

Mobile 2.0: m-money for the BOP in the Philippines

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Introduction

The potential of electronic banking (e-banking) and electronic money (e-money)² to improve efficiencies, reduce transactional costs and bring new opportunities has long been recognized (Basel, 1998). Greater interest has been generated with new forms of e-money that is transmitted with the aid of mobile phones.

Interest in the area of ICT and Development field is with reaching the unbanked, and people at the bottom of the pyramid (BOP). This includes the potential to provide them with banking-related services through mobile banking (m-banking)³ and mobile money (m-money)⁴ (Soriano & Barbin 2007; Bångens & Söderberg, 2008), which can be done by capitalizing on the rapid diffusion of mobile phones among social networks including the BOP (Zainudeen, 2008). The unbanked require efficient utilization of varying sources of cash inflows. Living off a cash-based economy, they receive irregular income from occasional jobs, farm produce, and “welfare” (Bångens & Söderberg, 2008). Their limited access to established financial channels exposes them to financial risks and less secure transactions.

Among their various income flows, remittances could be the driver for m-money usage among the BOP. One factor is the large flow of money going through remittance channels that imply a steady customer base. The World Bank estimates that the value of remittances in 2008 was US\$ 305 billion worldwide (BSP, 2009a) which were often coursed through various money transfer outfits (MTO) (55% market share) and Western Union (25% market share)⁵ (GSMA, 2008). Another consideration is BOP phone subscribers who send remittances through costly channels, and the use of mobile phones provides a less costly alternative with added value. The next section elaborates on these possibilities.

M-money and remittances

There are many reasons for m-money service providers to get into the remittance market. One is that remittances are relatively stable even during economic slowdown in contrast to other investment forms. Second, they are also expected to continue to increase as a consequence of globalization-induced labor migration (Maimbo & Ratha, 2005). These are supported by an ADB study in 2005 where, contrary

² “E-money shall mean monetary value as represented by a claim on its issuer, that is- (a) electronically stored in an instrument or device; (b) issued against receipt of funds of an amount not lesser in value than the monetary value issued; (c) accepted as a means of payment by persons or entities other than the issuer; (d) withdrawable in cash or cash equivalent; and (e) issued in accordance with this circular.” Circular 649, Sec. 2 (BSP 2009b:1)

For the purposes of this paper, m-money shall refer to a form of e-money transmitted through mobile phones.

³ Distinction is made between electronic banking and mobile banking as the former refers to “the provision of small banking products through electronic channels” (Basel 1998:3) while the latter offers financial services through mobile networks in mobile phones (Bångens and Söderberg 2008)

⁴ Mobile money can also refer to “services that connect consumers financially through mobile. Mobile money allows for any mobile subscriber – whether banked or unbanked – to deposit value into their mobile account, send value via a simple handset to another mobile subscriber, and allow the recipient to turn that value back into cash easily and cheaply” Mobile Money for the Unbanked 2009 Annual report, page 7

⁵ from Figure 5 “Estimated Market Share of International Person-to-Person Transfer Services (by number of transactions processed)” of the GSMA (2008) study

to the concept of remittance decay, international remittances sent by Filipinos and other Southeast Asian migrants have remained constant over time, regardless of their length of stay overseas. In the Philippines, increased remittance flows are expected to correspond to that of increasing numbers of overseas foreign workers (Nakanishi, 2009) as approximately \$16 Billion was remitted from abroad in 2008 (Bird, 2009).

Most of these international remittances were concentrated to urban areas while most of money flows going to rural areas are local transfers (from urban areas) (Pangilinan, 2007). This is explained by Ang (2007) who reveals that most Overseas Filipino Workers (OFWs) come from regions with lower poverty rates, namely Regions I, III, IV, VI, XI and NCR, implying that poor people are less to migrate to other countries (Pernia in Ang, 2007). This suggests that between international and domestic remittances, it is the domestic remittances that would be more relevant to the BOP. Hence, while the potential for m-money services includes the movement of money from migrant countries to home countries, more significant to the BOP would be the movement of money from the seemingly rich urban areas to poorer regions in rural areas.

In moving money, senders seek the most affordable and convenient channel. Further, the importance of physical infrastructures may diminish as more money transfer outfits consider new technologies, such as the internet and mobile phones, as alternative channels (ADB, 2004). This new landscape has made m-money a viable option to consider. Case in point are Filipino migrants whose high SMS usage (ADB, 2005) has been capitalized on by telecom companies and banks to offer mobile-based financial services including m-money. Notwithstanding their preference for existing formal and informal channels⁶, they use SMS to inform their recipients of their remittance.

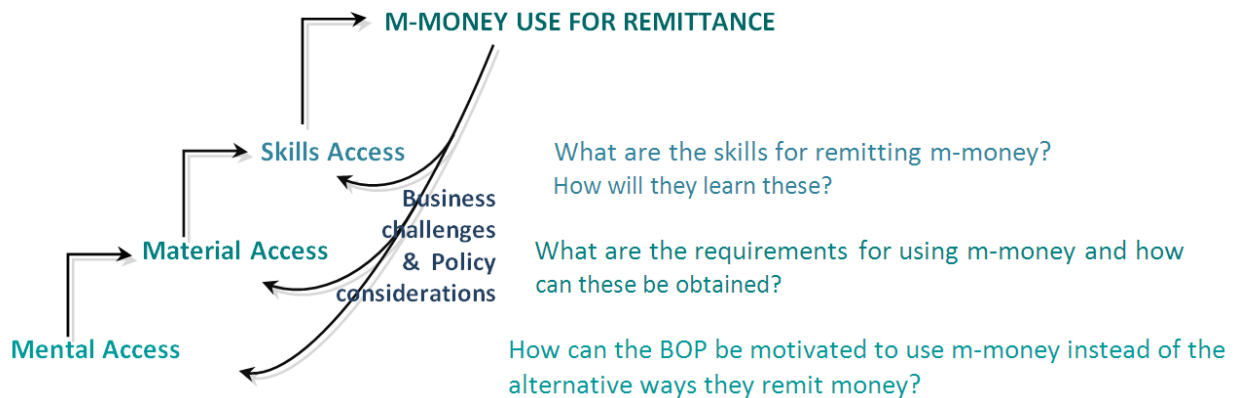
While there is growing research in the use of mobile phones for financial services, attention has been mainly on application design and adoption, and issues relating to financial needs and the measurement of impacts have been comparatively neglected (Duncombe & Boateng, 2009). Hence, the next part of this paper will look at m-money innovations in the Philippines to tap the huge remittance market and what it means for the BOP. The paper applies Van Dijk's (2006) Stages of Access to Digital Technologies to the potential adoption and use of m-money for remittance among the BOP (see Figure 1). The discussion is based on the results taken from LIRNEasia's 2008 Teleuse@BOP3 survey findings⁷ and CKS Consulting Pvt. Ltd.'s 2009 Teleuse@BOP3: A Qualitative Study⁸. Business and policy recommendations are then given on how to expand access and use of mobile money for remittance among the BOP.

⁶ Formal channels: banks, non-banks and money transfer agencies/ remittance agencies
Informal channels: courier service/door-to-door and hand carried cash brought home by relatives or friends (Maimbo & Ratha, 2005)

⁷ The survey was conducted in six countries with an aim to enable "more people at the BOP to join the information society". (LIRNEasia, 2008:4) In the Philippines, it had 800 respondents nationwide who belong to SEC E. This sample had, on average, a household monthly income of 126 USD, four household members and one mobile phone per household. The respondents came from urban and rural areas, and are those who have used a phone (regardless if they own it or not) in the preceding three months of the survey.

⁸ This study complements the Teleuse@BOP3 survey findings and was conducted in the same six countries. The Philippine sample consists of four respondents from the urban area (Metro Manila) and three respondents from the rural area (San Fernando, Pampanga). Both groups have one respondent who is an internal migrant or who is related to a migrant worker.

Figure 1: Stages of access to m-money for remittance



In applying the framework, this study looked at three issues that the BOP has to overcome in order to use m-money for remittance: Mental Access, Material Access, and Skills Access. Data for this was based on surveys that LIRNEasia conducted in 2008 and qualitative investigations in 2009.

Mental access looks at the BOP's interest in using m-money and their awareness that remittances can already be sent through mobile phones. For service providers and policy makers, it is important to know the factors that motivate the use of these alternatives vis-à-vis the traditional ways of remitting money.

As demand for the service is established, the next issues for the BOP are securing the necessary materials and skills for m-money. Crucial would be mobile phone ownership, the accessibility of service support structures, the required skills and the manner of obtaining them. Material access would be based on people at the BOP's access to mobile phones that can use m-money. It would include its affordability and the availability of the service (and supporting infrastructure) in all areas. The supporting infrastructure would include facilities for enrolling in the service, and cashing out money.

Skills access identifies the capability of people to send m-money. Since the process is similar to texting abilities and experience with e-loading, people's capabilities to SMS and pass loads are important measures.

Lastly, a description of their current usage will illustrate the factors necessary in expanding uptake and regular use. This includes determining who uses m-money, for what purpose, and how much and how often. With its use, how can trust in the system be enhanced?

From these, the paper will then discuss the business challenges and policy considerations in offering m-money and its innovations. These considerations are relevant for every stage, especially in introducing innovations for increasing usage among the BOP.

Expanding use of m-money to the BOP in the Philippines

Two kinds of m-money platforms are presently available in the Philippines: SMART Money and Globe GCash. Introduced in 2001, SMART Money is issued by the Banco de Oro (BDO) Universal Bank, in partnership with SMART Telecom. It is a debit card (pre-paid card), which can be accessed using an

automatic teller machine (ATM), a credit card terminal or a mobile phone. GCash, on the other hand, was introduced in 2004 by Globe Telecom and its fully-owned subsidiary, GXI⁹ Incorporated. GCash functions as an electronic money transfer facility that turns a mobile phone into an electronic wallet.

Despite the absence of comparable figures with respect to m-money usage, an indication of use can be seen from the number of registered users, the value of transactions handled, and the amount of revenue generated from the service. For instance, in 2007, Globe Telecom increased its GCash user base to 1.4 M GCash from 1.2M the previous year (Globe 2008b:61). At the end of the same year, they were already handling an average monthly transaction value of around P6.23 billion (Globe 2008b:65). SMART, on the otherhand, was able to generate Php 41M in revenue from SMART Money alone (PLDT 2008b:40). Moreover, the total value of remittances sent in 2006 using SMART Money was already around US\$28.9 million from abroad, while within the country it was US\$113.7 million (Proenza 2007).

This income and increase in user base may be due to various applications with which m-money can be transacted. With GCash or SMART Money, consumers can already purchase goods and services over-the-counter or remotely, pay utility bills, purchase airtime credits and send international and domestic mobile remittance (m-remittance) (Proenza, 2007, Mendes, et.al 2007). It has even lead to a Filipino-version of e-commerce that combines use of online social networks that are completed with m-money transactions (Alampay 2008). While this reflects the transaction demand for m-money and m-banking, Proenza (2007) explains that the demand has still been predominantly from high income urban dwellers largely because they are easier to reach.

The challenge then is to expand m-money usage to lower income, rural dwellers, in particular, users from the BOP. If it is to use the technology for remittances, the potential demand could be from people who have relatives working abroad or people who have migrated internally to other regions in the country.

In a survey of the BOP that LIRNEasia conducted in 2008 (n=800), 9% had relatives working abroad and 13% had migrated internally to other regions of the country. Of them, 61% sent money¹⁰ (n=172 working abroad) (LIRNEasia 2008), while a majority (71%, n=74; 55%, n=103 respondents who have family members working away from home) received financial support on a monthly basis. Chances are, a considerable number still use traditional remittance channels. According to the NSO (2007) of remittances sent, 77% are coursed through banks, 14% through door-to-door services, and 9.2% are sent informally through the agency, local officers, friends, co-workers or other means. More recent reports from the BSP says that the number of Filipinos who send through informal channels have been going down and estimates this to be only 5% in 2008 (Gonzales, 2009).

Given this, how can people at the BOP be convinced about the advantages of using m-money, instead of the traditional and informal methods mentioned?

⁹ GXI is registered with the BSP as a Money Transfer Outfit/ Remittance Agent, which falls under the third classification of e-money issuers (EMI-others) recognized by the BSP. The other two types are: (1)a bank and (2)a non-bank financial institution recognized by the BSP (BSP,2009b)

¹⁰ The average amount sent among Filipino OFWs is \$90 per month, according to 58% of the respondents who have household members working abroad.

Mental Access

Almost a quarter of the BOP (23%, n=800) were found in LIRNEasia’s survey to be aware that financial and banking services can be accessed through mobile phones, and 41% of them knew sending or receiving money through ICTs was possible. Moreover, 38% who were unaware of the service (n= 469) expressed interest in using m-money transfers (LIRNEasia 2008).

However, the BOP’s reasons for not using payments through telephones or computers (see Table 1) reflect barriers to subsequent usage of m-money. For example, 1% and 4% of those who were aware of such services but did not use them suggest a challenge of overcoming motivation to change.

Table 1: Reasons for not using payment services over the telephone or computer

Reason	% (n=294)
I do not know how to use it	56
It’s not applicable to me	16
I do not own a telephone or computer	10
My telephone does not have that capability	9
It is too expensive	9
These are not reliable/trustworthy	4
I am satisfied with my present mode of obtaining such service.	1

LIRNEasia Survey (2008)¹¹

Few of the respondents actually had issues with m-money’s trustworthiness (4%) (see Table 1), which could have been a factor in their decision to not try the mobile channel. Their trust may have to do with Filipinos’ high use of SMS and e-loading which makes them highly exposed to electronic exchanges. Their experience has been very positive as reflected in their high trust rating of e-loading (4.63)¹² in the survey (LIRNEasia 2008). This high trust makes the Philippine market feasible for m-money services, as the concept of transferring information and monetary values are somewhat similar.

The bigger challenge is explaining how it actually works, and the benefits that could be gained by using the technology. In the case of remittances, respondents from FGDs perceive that the different and often informal ways of sending money are more trustworthy than their own ability to send m-money. The investigation also reveals that younger people are more interested in m-money than those older than 35 years of age (CKS 2009).

Collectively, respondents were open to using such a service, but said they “will need to see the service do very well, prove its reliability, have to be recommended by their social networks and competitively priced for them to use it.” (CKS 2009). This is similar to the concerns for sending money home--security of the transaction (that it gets home), excessive fees¹³, and time it takes to receive the money (Comminos, et al, 2009). The popularity of Western Union’s remittance delivery indicates that it addresses said concerns, along with the BOP’s preference of having remittances delivered at home to

¹¹ multiple response question

¹² where 1 means “I distrust this method completely” and 5 means “I trust this method completely”, respondents were asked to rate their degree of trust in top-up methods used: top-up cards, electronic reloads, load transfers from others, and SMS top-ups

¹³ fees are dependent on access to bank accounts, the speed of transfer, the destination, amount, exchange rates, etc. (Comminos et al, 2009)

save time and travel costs (CKS, 2009). Hence, to be considered an alternative remittance channel, m-money services have to assert their added value and service quality to the BOP.

For subscribers, the benefits that mobile currencies provide include savings in cost, time, and security. Other studies have estimated that the advantage of using SMS payments over over-the-counter transactions would be around Php 216 (roughly \$4.25), when one considers the cost of travel, and the opportunity cost of time spent for the transaction (Owens, 2006:6, as cited in Proenza, 2007:52). This is aside from the safety it provides given the risk of burglary or theft. The box below illustrates such savings:

BOX 1: The Common Remittance process

To understand the potential of m-money for remittance purposes, one must first understand the nature of domestic remittances among the poor. Take the case of Ms. A, who works as a domestic helper in Manila, and sends money back to her parents monthly:

" I send Php2000.00 per month to my mother through Cebuana Lhuillier (a pawnshop). The first time I sent money through them, I was asked for some identification. I provided my postal ID, after which they gave me a customer ID that I could use for future transactions. For every remittance I send, I provide the name of the person, and their address. For every transaction I do, they provide a control number. I pay a fee of Php70 per Php1000 I send. So every month I pay Php140. I call my mother to inform her of the control number. I also text her the control number to make sure she gets it correctly. She can then collect the money from her end by showing her ID (I think she will also get a customer ID once she's been a client before), and the control number. Without the control number and ID, she will not be able to get the money. It costs Php 15 to travel to get the money, and another Php15 back."

In the case above, one can see that for every Php2000, they spend about Php195 (P140 fee; SMS/call P10; sender transport P15; receiver travel P30). This translates to almost 10% of the transaction value. One can assume that a travel cost varies depending on the distance relatives are from the town centers.

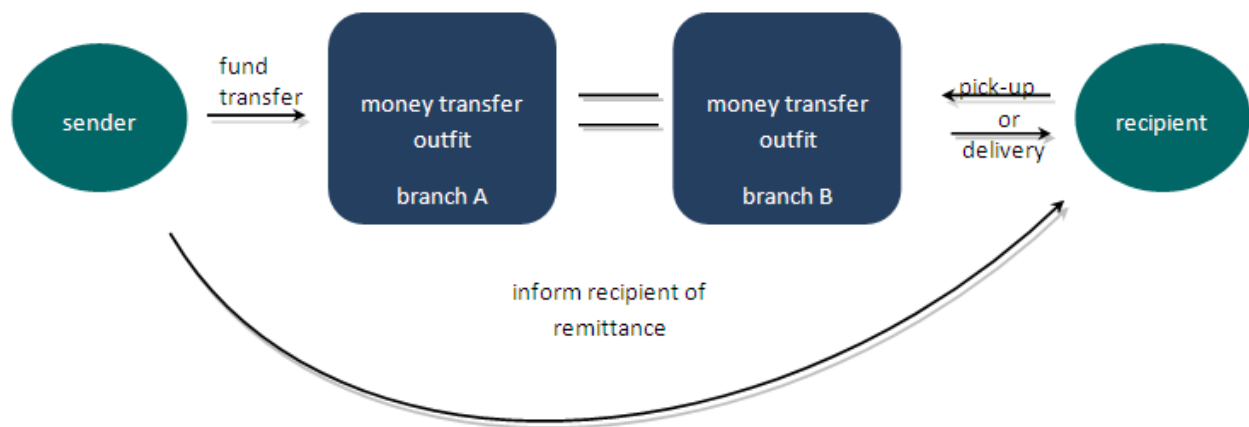
Monetary savings are evident with m-money, as the sender and recipient collectively save up to Php 180. Assuming that the sender did her cash-in at Globe Wireless Centers for free, she only needs to spend an additional SMS fee of Php 2.50 to send the remittance through mobile. The recipient, however, only needs to pay a minimum of Php 20.00, assuming that she went to a partner center charging a 1% cash-out fee. Once in the cash-out center, the recipient has to reply with her MPIN to a system-generated SMS initiated by the cashier that costs Php2.50 worth of airtime load. The said SMS is an additional security measure to ensure that the person doing the cash-out is the same owner of the GCash wallet/ mobile number.

Evidence of trust in the technology and its security, is seen with how some people send their transaction details and control numbers via SMS (see Box 1 Story). These people argue that such method might be safer than having it written on paper, which may be misread, miswritten or lost. This was captured in the qualitative investigation of LIRNEasia on Teleuse@BOP3 (CKS 2009):

"...respondents in all these countries did not hesitate in sending their transaction identity numbers for remittances over an SMS. In (the) Philippines, Thailand, Sri Lanka as

well as Bangladesh, migrant workers do not hesitate in sharing the important details of transactions via text messages or calls to their family members in their country of origin. They in fact, prefer it, so that the written record remains conveniently at hand and does not fall in wrong hands, which could happen if they were written in paper (CKS 2009:88).

Figure 2: Sending local remittance through traditional channels (MTOs)



Sending remittances, whether locally or internationally, would require the sender to eventually communicate with the recipient that money was being sent. This could either be through a call, an SMS, or an email message.

From an information systems perspective, this process is simplified with the m-money platform since the responsibility of informing the recipient shifts from the sender to the m-money service provider and eliminates the costs of calling and texting recipients regarding their remittance (see Figs. 3 & 4). It is the information system that automatically sends confirmation texts to both sender and recipient indicating the success of the transaction at the same time the m-currency is transferred. Moreover, it makes sending money more flexible: senders can cash-in money in bulk then send money in increments, anywhere at any time, provided that it is within the limits of maximum number of transactions allowed per day. This reduces the traveling expenses and time spent when sending money through MTOs.

Figure 3: sending local m-remittance through cash-in/out centers

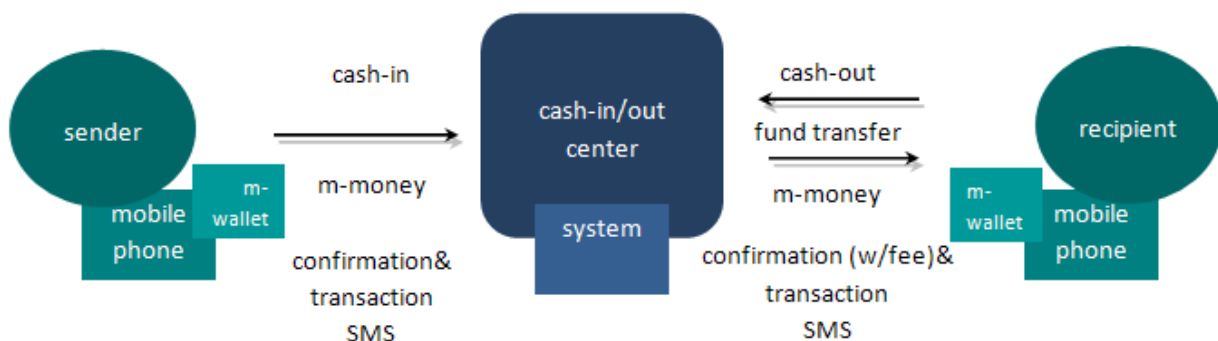


Figure 4: sending local m-remittance through mobile phones

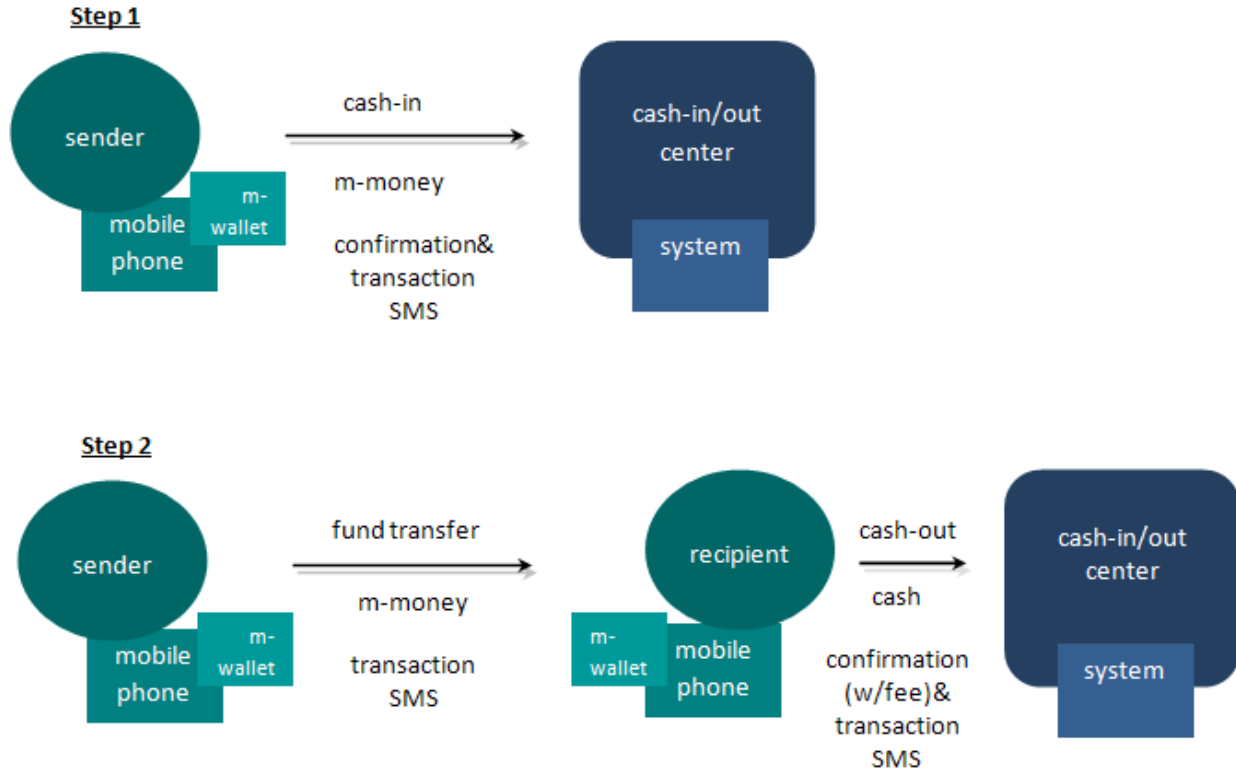


Table 2 shows that the fees for sending money are dependent on the available partner centers in the area; for example, a sender may cash-in at a center charging a 1% transaction fee while the recipient may cash-out at a partner center charging 5%. Compared to other remittance channels, fees for m-money services occur both at the first and last mile¹⁴ of the process, a feature which may not appeal to most recipients as they are used to the sender shouldering all the transaction costs. Therefore, it is important to explain to customers that in summing all the fees, m-money services are still comparatively cheaper than other existing channels.

Based on price rates alone, the BOP may still use their existing remittance channels in the event that the closest m-money center to them would be the one that charges a 5% transaction fee. Otherwise, price rates should serve as one of the incentives for shifting to m-money for remittance.

¹⁴ first mile: sending the remittance
last mile: receiving the remittance

Table 2: Fees for sending Php 1,000 worth of domestic remittance

		<u>Cash-in</u>	<u>Sending Remittance</u>	<u>Cash-out</u>	<u>Total (Price range)</u>
M-money	GLOBE GCash	Globe Wireless Center (no fee) Partner Center 1 (1% or Php 10) Partner Center 2 (5%)	Php 2.50 per SMS	(+ confirmation SMS: Php2.50) Globe Wireless Center or Partner Center 1 (1% or Php 10) Partner Center 2 (5%)	Php 15 to 105
	SMART Money	SMART Wireless Center and other Partner Centers (no fee)	Php 2.50 per SMS	SMART Wireless Center or Partner Center 1 (1%) Partner Center 2 (5%) BDO/ EPCI ATM (Php 3) Express/ Megalink ATM (Php 12)	Php 5.50 to 55
	SMART Padala	_____	SMART Wireless Center or Partner Center 1 (1%) Partner Center 2 (5%)	SMART Wireless Center or Partner Center 1 (1%) Partner Center 2 (5%) BDO/ EPCI ATM (Php 3) Express/ Megalink ATM (Php 12)	Php 13 to 100
Pick-up Remittance	Western Union	_____	Php 65	_____	Php 65
	Cebuana Lhuillier	_____	Php 60	_____	Php 60
Delivered Remittance	LBC Peso Pak 24hr Door-to-door	_____	Php 140	_____	Php 140
	LBC Peso Pak 48hr Door-to-door	_____	Php 95	_____	Php 95

Total fees are computed based on the price rates retrieved from respective websites and e-mail correspondences¹⁵; note that LBC, Western Union and Cebuana Lhuillier offer different ways of remitting money. They are not limited to delivery or pick-up remittance. For purposes of this paper, one method and price rate per MTO was chosen.

¹⁵ e-mail correspondences with: Diana Bonghanoy, Quality Relations Specialist, Cebuana Lhuillier
Don Nino Santos, GCash Services Team
Lei Madrid and Yani Mallari, SMART Customer Care
Western Union's fee is verified by their Customer Service Representative

Still, even with the relatively low transaction costs, the proportion of SMART and Globe subscribers utilizing SMART Padala or GCash remains small. Of the 25 million SMART subscribers, only 7 million have activated SMART Money SIM cards. Of these, only 500,000 are active users. Globe, on the other hand, has 1 million activated GCash SIM cards from its 19 million subscribers (CGAP 2008).

Material Access

The perceived ubiquity of mobile phones among all segments of society including the BOP has been the rationale for considering the technology for the unbanked.

LIRNEasia's survey confirmed that the BOP have easier access to mobile services than banking and financial services. In the survey, only 13% of the BOP (n=800) reported having a bank account and only 1% had access to credit card. This is in contrast to the 1.36 mobile phone per household for the same sample. Hence, the availability of mobiles in the hands of the BOP makes the service more feasible.

Still, reasons cited in the LIRNEasia survey (refer back to Table 1) show that issues on phone/computer ownership, and fees, still hinder some users in accessing telephone and computer-based payment services (10% and 9% respectively, n=294). There are also those with the perception that their phone is not capable of using that m-money applications (9%, n=294). In reality, such capability however, is not dependent on the mobile phone itself but on the SIM card. While m-money for remittances in the Philippines is an SMS-based service applicable to any mobile phone with an SMS feature, it is however, limited to the two telcos who are providing m-money services-- Globe Telecom (GCash) and SMART (SMART Money and SMART Padala). M-money services are exclusive to the subscribers of the said telcos and cross-network money transfer is not possible. In theory using m-money may also be possible with shared handsets; however, this would also have implications with respect to the privacy and security of transactions.

To use m-money, the BOP non-subscribers either had to switch to another network (purchase another SIM card) or use two SIM cards, wherein one will be used for m-money transactions. This is evident in the Philippines, as among the countries surveyed, it had one of the higher reported multiple SIM use (16%, n=506). It was noted, that one BOP user interviewed said she usually uses one number/network for regular SMS-communication; she uses the other whenever she calls once a month and coordinates her remittance (LIRNEasia 2008).

Besides access to any basic mobile phone use of m-money for remittance would also require access to support structures such as cash-in/out centers and facilities for enrolling in the service. Cash-in/ out centers are somewhat similar to MTOs. They are physical outfits that convert cash to m-money (cash-in) and vice versa (cash-out); they may also facilitate the mobile fund transfer from the sender to the recipient. This is because there are two ways to send m-money using the mobile platform-- through the cash-in/out center (see Figure 3) or through the mobile phone (Figure 4); both however require cash-in transactions prior to funds transfer. The Globe GCash service conducts both transfer methods under the same brand. SMART however, markets each process in a different brand: SMART Money allows for phone-to-phone transfers (Figure 3) while SMART Padala uses the cash-in/out system (Figure 4). A SMART Money card also allows users to withdraw credit or to charge purchases through any MasterCard terminal. It also allows users to send cash credit from one's Smart Money account to another person's Smart Money account using their mobile phone (Proenza, 2007). Besides this, both Globe and SMART operate in partnership with other agents (called partner centers) such as convenience stores and pawnshops. This helps increase their reach to all groups, particularly those in rural areas who have problems in accessing financial institutions.

While accessibility generally overrides cost concerns when sending remittances, as exemplified by the BOP's preference for the Western Union Delivery Service, cash-in/out fees are still a concern since this sector heavily relies on cash for their expenses. Hence, having limited network/outlets accepting m-money for transactions poses problems. And with less than 1% of the 1 million merchants selling airtime registered to perform this function, the mobile transfer process now becomes similar to the pick-up remittance process: recipients have to go to physical institutions to utilize the money (CGAP 2008). These new options provide customers not only with convenience, but also choice. What is important, however, is greater transparency with respect to rates, as fees may vary depending on the 'partner' used. Also, choice would still be more limited in rural areas.

Other barriers to using the technology include: (1) the BOP's access to acceptable identification documents (such as formal home address required for identity proof (CKS, 2009)) which are needed to activate an account or to change m-money to cash and (2) the method of converting cash into electronic value and the other way around, as required by banking regulations.

Skills Access

M-money services require SMS-related skills as well as informal financial skills similar to receiving or sending remittances through the usual platforms.

With 99% of the BOP respondents being knowledgeable in using SMS and 98% saying they write their own SMS (LIRNEasia 2008), coupled with the considerable number who have sent remittances it is surprising that 56% of the BOP still stated that their primary reason for not using such services is because they do not know how to use the service (refer back to Table 1). This is true with respect to both internal and external migrants.

Part of the reason stems from the older age groups' perception that using m-money requires other sets of 'soft skills' acquired from using computers, bank ATMs and other automated systems, none of which are prominently available to them (CKS 2009). Although cash-in/out centers and customer service hotlines technically serve as information hubs for potential users of m-money, the BOP still depend on their social networks for information inputs. However, they also exercise a great deal of individual decision-making through their reliance on information on the internet. Respondents rely on their friends and other contacts in their social network for their information but they have also begun to use the internet effectively (CKS 2009:109). This implies that the speed of adoption could be exponential once a part of a member of a social network becomes convinced and learns the process.

Credibility comes into play when respondents are dealing with important business related issues on their mobile phones, when financial transactions are being carried out or new services are experienced (CKS 2009). In most countries people would still prefer face-to-face transactions to ensure transactions occur 'effectively' (sic). It is not that they distrust mobile phones, but find it is difficult to imagine how transactions can be done over the phone. This is the challenge that mobile currencies have to overcome: demonstrating that such a service can work and perhaps, when dealing with 'larger' amounts, the BOP has to weigh the risks a bit differently.

Conclusions

Given the dearth of studies that analyze how mobile phones are inter-relating with the pre-existing informal practices that the poor favor (Duncombe & Boateng, 2009), this study looked at how m-money as an alternative remittance channel can substitute for long established ways that the poor remit money to their families.

The feasibility of tapping Filipinos at the BOP to use m-money for banking and remittances is good. A large percentage of them have relatives working abroad or in other parts of the country and based on the LIRNEasia survey, only 13% of the BOP have bank accounts. Personal phone ownership among them is high, and there are 1.36 mobiles per family. They also have the prerequisite knowledge in SMS, and high knowledge and trust in electronic reloading. They also have high awareness in comparison with counterparts in South Asia and South East Asia regarding the capability to send money (41%) and do banking (23%) using the phone.

However, despite the application's obvious relevance to many Filipinos at the BOP, and their knowledge of the financial services such as banking and money transfers offered through mobile phones, only 1% of the BOP has used it for banking services, and only 5%¹⁷ has made payments or received money through this method. The challenge is how to increase these numbers.

Business Challenges

The main challenge for m-money usage is more mental since availability of mobiles and the skills necessary for using them are generally present even among the BOP. For a country with a long history of migrant labour, it has already an ingrained network and system for sending money home.

The limited awareness of the BOP raises challenges on the businesses' way of positioning their m-money product. They face competition from other fund transfer agents-- pawnshops offering remittances and existing MTOs. As people at the BOP have been used to and are more comfortable with entrusting their money to a (1) Pawnshop-MTO or a (2) friend/relative visiting the place of their recipient (CKS, 2009). Telco-bank partnerships have to stress their comparative advantage by raising awareness on the benefits of m-money and the security of its system.

Marketing m-money, however, has largely been focused on international remittances. But, as this paper has shown, more significant to the BOP are domestic remittances. This is because flow of international remittances has tended to go to more affluent segments of the population, whereas domestic remittances flow from urban areas to poorer provinces. Furthermore, there is minimal transactional cost savings with international remittances, since all of them are all linked to formal banking channels. With domestic remittances, however, more direct transfers are possible, without necessarily going through formal financial channels, and there are greater cost savings from fees (see Table 2). In fact, domestic m-money transfers have had larger volumes in terms of transactions and amounts.

Developing the needed skills and confidence is also an important challenge to overcome. The existing procedures for using m-money should be reviewed with the BOP in mind. An example would be the system generated SMS for m-money; considering the literacy level of the BOP, the structuring of messages should be easy enough to understand and that options to have it written in the native

¹⁷ 2% regularly do this, 3% have done it, but do not do so regularly.

language or dialect of the BOP may facilitate ease in use. Moreover, Encouraging use of this system would need to consider how people at the BOP gain skills to use new technologies and processes. In this, social networks have an important role to play.

Limited cash-out centers and retail outlets that accept m-money may restrict the attractiveness of using m-money as recipients still have to convert them to cash. Pawnshops are heavily favored by the BOP for local remittances due to their minimal requirements and customers feel they do not have to dress nicely to visit such venues (Iglesias, 2009). To address this, the m-money centers should not be intimidating to BOP customers and should provide helpful information on m-money use. In this, village convenience stores have proven in the past to be valuable allies, especially with respect to electronic loading.

Policy issues

The success of m-money in reaching the BOP is tied to the telecommunication policies that address the required infrastructure, available services and applications (Ahmad, 2006). Important, as well, are banking policies that also affect the regulatory environment of m-money use. With m-money services offered by Globe and SMART, the Philippine Central Bank (BSP) is technically regulating Banco de Oro (BDO) (a bank), and G-Exchange (a money transfer agent), and not the telecommunication companies (SMART and Globe respectively). In the case of G-Xchange, the company has been regulated by the BSP as a remittance agent since its establishment in 2005¹⁹. It is covered by BSP Circulars and has to comply with Anti-Money Laundering laws. Among the regulatory implications of these laws are the need to verify the identity of the users, and limitations on the amounts that subscribers to the service can transact.

This would have implications on the BOP if such policies affects the amounts the poor are able to remit or restrict access to the service altogether. The LIRNEasia survey has revealed that the average money sent per month by external migrants abroad to the BOP respondents is \$90, an amount that does not exceed the AMLA monthly load limit of Php 100,000 set by the BSP. AMLA restrictions then, may not be an issue for the BOP since they do not move large values per month. They may, however, be more affected by the know-your-customer (KYC) regulations for banking, as they may have difficulty in obtaining proper identification cards, documents and other requirements, that were not required when getting a prepaid mobile phone line. The challenge, for policy-makers is to encourage access to the said documents, which may also be beneficial for other activities.

Finally, an important policy consideration is always the protection of the customer. Unless customers are assured that their transactions can be secured, they will not be convinced to using m-money as an alternative to the present modes that they use. In the Philippines, the BSP has already ruled that m-money is not considered a deposit and hence do not earn interest. One implication is that it is not insured. Nonetheless, the Central Bank does require that the amount of m-money in circulation should always be backed up with an equal amount by its issuer. It also requires proper redress mechanisms be put in place as well as secure information systems and records management.

With good policies, the central bank can encourage the use of m-money among businesses and consumers. Technically, the idea is to regulate the playing field of m-money and not the players, so as to extend reach to target customers even at the BOP.

¹⁹ GXI was set-up a year after Globe developed the GCash service.

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