Unlocking the Potential of Digital Cash Transfers: American Red Cross and Mastercard Pilot

In March of 2016, Mastercard and the American Red Cross joined forces to pilot Mastercard Send’s technology for the distribution of humanitarian aid. This global service enables aid organizations to make digital cash transfers across multiple payment mechanisms and brings with it the capacity to transform the future of humanitarian cash programming.
The Rise of Cash Transfer Programs

Over the past decade, the humanitarian community has shifted toward cash-based transfer programs (CTP) for the delivery of aid. In many humanitarian crises, CTP is viewed as a more dignified, useful, and flexible way to distribute assistance than the direct provision of goods. For this reason, humanitarian agencies are exploring ways to expand CTP, with the objective of increasing scale and efficiency without sacrificing quality.

A key determinant in implementing large-scale CTP is the ability to contract and roll out reliable payment mechanisms at the local level. If a payment system with significant reach is implemented in advance of a disaster, serving a large population with cash grants in an expedient manner is ideal and often feasible. However, many humanitarian agencies do not have the time or resources to proactively find suitable service providers – whether financial service providers (FSPs) or mobile network operators (MNOs). Nor are they able to create standing contracts in all the countries in which they operate. They often negotiate contracts post-disaster.

In short, identifying suitable partners and finalizing the contracting process can significantly delay implementation, preventing organizations from delivering timely, relevant, and at-scale assistance.

To support preparedness efforts, the humanitarian sector has seen the introduction of regional contracts, in which multiple countries can be reached with one pre-negotiated payment mechanism, saving significant time post-disaster. While regional contracts represent clear progress, they are limited to one type of payment mechanism and cannot be leveraged beyond the designated region.

Through years of CTP experience and evaluation of the payment mechanism landscape, the American Red Cross concluded that a truly global disbursement capability – one that could draw upon multiple payment mechanisms worldwide – would be the best way to achieve at-scale, efficient delivery of emergency assistance. The organization sought a partner with a global disbursement solution that would, via a single contractual relationship, give them widespread access to local payment providers.

The Emerging Mobile Payment Opportunity

Many humanitarian organizations have been testing mobile technology as an aid delivery alternative to direct cash, vouchers, and payment cards. The drivers of this shift are clear and compelling: while 2 billion people around the world still lack access to a bank account, global mobile subscriptions reached a staggering 7.1 billion in 2016. Because of this rapid growth, mobile payment technology has become a starting point for bringing the underserved into the financial mainstream. Mobile technology has other advantages over non-digital methods, including:

- **EFFICIENCY**: funds can be distributed digitally to beneficiaries almost instantly
- **SECURITY AND CONTROL**: only owners of the mobile wallet can see and access funds available for use, and funds can be used to make purchases or exchanged for cash
- **REACH**: the relative prevalence of mobile phones makes it possible for humanitarian organizations to reach more individuals in need
- **ACCESS**: an MNO’s agent network can make it possible for beneficiaries to access cash more easily and without having to travel significant distances

The American Red Cross tested mobile technology in recent years, and was interested in evaluating mobile payments as part of a global disbursement solution to better serve a large-scale population in both urban and rural areas.
**American Red Cross/Mastercard Partnership**

The American Red Cross sought a global payment solution for CTP that would enable rapid response to urgent needs anywhere in the world via electronic cash disbursement. The organization discovered a potential solution in Mastercard Send, a global service, which provides a single connection to reach over 80 countries via diverse consumer channels, including bank accounts, cards and mobile wallets. Through this reach, Mastercard Send enables organizations to more efficiently distribute funds in local markets.

The two organizations formed a partnership to pilot the Mastercard Send service for the distribution of aid in a test market using mobile disbursements technology. This marked the first trial of Mastercard Send in the humanitarian sector.

**Pilot Overview**

Mastercard and the American Red Cross chose Indonesia as the pilot market due to the level of humanitarian need, the availability and feasibility of utilizing a local Mastercard Send mobile money partner, and a robust Red Cross presence in the region.

The American Red Cross partnered with the Indonesian Red Cross (locally known as Palang Merah Indonesia, or PMI) to work in Bekasi, a region on the outskirts of Jakarta that faces recurring droughts. Bekasi was most recently affected during the spring and summer months of 2016, and in response, the pilot was fielded over three months from May to August.

PMI has extensive experience in responding to disasters throughout Indonesia. They also have experience working in CTP. Through this project, PMI hoped to gain experience and understanding in using a new payment method—mobile wallets—which they had not used before. PMI’s network of branches throughout Indonesia, also make it an excellent partner for identifying, and working with affected populations. In this project, PMI targeted vulnerable populations with messaging to encourage the purchase of water and other critical items to meet daily needs. PMI organized the distribution and registration of SIM cards and mobile money wallets. Further, PMI carried out post distribution monitoring, and a full evaluation to discover lessons learned from the project.

**Mastercard Send Technology & Process Overview**

The American Red Cross initiated payments to intended beneficiaries via a bulk file transfer to the Mastercard Send platform. Mastercard Send’s connection to local telecommunications partner Indosat Ooredoo enabled beneficiaries in the Bekasi region to receive Red Cross relief funds into registered mobile wallets on their feature phones within 24 hours. PMI worked with Indosat in advance to register beneficiaries for mobile money accounts and provide training.

Digital delivery of funds gave beneficiaries a safe and convenient way to access aid via a phone many of them already owned. Receiving digital funds also gave them the control and flexibility to spend their aid money on what they needed most. During the evaluation period, one beneficiary stated: “Sometimes families receive goods they might not use. [Digital money] allows people to buy what they need.”

The mobile wallet functionality also enabled beneficiaries to easily access information on fund balances, so they were always able to see how much money was still available. This feature is not always available with other payment mechanisms, such as with prepaid cards, unless the beneficiary uses the card at certain ATM or bank locations. With the mobile wallet, the balance was easily found, and intuitive to use.
American Red Cross

**Payment Initiation:** American Red Cross collects beneficiary's name, mobile phone number, payment amount etc. Instructions for Payment are sent.

Network

**Processes:** Mastercard Send receives the payment instruction and routes to the relevant participant connected to its network, such as a mobile network operator, who then delivers the payment to the beneficiary's account.

Beneficiary’s Account

**Funds received:** Funds arrive in the beneficiary's account within minutes*. Funds are available for cash-out with mobile network operator’s agent.

*Delivery speed of funds to beneficiary is dependent on receiving partner

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**Results**

The American Red Cross and PMI conducted a thorough post-distribution monitoring survey to gauge the effectiveness of the pilot. Survey results showed that the pilot was highly successful, exceeding expectations in a number of ways:

**Funds reached nearly every target beneficiary:**
- 99.7% of targeted households received the digital cash grants

**Recipients acclimated quickly to the idea of assistance via a mobile device:**
- 100% of transactions reached the correct beneficiary accounts within the 24 hour timeframe
- 79.2% reported that they would like to receive aid via a mobile wallet mechanism again
- 94.3% had never received funds electronically before

**Recipients expressed interest in continued use of mobile wallets:**
- 84.9% said they wanted to use a mobile wallet again – whether to receive funds or to make essential purchases for their households

**Recipients used their funds to purchase items related to their humanitarian needs:**
- 98.1% of recipients said that the distributed funds helped them to fulfill their household needs. Recipients used funds to purchase clean drinking water, groceries, and hygiene supplies, and even to help pay for their children’s education

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Learnings

Overall, the Indonesian pilot achieved the American Red Cross objectives of rapid, scalable, electronic cash grants to beneficiaries. It gave the American Red Cross the ability to initiate and electronically control the distribution of aid funds end-to-end through a single interface. Mastercard Send facilitated a safe and convenient way for beneficiaries to access aid and receive digital funds through their partner Indosat, which gave beneficiaries the flexibility to spend those funds on the items they needed most.

Valuable lessons from the pilot will be applied to future implementations. For example:

**LARGE-SCALE USER REGISTRATION**

Mobile money accounts had to be created for all beneficiaries, and payment instructions were submitted by the American Red Cross in the U.S. for each individual’s mobile account number. Improvements were identified to scale this process in order to serve a broader set of beneficiaries.

**DATA MANAGEMENT**

Laws and regulations pertaining to the Know Your Customer (KYC) process -- required to set up a mobile money account -- differ across various national and local jurisdictions, making it critical to build in adequate time for up-front beneficiary identification and registration. Pre-planning in this and other areas will make mobile money disbursements suitable for slow-onset as well as immediate disaster relief.

**BATCH PROCESSING:**

Large-scale batch processing will be required by the mobile money operator and disbursements platform in order to support thousands of beneficiaries. Improvements to the bulk file process user interface and database management were identified to enhance commercial readiness.

**OPERATIONS:**

PMI distributed SIM cards to beneficiaries to ensure mobile money accounts and phone numbers were accurate. This also ensured beneficiaries received the SIM card registered with their name. The distribution of the cards was done by the location/household address. However, feedback from the local administrators organizing the distribution suggested there may be more efficient ways of distributing the cards. They suggested there should be multiple ways that beneficiaries can receive the SIM cards, in the future.

**ENCASHMENT:**

While the statistics show that 85% of the Indonesian population own a mobile phone, there are some areas and populations where phone ownership is not as prevalent. PMI surveyed mobile phone usage in the project area and found low phone ownership. Many households used their neighbors’ phones. Knowing this fact, PMI pre-positioned mobile phones at the stores where beneficiaries would receive their money. Because the mobile wallet is connected to the SIM card, not the mobile phone, this allowed for the SIM to be inserted into the borrowed phone unit at the counter. Beneficiaries were able to enter their pin code and receive their cash grant without buying a mobile phone for this specific pilot.
Shared Vision for the Future

The American Red Cross and Mastercard were very pleased with the successful results of the pilot. Says Guillermo Garcia, Executive Director, International Programs of the American Red Cross,

“We were looking for a partner that could help us expand our aid delivery channels and reach a large number of beneficiaries effectively and securely, and in Mastercard we found that partner. We view mobile technology as an innovative mechanism to support cash transfer programs, and are excited by the potential of Mastercard Send to further improve the distribution of cash-based humanitarian aid.”

The American Red Cross-Mastercard partnership marked the first expansion of Mastercard Send into the humanitarian sector. While the pilot was restricted to Indonesia, Mastercard Send could give the American Red Cross access to FSPs in 80+ countries. Going forward, the partners intend to build on the success of the Indonesian pilot, expanding the innovative and global Mastercard Send capability and streamlining the delivery of much-needed humanitarian aid to all corners of the world.