



# Mobile Payments in Brazil: How to Make Them Happen?

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There is a pressing need for expanding the level and the quality of financial services to the poor. While about 50 per cent of the global adult population has access to formal financial services, the rate of mobile penetration has reached 87 per cent, with about 6 billion active lines, making the use of a mobile payments system one of the most promising innovations towards global financial inclusion. Taking Brazil as a prime example, this article discusses the possibilities and restrictions of implementing a mobile payment system in developing countries.

Only 50 percent of adults worldwide report having an individual or joint account at a formal financial institution.<sup>1</sup> However, this figure can be misleading. When breaking up the latter percentage, we can see that bank accounts are nearly universal in high-income economies, where 89 percent of adults report that they have an account at a formal financial institution; in contrast, this is only true for 41 percent of adults in developing economies. Globally, more than 2.5 billion adults do not have a formal banking account; the majority (2.2 billion) from developing economies.

Besides banking accounts, all components of a basic financial services basket, namely, credit, insurance and savings, show a relevant gap between the current supply and the potential demand. Financial inclusion, defined as the access and use of financial services, seems to be the most appropriate expression to capture the issue of serving the underserved by banking. Considering the relationship between finance and

development<sup>2</sup> there is a pressing need for expanding the level and the quality of financial services to the poor, pointing out the relevance of promoting financial inclusion.

Financial inclusion has always been connected to innovation. Microcredit, for example, developed from practices totally innovative to the traditional banking business. Group loans, credit agents, progressivity and weekly instalments are examples of innovative and to some degree successful practices that have helped to expand financial services to the poor.

Another example of innovation is the development of credit risk models using “alternative data,” such as electricity bills.<sup>3</sup> The task of financial inclusion is gigantic and cannot be accomplished without the effective engagement of traditional financial system players, such as banks and insurance companies, together with an involvement of new participants, capable of developing innovative business models.

## **Mobile Payment for financial inclusion**

In this context, the use of mobile payment systems is one of the most promising innovations for developing financial inclusion. Delivering financial services through mobile devices represents an innovative concept known as “mobile money.” However, it is important to emphasise that there is no consensus around this concept, which encompasses currency digitalisation, use of mobile payments, and mobile banking.

The logic is quite simple: while about 50 per cent of the global adult population have access to formal financial services, the rate of mobile penetration reached 87 per cent by the end of 2011, with about 6 billion active lines. Therefore, if financial services were to be provided through mobile phones, they could reach, in a relatively easy and cheap manner, people who are currently excluded from formal financial services. There are several concrete examples where “mobile money” has successfully served the poor, the Philippines and Kenya being the most successful ones.

It is also interesting to note that the data provided by the World Bank show that an increasing part of the population, particularly in less developed countries, rely solely on financial services via mobile phones, which are provided by institutions outside the formal banking sector. For example, in Kenya 40 per cent of the population that uses mobile financial services remains without access to traditional banks, meaning that financial inclusion is not synonymous with banking inclusion.

## **The Brazilian context: banking correspondent model**

Brazilian banking has been in the vanguard of technology innovation for financial inclusion since the dawn of the 2000s, when a pioneer branchless banking initiative known as banking correspondents expanded the outreach of financial services in the country. In the last decade, this primary channel for banking and financial inclusion introduced innovations in the financial services logistics, and received international attention for its ability to expand

banking access at a low cost and in a short period of time.<sup>4</sup> For the first time, banks could reach historically unattended places such as the poor and dry Northeastern region, the rainy green wide spaces of the Amazon, and the unassisted favelas in big cities.

The success of the banking correspondent model in Brazil is remarkable due to the outreach and the scope of services offered.<sup>5</sup> According to the World Bank centre dedicated to research on financial access for the poor: “*What happens next in Brazil when it comes to correspondent banking will serve as a considerable source of learning for the rest of the world.*”<sup>6</sup>

In another front of social innovation related to financial inclusion, Brazil also has a successful Conditional Cash Transfer (CCT) programme, the Bolsa Familia Programme (BFP)[Family Welfare Program], which reaches more than thirteen million families and has been attracting worldwide interest.<sup>7</sup> The success of BFP is largely credited to the implementation of the correspondent banking network,<sup>8</sup> since 70 per cent of all of the Bolsa Familia payments are made through this channel. In practice, Caixa Econômica Federal (CEF), the public bank hired by the Ministry of Social Development (MDS) to deliver social benefits, carries out BFP payments through its correspondent banking network. This network is built in partnership with all types of organisations (post offices, lottery shops, pharmacies, small grocery stores, supermarkets, real estate offices, and microfinance institutions), which work in regions with low access to traditional banking channels.

Correspondents have thus become the preferred distribution channel because of their proximity to the most vulnerable population, but the model seems to be reaching its limits and this can be one of the reasons for the recent stagnation of financial inclusion in the country.<sup>9</sup> Signs of these limits can be clearly noted in the two most recent Financial Inclusion Reports of the Central Bank,<sup>10</sup> and also in the last Brazilian Banks Federation Report on the banking market.<sup>11</sup>

In fact, despite recent improvements, it is estimated that still only 56 per cent of the adult population have banking accounts in Brazil. When adjusting this figure for considering the poorest (20 per cent of lower income), the number falls to approximately 33 per cent. It is the same for other financial services; their use by the poorest is still lagging behind the poorest’s use in developed countries.

## **Banking correspondents in the crossroads**

Having established a network that helped to expand the access to financial services in a country as big as Brazil, the banking correspondents’ model now faces the challenge of modernising its structure to incorporate mobile devices that are already in the hands of a poor population, which is underserved by financial services.

For this purpose, the transformations that need to be implemented in the original model have

to value the important progress already made, and must propose a strategic agenda to involve the actual correspondents' network, banks, microfinance institutions, mobile companies, regulators and others who may contribute to the continuity of financial inclusion in the country. At the same time, the new model must deal with new forms of digital payment, thus reducing risk in dealing with cash, and creating opportunity for new financial products and services to be more in line with the needs of poor clients.

Despite differences in their respective characteristics, the banking correspondent model and mobile payment platform both require a complex web of relations between an ample spectrum of actors to offer financial services for a segment of the population that lacks access to financial services. Thus, since the employment of mobile payment platform for delivering CCT benefits is being used in other countries,<sup>12</sup> the focus on constructing a mobile payment platform for the low-income population in Brazil could benefit from both the well-executed experience of BFP<sup>13</sup> and the establishment of the wide-spread network of correspondent banking in the country.

## **Mobile payment in Brazil**

A recent Anatel (Brazilian Telecom Agency) database reveals that there are over 265 million cell phones lines in a country of 195 million inhabitants. Clearly, a relevant part of these mobile devices is in the hands of people that are excluded from the formal financial system. However, mobile payment (MP) in Brazil still remains an embryonic concept, as it is currently not widely available. This raises two important questions: a) Why is mobile technology still not being used as a platform for financial inclusion in Brazil? b) What are the requirements for fostering the widespread expansion of this technological model?

There are at least two main restrictions that explain this situation: one related to the regulatory environment and another related to the lack of a solid business model involving all the main players interested in this market. These two restrictions can be identified based on an analysis of the macro, meso and micro levels.

### *Macro level*

In Brazil, as in many other countries where mobile payment has not taken off, financial and non-financial institutions have demonstrated some difficulty in establishing strategic alliances involving banks, telecom and credit card institutions. This general lack of business integration among this network of different actors is surely one of the obstacles for the implementation of a mobile payment ecosystem. Those players have high power to influence the market, fostering or blocking mobile payment initiatives.

Concerning regulatory issues, it is not possible to raise and consolidate any innovative or groundbreaking financial service that is not in line with the rules of the national financial system. This implies that the Central Bank plays a crucial role in providing the conditions in which business models can be created within the financial market.

Currently, the actual regulatory environment for MP services in Brazil requires that a financial institution must be included in business arrangements involving payment transactions. On the one hand, this regulation is an entry barrier that protects the traditional financial sector and maintains a potential market to be further explored; on the other hand, it inhibits the emergence of new business models operated by newcomers from other sectors, such as the mobile operators.

More specifically, Brazilian banks would like to maintain and replicate MP services for the same arrangements already in place with plastic cards in the market, integrating network acquirers (that are owned by the largest banks of the country) and all the same pricing structure.

Unsatisfied with the current situation of electronic payments in the country, the Brazilian Central Bank wants to propose a redesign for payment services, in order to prevent the replication of the rigidity of current payment arrangements in the new flexible emerging market of MP. Recently, a new regulation proposal was announced for this market, which must be now analysed and approved by the Congress. The proposed regulatory environment would create room for the emergence of PSP (payment services providers), with the possibility of new non-financial entrants, such as mobile network operators (MNO). These companies are eager to expand their portfolios with higher value-added services, since they are used to act in markets with intense competition and low operating margins.

Moreover, this new regulation will probably enable the resumption of a major project developed by MDS (Ministry of Social Development): the payment of BFP benefits via mobile phones, aiming at improving the logistics of payments and allowing digital interaction with the beneficiaries, who are the poorest of the poor. Since BFP serves around 13 million Brazilian families, a successful experience in delivering BFP benefits through a mobile payment platform would create one of the biggest cases of mobile payments in the world.

### *Meso level*

Existing mobile payment initiatives and some MP pilot projects in the country seem to have some points in common: none of them reached a critical mass; all sought unsuccessfully to replicate payment arrangements already in place via credit cards; all had serious problems with the governance of the partnerships between companies from different economic sectors.

Usually, the existing MP services are offered by partnerships integrating a bank, a MNO, a credit card company and an acquirer. However, examining the cases one can see structural problems in the relationship between partners and in the joint governance of services, problems that go beyond the overlap of the technological model with the business model. Being provided in closed platforms, which do not allow integration with other networks, payment services and competing agents, these MP services already in place disregard users' desire of a universal payment platform, which is not restricted to a limited group of companies.

**No MP initiative has reached critical mass market in Brazil to trigger a significant network effect, which would allow the emergence of one or more business models.**

Thus, no MP initiative has reached critical mass market in Brazil, triggering a significant network effect, which would allow the emergence of one or more business models with broad membership, acceptance, integration and value for customers.

#### *Micro level*

From the users' point of view, the value proposition of MP services needs to be expanded to ensure broad interoperability and confidence that would ensure an effective use of these innovative services. Users' trust would be built from their perceptions on

factors such as: value added; digital security; experience and effective performance of the new services; reputation of the agents involved; existence of regulation; supervision and government control, among others.

Interoperability encompasses technical aspects (running on any mobile network available; standardisation of services and payment systems; adaptation devices from smartphones to low-end devices), marketing (wide acceptability and MP commutability between different services and other electronic means of payment) and integration with the formal financial system, including system interbank, ATM networks and banking correspondents.

In general, we cannot conclude that the failure of many MP initiatives and pilot projects in Brazil is due to a misalignment between the demand and supply sides. This reflects that the users' needs and expectations are poorly met by these MP initiatives, which have been designed mainly to serve the exclusive and immediate interests of the suppliers and are not in line with users' expectations.

## **What to expect from MP in Brazil**

Looking at the Brazilian scenario and considering the aforementioned aspects, we could see more clearly some of the challenges for implementing a mobile payment system in this context. First, in Brazil no single bank or operator controls the entire market. On the supply side, there are some MP initiatives, most of them based on the "one bank, one operator" model; however, none of them have the power to make a significant impact on the market.

On the other hand, however, telecommunication regulators have recently allowed the implementation of mobile virtual network operators (MVNO). This creates new opportunities for banks to buy minutes from operators on wholesale and pass them away on retail (with many possible business models) to their clients. This initiative may raise expectations for new opportunities in mobile payments in the country.<sup>14</sup>

From the supply side, it is important to note that in Brazil there is already the CIP (Camara Interbancaria de Pagamentos [Interbank Chamber of Payments]) in place, an institution with great potential for becoming the clearinghouse for mobile payments in the country. CIP is owned by the main banks and has capabilities for processing a large number of interbank

payments. From a strategic point of view, this institution could become the solution for banks to process any form of mobile payment. However, CIP is not related in any way to mobile phone operators and is not being considered by banks in any MP experience in place.

From the demand side, delivering BFP benefits through a mobile payment platform could trigger the needed network effect that would help the dissemination of the culture for using this innovative means of payment among millions of poor people in the country. Although MDS has already manifested interest in mobile payment alternatives, a previous initiative to create a pilot project to deliver BFP through mobile payments was aborted by the Central Bank, as it was afraid it would create closed platforms that would avoid the dissemination of a wide mobile payment ecosystem. Still, there are expectations that as soon as the new PSP regulation takes place, MDS will return to developing a MP solution for delivering social benefits.

**Use of mobile technologies can be a great groundbreaking point in order to structure new model of financial inclusion in Brazil.**

Finally, even if mobile payment looks like an attractive alternative for reaching the underserved by banking at a low cost on the demand and the supply side, its implementation is not an easy task due to the dynamics of the telecom and banking markets. Companies in those sectors will probably be forced to reposition themselves in order to create conditions for the establishment of mobile payments. Therefore, the use of mobile technologies can potentially be a groundbreaking point in order to structure a new model of financial inclusion in Brazil.

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