

Using Mobile Money as a Conditional Cash Transfer Conduit in the Philippines

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Abstract

Many developing countries are providing conditional cash transfers (CCT) to address development challenges among its poorest people. In the Philippines, this has been expanded significantly, such that in a span of five years, the amount of cash transfers to the poor has increased by 3300%, with Php34B given for 2013 alone according to the Department of Social Welfare and Development (DSWD). This rapid expansion has made the government logistics for delivering cash transfers more complicated and difficult. As such, it has partnered with GRemit to tap GCash's network of merchants to help reach the poor in all areas in the country.

This study evaluated the delivery of conditional cash transfers thru GRemit by initially applying Van Dijk's (2009) model of digital access through a random survey of CCT beneficiaries in one province in the country. Thereafter, cost comparisons were also done to determine if a mobile money system is indeed more efficient, secure and less costly, based on interviews with program implementers and randomized surveys of 194 CCT beneficiaries in San Jose, Mindoro Occidental. Subsequent field observations of financial service and mobile service infrastructures in four other municipalities where CCT was being implemented were also done to determine the technical feasibility of the program in a broader context.

The study findings suggest that using m-money for CCT is already technologically possible, and may be financially more cost effective in comparison to the amount currently paid by DSWD for delivering cash transfers. However, this is not yet possible in all communities in the Philippines, since the support infrastructure for m-money services varies from province to province. Given that there are already various m-money providers in the market place, considerations of possible m-money conduits can also be more location specific. Furthermore, using m-money for CCT can be even be more advantageous if local m-money ecosystems are strengthened and further developed in order to reduce transaction costs by retaining CCT in m-money form. Developing that ecosystem, however, requires further interventions, such as

possible limitations on where the cash transfers can be spent and making arrangements for private vendors to encourage purely m-money transactions in the future.

I INTRODUCTION

Since its inception in 2007, the Pantawid Pamilyang Pilipino Program (4Ps) has become one of the country's largest social protection programs. As of September 2013, there were already 3.9 million beneficiaries on record with the Department of Social Welfare and Development (DSWD), with the goal of expanding this to 4.3 million before the end of Philippine President Aquino's term in 2016.

However, because the unanticipated scaling and rapid expansion of this conditional cash transfer (CCT) program compared to the previous' administration, DSWD and Land Bank of the Philippines (LBP) has encountered logistical difficulties in its implementation of the program. As such, it has partnered with private payment providers, such as GRemit to help deliver CCTs. This partnership is the program's initiative for bringing the money closer to the beneficiaries, by utilizing partners such as GCash Remit, rural banks and other merchants of the market, and helping reduce transportation costs for the beneficiaries.

Research Problem

This research addressed the following questions:

1. How was the GRemit system for disbursing cash grants to the CCT beneficiaries implemented?
2. In terms of accessibility, transaction cost, and technology use, how does the system compare with other existing disbursement systems of the CCT program?

3. How can the system be enhanced in order to maximize the advantages of mobile money systems already in place in the Philippines?
4. Can such a system be scaled-up at a national level?

Research Objectives

This study focused on the following objectives:

1. To describe how the GRemit system works in disbursing cash grants to CCT beneficiaries;
2. To identify ways for improving the system of CCT delivery by leveraging the existing m-money ecosystem;
3. To identify the spillovers and/or new opportunities for using m-money for CCT at the community level;
4. To identify enabling factors (enablers) and hindrances (barriers) in scaling up the use of m-money for CCT.

II. CONCEPTUAL FRAMEWORK

In analyzing the socio-technical viability of using mobile money as a system for delivery of conditional cash transfers, the research applied Van Dijk's model for digital access. According to Van Dijk (2009) digital technology adoption can be explained by looking at the following four conditions of access:

- 1) Mental Access – pertaining to level of interest and anxiety in using a new technology;
- 2) Material Access – the actual possession of computers and network connections;
- 3) Skills Access – the presence of digital skills provided through education or social support;
- 4) Usage Access - significant usage opportunities or unequal distribution of them.

The operational aspects of its implementation were then analysed by looking at the financial and technical viability of its implementation, both from the program implementer and beneficiaries' perspective.

II. METHODOLOGY

Mixed methodologies were used for the study, comprised of field observations, interviews and surveys among conditional cash transfer beneficiaries.

Initial interviews of personnel from the Department of Social Welfare and Development (DSWD) Central Office and DSWD Region IV regional office regarding the implementation of CCT through GRemit were done in order to understand the history and rationale of using GRemit as an alternative conduit. This is important since Region IV (MIMAROPA) served as a pilot site for distributing money to the beneficiaries using the GRemit. This was also done to better understand its actual implementation and make revisions in the survey tool as necessary. Questions on the usage of cellular phones by the beneficiaries in receiving money and on their perspectives regarding the use of cellular phones were deleted since they were not applicable to the way CCT distribution via GRemit was implemented.

Subsequently, surveys of CCT beneficiaries and field observations in a province where GRemit was the conduit for delivering conditional cash transfers (CCT) (i.e. Occidental Mindoro) were done. In particular, Conditional cash transfers (CCT) were distributed in San Jose, Mindoro Occidental for three days in October 29-31, 2013. It takes three days, because the cash is 'manually distributed', which should not be the case if m-money was used. The length of time is due to the fact that the merchant who distributes the money to the beneficiaries is not a local in the municipality and will only go to the distribution sites on the scheduled dates provided by the DSWD. The partner is likewise limited by the need to be physically present in all sites, and hence has to work within the schedule. Based on the schedule provided by DSWD, around 4093 CCT beneficiaries were expected. There were eight payout venues in San Jose, Occidental Mindoro

and barangays were clustered together in these different payout venues. The barangay is the basic unit of government and the lowest level of political and governmental sub-division, which is under the administrative supervision of either a city or a municipality. Payout venues were usually open spaces in the barangay that could accommodate a large number of individuals (e.g., open park, barangay hall, and school ground). There were 192 respondents randomly selected from thirteen barangays out of the twenty-two identified CCT barangays in San Jose, Occidental Mindoro. Respondents from six barangays were surveyed on the first day of the payout, four barangays during the second day and three barangays on the third day. During the payout of cash grants, survey respondents were randomly selected by identifying every fifth CCT beneficiary in the payout line. To ensure that CCT beneficiaries from different barangays were represented, enumerators were distributed along the different lines designated for each barangay.

Almost all the respondents were women.¹ This is because by design women are intended to be the main recipients of the cash transfers. Most of the respondents walk, and among those who have to pay for transportation, their mean travel cost is Php15.99 (s.d. 10.6). Also, although the average travel time to the distribution center is only 28 minutes, there is a large variance, with one person reporting that she travelled for a day and spends Php100 for the trip², whereas others said they could walk to the distribution point within a few minutes. Respondents' ages range between 15-53.

Subsequently, field observations on critical m-money infrastructure were also conducted in two other provinces (Agusan del Sur, and Isabela) where conditional cash transfers were being implemented from May to June 2014. Data systematically collected included assessments of the availability of electricity; mobile services and information on the availability of m-money cash out services (GCash and SMART Padala); and availability of banks and ATMs in the

¹There were a few cases where the husbands or children collected the funds because of unavoidable reasons.

²She was from the town of Natondol in Ilin Island. Although it had a different distribution point in the same island (bgy Pawican), it was noted that the mean travel time for people there was higher than the ones travelling from towns nearer San Jose. Because she wouldn't require riding a boat, this would nonetheless indicate differences in road/transportation infrastructure in the area, which can be said in many dispersed communities in the country.

locations. These were locations that were not necessarily being served through GRemit, but instead were being served through other conduits (e.g. banks, postal service, etc.). The field observations were done to determine the technical feasibility of applying the m-money technology in a more generalizable context, where other m-money providers can also be tapped.

III. RESULTS

SOCIO-TECHNICAL FEASIBILITY

Based on interviews and actual observations of its implementation, the GRemit partnership was not an m-money model in the technical sense, because it was only using the GRemit merchants as distribution channels, and was not sending cash transfer directly to the phones of beneficiaries. However, the possibility of using m-money for this purpose has been demonstrated in other countries (e.g. Niger), and also piloted recently for Typhoon Haiyan victims.

If it is to be implemented for CCT locally, part of assessing its feasibility would require understanding community preparedness, as well as available market/financial infrastructure in the communities.

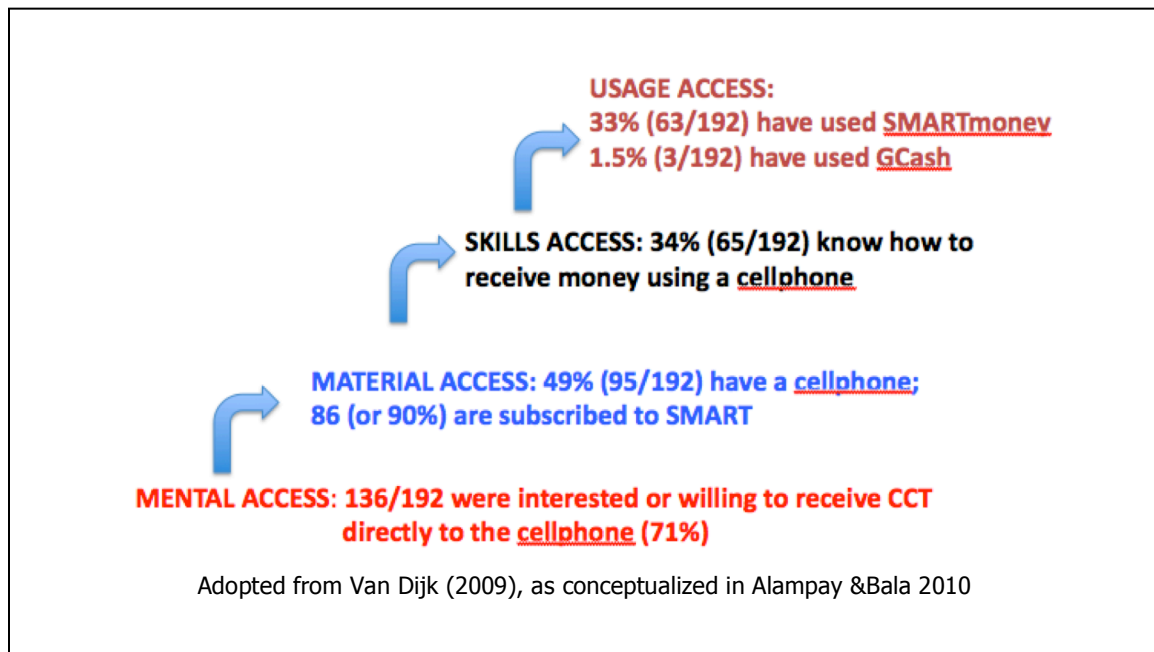
For instance, the World Bank's Findex data in 2011³ shows that only 12.5% of Filipino adults have received money on their mobile phone. This figure is also lower for the bottom 40% in income at 11.8%, although it is higher among women (13.2%) and adults in rural areas (16.0%). This is also likely to vary from community to community.

³ See <http://datatopics.worldbank.org/financialinclusion/>

As such, assessing a community's preparedness should include their interest in the use of the option, their access to mobile phone services, knowledge of using m-money services and previous experience using it.

This would require scoping the availability of needed m-money support infrastructure in the local ecosystems, including places to cash out (e.g. partner vendors and available ATMs). In San Jose, Mindoro Occidental, for instance, there was strong interest in considering this option, and there was high access to mobile phone services. M-money partners were also present and known to many beneficiaries (see Fig. 1). However, the main provider of such services was not the same as the selected DSWD partner for the area. This may have had to do with the fact that the other provider of m-money services (Smart Money) was not aware of the possibility of providing their service for CCT at that time⁴. These kinds of situations are likely to vary from community to community.

FIGURE 1: Stage of Access for Beneficiaries with respect to receiving CCT via mobilemoney



⁴ Based on an interview with Lito Villanueva of SMART Telecoms' Innovations group.

For instance, field observations in four other locations in two provinces⁵ revealed that the possible remittance infrastructure (Table 1) and quality of mobile services (Table 2) vary greatly.

Table 1: Remittance Infrastructure in CCT sites

Establishment	Isabela Province		Agusan del Sur Province	
	Palanan	Divilacan	Sta. Josefa	La Paz
Banks	None Landbank opened in 1990 at Dicabisgan West, but closed in 1995	None no electricity, no internet	None	1 (People's Bank of CARAGA, Inc.)
ATM	None	None	1 Bancnet (at municipal hall) charges Php30/ withdrawal)	None
GCash	4 sites but only in poblacion, tarpaulins in every sari- sari store	None no network	None	None
Smart Padala	3 sites	None	None	20+ sites
Other remittance channels	None M_Lhuillier was conduit of 4Ps for one pay out period (Sept 2013)	None	M Lhuillier and Cebuana Lhuillier is present	Western Union

In terms of possible m-money provider presence, G-cash was present only in one, and SMART Money was in two. The quality of mobile signals also varies not only among municipalities, but also communities within them.

Table 2: Quality of Mobile services in CCT sites

Service Provider	Isabela Province		Agusan del Sur Province	
	Palanan	Divilacan	Sta. Josefa	La Paz
SMART TnT	Didagun (none), Didian (weak) Dialawyaw (moderate) Malicucu (strong)	Moderate	Moderate	Strong
Sun Cellular	Didagun (none)	Weak	Weak	None
Globe	Didagun (none), Didian (weak) Dimasari (weak) Centro East (strong)	None	None	Moderate
Touch Mobile	Didagun (none) Marikit, Sta. Jacinta (moderate)	None	None	Moderate

⁵Observations were done in May 2014

	Dimatican (strong) Centro West (strong)			
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B. FINANCIAL FEASIBILITY

If the primary consideration for selecting an alternative delivery channel is on the basis of feasibility, then the m-money alternative must cost less than Php42, which represents the cost currently charged by partner service providers like GRemit and MLhuillier for such a service.

Table 3 shows the prevailing costs structure of current m-money providers for transferring money. It shows that the delivery of CCT is financially feasible for m-money providers like SMART Money and GCash, even if the amount to be transferred is of smaller increments and done more frequently. This would allow DSWD, for instance, to send more frequent cash transfers monthly, and would help smoothen cash flows for the poor beneficiaries. This is difficult to do, at present, because of logistical and cost considerations. At current market prices, SMART Money can already provide the service at a lower cost.

TABLE 3: Comparison of m-money Total Transaction Costs (DSWD+beneficiary)

Remittance Range	Current model	SMART Money	Gcash
Php1-Php500	Php42	Php10	Php20
Php 501-1000	Php 42	Php 15	Php 20
Php 1001-1500	Php 42	Php17.50 to Php 22.50	Php 40
Php1501-2000	Php 42	Php25-30	Php 40
Php 2001-2500	Php 42	Php32.50-Php37.50	Php 60
Php 2800	Php 42	Php 43	Php 60

III. FINDINGS & RECOMMENDATIONS

GRemit is an arm of GCash, one form of m-money in the Philippines, but the inherent advantages often attributed to m-money in the literature, such as its ability to send funds easily, at less cost and more securely (see Jenkins 2008)⁶, was not actually applied in the delivery of m-money for the CCT. As such, the viability of m-money for this purpose was never really tested in its actual implementation.

Nonetheless, this study has found that:

1. **Using M-Money for CCT is already technologically possible.** This has been done in some countries (e.g. Niger) and implemented in some form during post-rehabilitation work in several regions of the Philippines (e.g. the Visayas) due to Typhoon Yolanda/Haiyan
2. **M-Money for CCT is financially more cost efficient.** This is true if CCTs are smaller in amount (<Php2800) and done more frequently.
3. **Some but not all communities are ready for CCTs through m-money.** Consideration for implementation must be made based on the availability of services, and should be

⁶ Jenkins, Beth (2008) Developing Mobile Money Ecosystems. DFID, CGAP

provider-neutral. This program can only be applied in areas where there is no bank or post office as a delivery option.

4. **Local m-money ecosystems should be developed.** If CCT is retained in its m-money form through greater acceptance as a currency in local markets, this can reduce the need for cashing out CCTs and reduce overall transaction costs for the program and the beneficiary

Furthermore, the huge volume and amount of funds being channeled through the government's conditional cash transfer program along with its regularity provides a unique opportunity to increase m-money use in the country. Using and transacting CCT funds in m-money form can provide the impetus for developing m-money ecosystems at the local level. Large and regular volumes of m-money in the system can translate to greater acceptance of m-money as a means of transaction among local vendors and service providers. If this happens, the need for cashing out m-money is reduced, and would further enhance the financial and security advantages of using the system among beneficiaries, allowing their m-money account to function more as a bank account, rather than just a delivery mechanism. In some countries, actual cash transfers also have conditionalities on what and where they can be spent on (e.g. farm inputs) (see Kirui et.al. 2013 and Akeret. Al. 2011), and this might be a possible option for reducing the need for actual cash outs and keeping funds in the m-money ecosystem.

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- Ms. Jan Veronica Arapeles – DSWD Regional Field Office Region IV-B (MIMAROPA), Monitorign and Evaluation
- Mr. Lito Villanueva – SMART Telecoms Innovations group
- Ms. Antoinette Duero – DSWD Central Office, FMS group