-level channels to facilitate financial flows throughout society.

Kamal Quadir: The innovator

The problem did not go unnoticed by Quadir, a Bangladeshi American entrepreneur. Quadir came from a family of entrepreneurs; his brother Iqbal was a big inspiration who left his lucrative career as an investment banker in New York in the mid-1990s and returned to Bangladesh to set up Grameenphone Limited (Grameenphone), the largest telco in the country with revenue of US$1.4 billion in 2016.[[11]](#endnote-11) Quadir, who studied studio art and economics at Oberlin College, Ohio, and later received a master of business administration (MBA) from the Massachusetts Institute of Technology, was not only well aware of macroeconomic dynamics but also well-equipped with business acumen to act on the urban–rural gap.

After finishing his MBA in 2005, Quadir founded CellBazaar, a platform similar to eBay, as he said that there was “no efficient way for sellers to sell their item and buyers to look for it.” Instead of relying on computers, he thought the platform should be based on mobile phones:

How do we use this tremendous resource we have in Bangladesh where 100 million people have mobile phones? So that was the idea I had—that if I can utilize the ubiquitously available mobile phones to create a marketplace, then poor people or anybody in the country can post his or her product and another person can retrieve it from there. So it’s like creating eBay with mobile phones.

The venture worked, and within five years, almost 4.5 million people had used it. Quadir soon ran into a problem that planted the seeds for his subsequent venture:

There was no efficient and universal payment mechanism in the country. The number of bank accounts was low, and on top of that, the number of credit and debit cards was also very low. So I was thinking how to solve the problem of common people not being able to make digital payment efficiently.

Having grown up in Jessore, a district town in the southwestern region of Bangladesh, Quadir was well aware of the infrastructural problems that people from the less-developed districts of the country were exposed to every day, limiting their opportunities. In later life, this exposure helped him have empathy and understanding of the needs of individuals with relatives away from home.

He wanted to empower these low-income individuals who, despite their poverty, had access to cell phones that cost as little as Tk1,200[[12]](#endnote-12) (approximately US$15). It was only a matter of time before he connected the dots with bKash, offering mobile money accounts to millions. The earliest adoption was in transferring electronic money among the accounts, which opened up opportunities for not only the unbanked population but also students and microentrepreneurs.

BRAC: The partner

BRAC, the world’s largest NGO, started its journey in 1972, a year after Bangladesh gained independence. With a focus on social development, BRAC provided a host of services geared to uplifting society. Founded by Sir Fazle Hasan Abed, BRAC had 5.3 million microfinance borrowers and served 138 million of the country’s population.[[13]](#endnote-13) Along with its development programs, in 2001, BRAC initiated a commercial bank—BRAC Bank—to finance small and medium enterprises, which at that time was the “missing middle.”

In January 2008, Quadir and his brother Iqbal went to see Sir Abed of BRAC, who encouraged them to consider how BRAC could serve as a platform for mobile payments. Two months later, Quadir went to Kenya to learn about M-Pesa, the world’s first successful and scaled mobile money solution. In September 2008, Sir Abed introduced Quadir to the management of BRAC Bank Limited. Meanwhile, Quadir and his brother formed Money in Motion, LLC, USA, together with Nick Hughes, who had led the launch of M‑Pesa in Kenya, and Arun Gore, the managing director of venture capital firm Grey Ghost Ventures. BRAC Bank and Money in Motion then formed bKash in February 2010. The joint venture was designed to provide an electronic payment platform to increase access to financial services for low-income users. In a broader sense, the goal was to offer an efficient payment system for all Bangladeshis. *Bikash* is the Bengali word for growth, prosperity, or bloom.

Digitalization for the poor: The regulator

In 2009, Dr. Atiur Rahman was appointed the tenth governor (May 1, 2009–March 15, 2016) of the central bank. Educated in the Marxist tradition, Rahman was an economist who was passionate about reducing poverty. Fortunately, in that respect he received clear support. He related, “When I started on my first day as a Governor, I received a text message from the Prime Minister, and it read: ‘Please work for the poor.’”

Rahman wasted no time doing precisely that. Financial inclusion became one of the prime goals of the central bank, as he believed it could contribute to economic growth without increasing inequality. According to Juanita Woodward, a financial inclusion specialist, Bangladesh was able to innovate in the area of financial inclusion partly because of the supportive role of the regulator:

Bangladesh Bank realized that countries cannot prosper unless poor people can access financial services. Payments are (at the) centre of the plate; it is fundamental for economic development. Even more so if you need to travel (far) to make payment. In Bangladesh, Grameen Bank innovated by credit. Bangladesh Bank realized the “payments” piece was missing.

According to Woodward, a key problem was that “banks are generally not interested in banking the poor.” For instance, in India, where the government was using banks to provide MFS, progress was slow.

The central bank understood the inherent complexity of providing basic financial services to the masses. It required a single-minded focus on digital financial services, rather than these services being just one of the priorities for a bank. The central bank saw merit in allowing independent organizations designed for these purposes. With its inherently conservative and cautious stance, the central bank gave a licence to bKash as a specialized and independent entity but required it to operate as a bank subsidiary. That way, if anything went wrong, the central bank could intervene.

Unlike other countries, such as Kenya and Philippines, where MFS took off through initiatives spearheaded by telcos, in Bangladesh, MFS were bank-led. The central bank saw the need to supervise and regulate the services. Two factors were of paramount importance: the safety of depositors’ funds and financial flows. From the consumer protection angle, knowing that this was common people’s money going into a system, the central bank needed to be confident that the money was safe. The second issue was related to monetary policy. The central bank needed to have a handle on how much money was flowing in and out of banks in order to have a clearer sense of the effectiveness of monetary instruments such as interest rates. A reckless decision could have a fundamental impact on millions of people.

From the outset, the central bank was keen to allow experimentation and relied on market mechanisms to turn financial inclusion for the poor into a reality. Allah Malik Kazemi, senior advisor to the central bank governor, said,

We felt that our task is to provide an enabling environment where ideas can be experimented, where successful ideas can flourish and other ideas will not do as well. We wanted to ensure that we do not over-regulate anything. We did not provide anything overly structured. That’s because we didn’t know what to regulate, the thing hadn’t taken off yet. So why should I make a 50-page manual laying out dos and don’ts? That would be self-defeating. So we provided them loose enabling guidelines.

Under the new guidelines for MFS, the central bank gave out 28 licences to different parties, including bKash.[[14]](#endnote-14) Thus started a set of innovations in Bangladesh that would draw admiration from around the world, not only from institutions such as the Bill & Melinda Gates Foundation and the International Finance Corporation (both institutions subsequently made for-profit investments in the company and are substantial equity holders in bKash), but also from the World Bank and other central bankers.

bKash: The business model

Making full use of the licence given by the central bank along with his expertise gained from the Kenyan M-Pesa model, Quadir launched bKash, a purpose-built entity to provide MFS for the unbanked. The initial challenge was which technology platform to rely on—that is, how to come up with a simple interface that could be accessed by the cheapest (around US$15) handset. An easy way out would be to develop an application for smartphones. However, then the service would be limited to affluent customers, which would defeat the purpose of reaching the poor and unbanked.

bKash was keen to avoid transactions based on Short Message Service (SMS) because this would make the process expensive and unsafe. With every SMS exchange, users would have amounts deducted from their virtual account. Moreover, SMS kept a log of all transactions, which could lead to privacy breaches such as a personal identification number (PIN) getting stolen. Finally, every handset had a different set of criteria for sending messages, making things more complex.

Quadir instead decided on a technology called Unstructured Supplementary Service Data (USSD). This system offered a way for individuals to send and receive money using their cell phones, but without the disadvantages of SMS-based systems. Also, it was supported by all handsets, no matter how basic. The fact that USSD could be used irrespective of the mobile handset or operator[[15]](#endnote-15) gave Bangladesh a faster adoption of mobile money than other countries.[[16]](#endnote-16)

On top of that, with a USSD system, security was higher. The system offered an opportunity to implement a two-factor authentication system. Since the mobile number for each person was unique, there was always a way to assign accountability regarding which account was being used. Also, providing a PIN to each account holder helped identify both the recipient and the sender. Thus, there was greater security in terms of payment or money transfer, since the secret PIN would prevent, for example, a thief from making a payment or transferring money in case of phone theft.

bKash found Fundamo, a South African financial software company that had deployed a highly scalable financial platform in more than 20 countries. Fundamo was not only eager to work with bKash but also able to provide bKash with a platform that combined global security standards with a high degree of versatility to accommodate any operator or type of handset.

Another challenge was how to get customers to use bKash. In the beginning, people did not understand or trust the service and did not perceive a need for it. bKash’s chief technology officer, Azmal Huda, commented, “As Steve Jobs said, customers don’t know what they need. Breaking that ice is very important.” He further noted that people originally would not believe that money could be transferred through the air; they had to be convinced that it really worked.

To reach the millions of unbanked people across the country, bKash needed an outreach program. Initially, with the financial support of the Bill & Melinda Gates Foundation, bKash piloted an agent recruitment program with BRAC, which had microfinance borrowers all over the country. Shahid Ullah, a veteran staff member of the BRAC Microfinance Programme, explained the recruiting strategy, which resulted in the first 5,000 “brave individuals” as agents: “bKash recruited small and medium enterprise borrowers as they were entrepreneurs and had good marketing skills.”[[17]](#endnote-17)

Customers would first go to an agent and give cash in exchange for electronic money in their mobile phone accounts. This was not unlike buying and selling airtime for mobile phones, something that was already commonplace in Bangladesh. As such, the first bKash agents were those small retailers that already sold airtime. Quadir shared how bKash followed a similar model of distribution as a consumer good company. He explained: “Essentially, we thought about mobile money as a consumer good that needs to be distributed. So after we concluded the pilot, we began to look for commercial distributors.”[[18]](#endnote-18)

In subsequent years, bKash aggressively pursued distribution by linking up with seasoned distribution companies that were each handling hundreds of agents. The distributors were hungry for new sources of revenue. Quadir had a vision of achieving fast growth to ensure access points for cash and electronic money everywhere. By 2016, bKash’s agent network grew to nearly 160,000 and bKash agents became a common sight across the country.

bKash ensured that opening an account was as simple as possible and cost free. It employed an aggressive pull strategy by flooding all media vehicles with awareness campaigns and “how to” promotions. To open an account, a customer needed to visit any bKash agent in the area along with a national identification document, photographs, and mobile phone, and fill out a form. The process involved filling out the central bank Know Your Customer (KYC) form, verifying the information at multiple levels, and eventually, the authorized bKash employee approving the account. The process took around three days. As soon as the account activation process was complete, customers could easily top up their virtual account, withdraw money from it, and send or receive cash from another bKash account holder.

According to Juanita Woodward, this process made bKash stand out: “bKash had another advantage: the sign up is very fast and easy, unlike banks. They also had a very transparent pricing. Banks, with their legacy systems driving up cost, cannot compete with all-digital systems like bKash.”

This strategy, along with an engaged regulator and a robust distribution system available all the way to the grass-roots level, caused the adoption of bKash to skyrocket and made the word “bKash” synonymous with a verb, like “google.” The number of customers rose dramatically. By the end of 2013, bKash had 11 million accounts.[[19]](#endnote-19) This number grew to 26 million by the end of 2016, according to Quadir.

The large footprint raised the issue of whether bKash was a bank-like institution. Quadir explained:

Banks are designed for serving the big fish. We are designed for anchovies. Our job is to design a new kind of net, collect all the anchovies and give that money to the bank as a capital resource. A bank is designed to maximize that big pot of money […]. They can finance a hospital, a factory, universities. There is no conflict between us and the bank. We are making the idle money that has been under people’s mattresses effective, and putting it in the bank. In a very fundamental way we are complementing the banking service.

Relying on small transactions, bKash indeed operated on a very different model. Its income came mostly from cash-out fees by customers (see Exhibit 2). Most of the service revenue—77 per cent—was shared with agents and distributors. Importantly, the bank-led model also implied that bKash paid telcos a fee for using the network; another 7 per cent of the service revenue was shared with the telco. bKash used the remaining 16 per cent of the revenue for operational activities such as marketing, technology, and recruiting agents. Overall, the margins seemed rather small, but volume generated viability (see Exhibit 3).

Scaling the model: The challenge

The reliance on existing distribution channels, also used for such diverse activities as distributing matchboxes, distributing aid after hurricanes, or selling mobile airtime, had given bKash the ability to reach even the remotest parts of Bangladesh. However, moving physical cash around the country was becoming a challenge due to the liquidity imbalance (see Exhibit 4). As people were primarily sending cash from urban to rural areas, urban agents received cash from customers in the cities and rural agents were paying out cash to customers in the rural areas. There was a need for agents in the capital to deposit their cash in banks, and for agents in rural areas to obtain cash.

However, because of existing regulations, depositing cash was only possible through the BRAC Bank, which had about 100 branches. This was not only inefficient but also posed security risks as agents had to travel far with cash. The need for extra protection raised costs, defeating the logic of a low-cost service. Moreover, counting excessive amounts of currency notes became a burden for BRAC Bank branches. The central bank recognized the challenges and adopted a change in regulation that allowed agents to deposit funds in any bank, not just a BRAC Bank. The new arrangement increased the protection of customer deposits, as the customers’ money was now kept in multiple banks, including large state-owned banks, instead of the BRAC Bank alone. Moreover, depositing in multiple banks reduced the risks to a customer’s deposit in case of a liquidity crisis in a single bank.

Then there was the question of technology. While large multinational companies often focused their research and development expenses on technologies for improving customer convenience in rich countries, different needs in emerging markets called for different technologies. As bKash grew, it needed a new platform that could help it run smoothly on a much larger scale and cater to new, innovative products and services it could offer. Fundamo had, in the meantime, been bought by Visa, which brought a very different working relationship. Under the new setting, the partner had less incentive to serve customers like bKash. In developed countries, new platforms had taken many years to mature, but bKash could not wait; it was time for bKash to find a new technology partner. In 2016, bKash started working with technology giant Huawei in place of Fundamo.

Separately, bKash thought about gearing up its application (app) development effort since cheap smartphones were becoming increasingly common. Quadir was looking for a human-centric designing firm that could help bKash come up with an app design allowing its customers to graduate out of USSD while receiving alternative channels. In 2016, bKash started working with San Francisco-based IDEO, which famously designed the first Apple mouse and many other innovative products.

The growth of the labour-intensive garment industry in Bangladesh was another opportunity on which bKash wanted to capitalize. In a country where cheap labour was the main competitive advantage, companies typically paid salaries in cash, with each worker receiving a relatively small amount. A typical salary for an unskilled garment worker was US$68 per month in 2015.[[20]](#endnote-20) Most garment manufacturing companies closed their factories for a day to organize the logistics of cash salary payments to their thousands of workers. bKash’s technology platform could also be used to provide payroll payment solutions to garment manufacturing companies. The first trials suggested that it could be a good solution for the garment workers. Most were women who, until then, had been forced to cope with threats of extortion by their husbands, theft, or mugging. This broadening of services required bKash to deal with large companies, a hitherto unexplored territory for the company.

Bangladesh, being one of the largest exporters of labour in the world, provided bKash with the opportunity to naturally extend its business by tapping into the growing pool of foreign remittances. Other players were already active in the market. To enter this existing market, in April 2016, bKash partnered with Western Union and MasterCard to help Bangladeshis transfer funds from anywhere in the world.

Remaining relevant: The future

bKash had witnessed remarkable success in a short time span, becoming the lead player in a newly created market (see Exhibit 5). Profit margins were small, but bKash recovered all its losses by 2016. The question was, How big could bKash become?

As bKash scaled up, became more visible, and increased its scope to adjacent services, it also attracted more attention. Some local banks thought that the disruptor was taking business away from them unfairly under a lighter compliance regime. Stories started to circulate that bKash was operating without regulation, overcharging customers, or even operating as a monopoly. Local newspapers occasionally reported on such allegations,[[21]](#endnote-21) and they were a source of concern for bKash.

bKash’s view was that it was far from a monopoly or acting as a monopolist. Quadir pointed out that it did not enjoy any special concession from the state or the regulator. The company’s success was due to other actions, such as making prudent strategies and decisions, aligning its business goals with the regulator’s financial inclusion objectives, attracting good investors with global knowledge and governance, using appropriate technologies, building grassroots reach, and recruiting qualified resources. Furthermore, bKash had no capacity of blocking any of the other MFS providers to grow—a common feature of a monopolist.

Even if some of the MFS licence holders were inactive, a few were stepping up their efforts to capture market share from bKash. In fact, the central bank hinted that it would be supportive of some consolidation as it hoped bKash would not dominate the MFS market. Kazemi, the central bank advisor, said, “We are keen to have a few major players in the market instead of bKash dominating the market.”[[22]](#endnote-22) Overall, competition seemed set to increase.

Non-bank players were also looking to enter the market. For instance, Grameenphone, the largest telco, had its own MFS. It offered services such as utility bill payment and train ticketing services. While telcos had been lobbying the central bank for years for a licence to operate full-blown MFS, banks, keen on maintaining MFS as bank-led, opposed any such move. Telcos, as network providers, could be in a position to discriminate certain financial service providers if allowed to play in this market. Since most Bangladeshis still had basic handsets (as opposed to smartphones), the financial service provider needed USSD connectivity and MFS providers were directly dependent on the telco. By virtue of its ownership of the network infrastructure, a telco could potentially provide an unfair advantage to its own MFS services. However, Quadir thought the possibilities of regulatory shifts remained:

A critical part of the business is that its character and boundary are defined by the regulator. If the regulator decides tomorrow that this is a business where it would allow telephone companies to be shareholders, then they will become my competitors along with being my essential network vendors. That would give birth to a serious conflict of interest and generate concerns on protecting the public interest.

According to internal company documents, by late 2016, 92 per cent of bKash’s revenue still came from cash-out fees, and there was limited diversification into other types of MFS revenue streams. Interestingly, the central bank encouraged the company to offer a broader scope of MFS because of its goal of financial inclusion for the unbanked. Rahman, the former bank governor, said, “Now, MFS is mostly concerned with payments, but in the future there could be diversification of services. There should be more partnerships—say with e‑commerce companies, or outsourcing companies.”

It was inevitable that new technological innovations would emerge in Bangladesh, such as greater penetration of smartphones, or other innovative e-commerce and financial technology solutions that would transform the lives of the poor in the years to come. As such, bKash had to keep innovating and coming up with new services and partnerships. Quadir, who believed in specialization, was mindful of the regulatory demarcation. Instead of encroaching on others’ territory, he thought bKash was in a position to offer plenty of specialized new services:

bKash should not be giving loans necessarily and have exposure to credit and related market risks. However, the customer data we possess can allow a bank to get very effective credit rating results, leading the bank to give loans to the right people; therefore, again we complement the bank’s business. Furthermore, we can be a channel through which the borrowed funds will be disbursed and loan repayment will be collected in a very efficient way at a reduced cost.

Being a first mover with an innovative model meant navigating new regulatory territory. The faster bKash developed, the more acute was the need to develop a regulatory ecosystem to match the risks. Quadir thought bKash should be regulated by the central bank, but it shouldn’t be regulated like a bank because it was not a bank. The current MFS guideline was created when the MFS industry was still in its infancy. Since then, the industry had grown to become an important part of the financial ecosystem in Bangladesh. Therefore, the question was how some regulatory areas needed to evolve to address the challenges identified in practice, and how to govern dedicated MFS players in an appropriate manner.

The question of whether bKash was, or even should be, a bank, or a technology company that happened to handle money, became pertinent in other areas too. The remote nature of money transactions could lead to abuse of MFS by criminals. Quadir said,

Say the law enforcement agency comes to us for details about a person and demands a copy of a customer’s KYC. Now, under the banking law, we cannot provide personal details; we will need a court order. So, the law enforcement agency tries to obtain a court order, but the court may say that this only happens under the banking law. But bKash is regulated under the company law, and thus the court may not issue a summon. You see, bKash intends to cooperate with all relevant agencies, and the agencies and bKash both require regulatory clarity.

As in other countries, it would take time for regulations and government institutions to catch up to new, innovative practices and technologies that were fast changing lives for the better and offering opportunities to address new challenges. In Bangladesh, banks needed to be held accountable for their MFS operations. In the case of bKash, since it was a subsidiary of the BRAC Bank, a complex web of regulatory responsibilities was placed on the BRAC Bank. Bank officers had their performance milestones and incentives. These might not match with the accountability for an MFS with 26 million accounts and 160,000 agents.

The central bank published a new draft regulatory guideline in July 2015 for “providing an orderly, enabling and competitive environment for utilizing this new window of opportunity of innovatively extending the outreach of financial services.”[[23]](#endnote-23) One of the aims was to broaden the playing field.

The guideline discussed the granting of licences and the direct supervision of newly envisioned MFS entities engaging in financial services such as limited deposits, payments, and remittance services—similar to current MFS accounts. These new entities would not have exposure to credit risks; however, they must maintain a minimum paid-up capital as a cushion against operational risks.

The guideline indicated that the central bank had in fact recognized the need for regulatory reform, endorsing the need for specialized digital financial platforms, similar to bKash, instead of offering MFS accounts through conventional banks. The latter would have increased the cost and defeated the whole purpose of financial inclusion through minimizing costs.

While Quadir was excited about the new possibilities, regulatory uncertainty was a major concern. Was bKash sufficiently robust in its foundation to be able to maintain its inclusive model of serving not only the unbanked but also the under-banked, while remaining financially viable? Said Quadir,

I emphasize that our regulators have allowed this innovation to take place. Bangladesh has seen some great innovations in the financial inclusion space due to its open-minded regulators. And, I recognize the spirit of finding comfort in ambiguity, which is an essential component of a social innovation that continues to evolve as does a society.

Exhibit 1: Mobile phone penetration by country

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | Rwanda | India | Kenya | Bangladesh | Germany | Philippines | Brazil | Chile |
| **Penetration rate (%)** | 70.24 | 78.76 | 80.84 | 82.45 | 116.86 | 118.07 | 126.80 | 129.25 |

Source: Compiled by the authors using data from the World Bank, United Nations Development Programme, TheGlobalEconomy.com, Telecom Regulatory Authority of India, and Bangladesh Telecom Regulatory Commission.

Exhibit 2: bKash pricing structure

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| --- | --- |
| **Type of Transaction** | **Fee** |
| Account opening | Free |
| Cash-in at agent | Free |
| Cash-out from agent | 1.85% flat fee |
| Person-to-person money transfer | Tk5 (US$0.06, based on the exchange rate of December 2016) |
| Bill and merchant payments (fee to customer) | Free |
| Merchant payments (cost to merchants) | 1.30% to 1.80% |
| Business-to-person disbursement (fee to business) | 0.50% (negotiable) |

Source: International Finance Corporation, *bKash: IFC Inclusive Business Case Study*, 2016, accessed January 1, 2017, https://www.ifc.org/wps/wcm/connect/5c993b23-8dd1-40c5-88cf-eb64618e871b/bKash\_FINAL\_low+res.pdf?MOD=AJPERES.

Exhibit 3: bKash financial statements

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **INCOME STATEMENT (in US$ Million)** | | | | | | |
|  | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** |
| Revenue | – | 0.01 | 4.66 | 40.61 | 73.88 | 110.26 |
| Cost of service | – | −0.00 | −4.24 | −36.10 | −61.53 | −90.02 |
| **Gross profit** | – | 0.01 | 0.42 | 4.51 | 12.35 | 20.24 |
| Other income | – | 0.76 | 4.11 | 6.06 | 8.54 | 13.04 |
| Salary and other allowances | – | – | – | −3.30 | −5.26 | −7.62 |
| Depreciation and amortization | – | – | – | −0.47 | −1.03 | −1.32 |
| Operating expenses | −0.33 | −0.73 | −2.37 | −2.73 | −3.86 | −6.73 |
| Other expenses | – | −0.75 | −3.57 | −7.79 | −6.60 | −12.73 |
| **Profit before tax** | −0.33 | −0.72 | −1.41 | −3.72 | 4.20 | 4.88 |
| Tax expenses | – | – | – | – | −1.77 | −1.83 |
| Deferred |  | −0.26 | 0.40 | 1.09 | – | – |
| **Total comprehensive profit** | −0.33 | −0.46 | −1.02 | −2.63 | 2.43 | 3.05 |

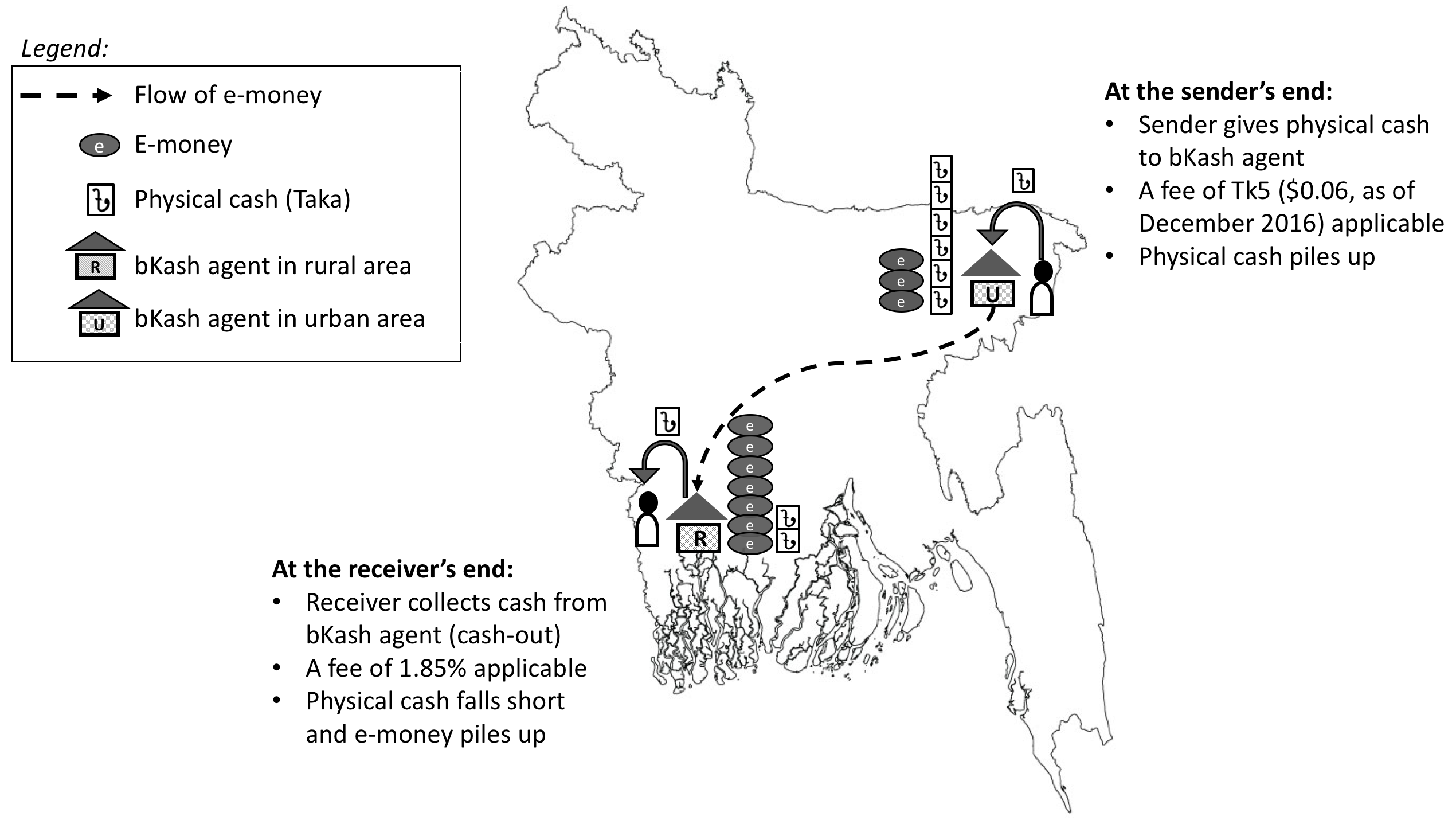
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **BALANCE SHEET (in US$ Million) (Not all items are listed)** | | | | | | | |
|  |  | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** |
| **Assets** |  |  |  |  |  |  |  |
| Non-current assets | Property, plant, and equipment | 0.03 | 0.74 | 1.03 | 2.01 | 2.60 | 5.18 |
|  | Intangible assets | 0.01 | 0.48 | 0.51 | 0.48 | 1.89 | 4.28 |
|  | **Total non-current assets** | 0.04 | 1.45 | 2.28 | 4.54 | 5.00 | 9.46 |
| Current assets | Accounts receivable | – | 0.02 | 0.12 | 0.87 | 1.28 | 2.63 |
|  | **Total current assets** | 0.49 | 1.10 | 16.67 | 65.97 | 117.47 | 175.95 |
|  | **Total assets** | **0.53** | **2.55** | **18.95** | **70.50** | **122.50** | **185.40** |
| **Equity** |  |  |  |  |  |  |  |
|  | Share capital | 0.05 | 0.04 | 0.36 | 0.49 | 0.49 | 0.49 |
|  | Share premium | – | – | 4.60 | 16.62 | 1.71 | 27.28 |
|  | Retained earnings | −0.32 | −0.69 | −1.76 | −4.47 | 2.02 | 1.03 |
|  | **Total equity** | 0.41 | 8.33 | 3.20 | 12.65 | 25.91 | 28.86 |
| **Liabilities** |  |  |  |  |  |  |  |
| Non-current liabilities | Deferred liabilities | 0.10 | 0.87 | 0.09 | 0.09 | 0.09 | 0.09 |
|  | Accrued expenses | 0.01 | 0.04 | 0.53 | 3.13 | 3.92 | 7.75 |
|  | Accounts payable | 0.00 | 0.68 | 0.97 | 2.40 | 1.62 | 0.35 |
| Current liabilities | Current liabilities | – | – | 15.66 | 57.76 | 96.47 | 155.70 |
|  | **Total liabilities** | 0.01 | 1.62 | 15.71 | 57.85 | 96.53 | 156.55 |
|  | **Total equity and liabilities** | **0.53** | **2.55** | **18.95** | **70.50** | **122.50** | **185.40** |

EXHIBIT 3 (CONTINUED)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CASH FLOW STATEMENT (in US$ Million)** | | | | | | |
|  | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** |
| Net cash from operating activities | −0.23 | −0.72 | −0.95 | −1.06 | 41.30 | 57.70 |
| Net cash from investing activities | −0.04 | −1.40 | −0.64 | −1.32 | −8.21 | −17.21 |
| Net cash from financing activities | 0.75 | 2.78 | 16.11 | 48.97 | 44.04 | 40.48 |
| Cash and cash equivalents at beginning of the year | – | 0.45 | 1.00 | 16.27 | 107.32 | 147.39 |
| Change in cash and cash equivalents | 0.47 | 0.66 | 14.51 | 46.59 | 63.28 | 106.91 |
| Cash and cash equivalents at end of the year | 0.47 | 1.11 | 15.51 | 62.86 | – | – |
| *Restricted cash and cash equivalents* | – | – | – | *−54.73* | *−93.10* | *−143.46* |
| **Cash and cash equivalents** | 0.47 | 1.11 | 15.51 | 8.13 | 14.22 | 3.93 |

Source: Company documents.

Exhibit 4: Liquidity imbalance



Source: Created by the authors.

Exhibit 5: Competitive landscape

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | bKash | Rocket | mCash | UCash | MYCash | Others |
| Market share (2015) | 58% | 16.60% | 8.50% | 7.70% | 3% | 6.10% |

Source: Created by the authors based on Jaheed Parvez, Ariful Islam, and Josh Woodard, *Mobile Financial Services in Bangladesh,* April 2015, accessed July 15, 2016, www.cashlearning.org/downloads/mfsinbangladeshapril2015.pdf.

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