SEEKING SOLUTIONS:
NEW ROLES FOR TECHNOLOGY IN CASH AND VOUCHER PROGRAMS

An Inspiration Brief for Technology & Private Sector Partners
Today, more people have been forced to flee their homes than at the height of World War II. The scale of these humanitarian crises are challenging, and sometimes outpacing, the capacity of institutions created to respond to them. Yet, the approaches we have available to reach populations in need have also advanced. In particular, the trend towards distributing cash and vouchers -- instead of goods -- has grown tremendously within the world of humanitarian assistance. This growth has been enabled by innovations in payment technologies.

This is a trend we embrace, since -- in the right circumstances -- cash and vouchers can reach people more efficiently than goods, which are cumbersome and expensive to transport, store, and distribute. And equally important: cash and vouchers offer flexibility to people affected by conflict and disaster to purchase exactly what they need. Used appropriately, cash and vouchers can also stimulate the recovery of local markets, thereby extending the positive impact of that initial injection of humanitarian support within affected communities.

Although cash and vouchers are now widely used, they are still impeded by the challenges of operating in post-disaster and conflict settings. We firmly believe that technology -- and the private sector -- can play a formative role in helping us overcome some of these challenges. And in doing so, we can improve and streamline humanitarian responses around the globe, reaching more people, more efficiently.

This brief is intended to inspire new thinking about solutions, products and tools that could support the use of cash and vouchers in humanitarian programs. It frames the top eight challenges identified by participants in an e-voucher design workshop held in London in February 2015. The workshop included 34 participants from international NGOs, UN agencies, donors and the private sector.

While the workshop focused on voucher programs, many of the challenges discussed also apply to cash programs. We invite actors from within and beyond the humanitarian realm to consider the needs presented in this brief and propose solutions.

The workshop was hosted by the Electronic Cash Transfer Learning Action Network (ELAN), which connects businesses and humanitarians to improve e-transfers in emergencies.

The ELAN is convened by Mercy Corps with support from the MasterCard Center for Inclusive Growth. The ELAN advisory group includes the Cash Learning Partnership (CaLP), the International Rescue Committee, MasterCard, the Norwegian Refugee Council and Oxfam. ELAN staff are available to answer questions related to this brief.

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1 For example, the World Food Program increased their cash and voucher program from US$10 million (in 2009) to US$837 million (in 2014).

2 Participants included representatives from Action Against Hunger (ACF), the Cash learning Partnership (CaLP), Concern Worldwide, Danish Church Aid, DFID, GOAL, MasterCard, Mercy Corps, Noble House/Red Rose, the Norwegian Refugee Council, Oxfam GB, Plan International, Save the Children UK, sQuid, the World Food Program and World Vision.

http://www.cashlearning.org/new-technologies/elan
This innovation brief frames eight specific challenges that require new products, services and processes. However, a number of universal needs and concerns were discussed during the design workshop. To be successful, any new product or solution targeting humanitarians should keep these needs and principles in mind.

**DESIGN FOR DIFFICULT ENVIRONMENTS**
Aid needs to be delivered amidst conflict, in difficult terrain and in places with minimal infrastructure and connectivity. Ideal solutions...
- Can work with inconsistent or absent internet and mobile connections and are well suited for low-power environments.
- Are sensitive to populations that have limited experience with technology and may have low levels of literacy and numeracy.
- Offer durable hardware that withstands dust, rain and rough handling.

**DO NO HARM**
Humanitarian assistance should be sensitive to local power dynamics and security risks. Any solution or tool for cash and voucher programs needs to...
- Consider how responses will support local economies and businesses, and seek opportunities to include small and medium enterprises in recovery efforts.
- Understand how new approaches may affect local power dynamics and tensions. Wherever possible, solutions should push for more equitable and transparent relationships.
- Consider how data – specifically personal information about program participants – will be shared, stored and protected.

**PRIORITIZE SIMPLICITY AND FLEXIBILITY**
Emergencies are not good moments to introduce new complex tools or relationships. Solutions that are simple and flexible – in both business and operational models, are highly desired. This may include...
- Universal/pre-positioned tools that an agency only needs to procure and learn once.
- User-friendliness in the field - solutions should require minimal training and support. Complex transactions can put disadvantaged program participants at higher risk of fraud or exploitation.
- Reliable, stable, tested solutions that do not require adaptation or de-bugging during emergency response.

**ENABLE COLLABORATION**
A typical humanitarian response can involve hundreds of programs and dozens of agencies working to address a multitude of needs. Solutions that can enable collaboration between actors, while not depending on it, are highly desired.
- “Common standards” for data collection, analysis and sharing were of high interest to workshop participants.
- Thoughtful approaches to user permissions may enable collaboration.
“DURING THE WORKSHOP, 34 PARTICIPANTS FROM HUMANITARIAN AGENCIES AND THE PRIVATE SECTOR MAPPED VOUCHER PROGRAM ACTIVITIES AND PRIORITIZED AREAS WHERE NEW SOLUTIONS AND TOOLS ARE NEEDED.”
Private sector actors may struggle to understand how an internationally supported humanitarian response takes shape, and how cash and voucher programs get off the ground. This diagram provides an overview of the common actors, steps and decision making moments.

1. CRISIS STRIKES

While local actors engage in self-recovery, international actors, including UN agencies, the Red Cross movement and INGOs start assessing needs and conditions, including impacts on infrastructure, financial services and markets.

2. ASSESSMENTS

3. RESPONSE ANALYSIS

4. PROGRAM DESIGN

This when programs are defined in detail - including how participants will be selected and if aid agencies will work with local partners (like Financial Service Providers) to deliver assistance.

5. VOUCHER PROGRAM SET-UP

Program participants and local merchants are selected, trained and prepared for distributions and voucher redemption.

6. DISTRIBUTION AND REDEMPTION

Vouchers are distributed to program participants and spent with local merchants. Humanitarian agencies reimburse merchants.

6. MONITORING (ONGOING PROCESS)

Program staff monitor program activities using accountability hotlines, surveys and structured observations. Program activities are adjusted in response to monitoring.
This section describes the top eight voucher program challenges that were highlighted by workshop participants. It also contains participant insights about what improvement looks like – and possible solutions – for each challenge. We recognize that other actors are currently working on solutions to address some of these challenges. We hope that this brief validates product development that is already underway, and inspires new thinking on products, services and models for collaboration between humanitarian and private sector actors.
COLLECTING MARKET INFORMATION

CHALLENGE

Humanitarian agencies routinely carry out market assessments to ensure that cash and voucher recipients can purchase desired goods at appropriate prices. These assessments primarily rely on surveys carried out directly by humanitarian agency staff. This approach is labor and time intensive, and may bypass information available from other actors.

IMPROVED FUTURE STATE

“Understanding of market health without having to go ask the questions ourselves.”

“Common sector wide understanding of market needs; not just at an organizational intervention approach.”

“Common standards to help with analysis.”

“Better use of data and understanding of what markets can sustain.”

“Better designed interventions at a meta level.”

POTENTIAL SOLUTIONS

▷ Increased involvement of private sector actors in market assessment (for access to market information).

▷ Meta market assessment conducted or supported by the private sector.

▷ Standard indicators/approaches that enable market information to be easily compiled and shared.
Humanitarians don’t know what cash transfer products and services are available in a given context, nor their capacity, quality, or reach.

“Implementing organizations have immediate access to information on FSP availability and can make an informed decision on selecting the most appropriate provider to deliver assistance.”

“More accurate description of (FSP) capacity.”

“Setting a ‘bar’ for service providers to respond to.”

“Faster and more customized response.”

“Make informed decisions (about transfer mechanisms).”

Common metrics and indicators for evaluating FSP capacity.

Tools to improve NGO capacity to evaluate FSPs.

Up-to-date country or regional guides to FSPs.

Pre-positioned FSP agreements, relationships and/or contracts.
The vast majority of voucher programs still rely on paper vouchers, which require tremendous amounts of time and resources to design, print, store, distribute and reconcile with merchants. Digital alternatives are recognized as a way to:

- Increase efficiency
- Improve targeting (since paper-based systems offer fewer options for authentication of the program participants’ identity)
- Increase access to purchase patterns – since it is very burdensome (or impossible) to know how program participants spend flexible vouchers, when, where and with whom when using paper.

“Automation of simple tasks (for example, voucher counting).”

“Instant and better information about how beneficiaries are using their cash and vouchers: who is purchasing what, where and at what price.”

“Increased penetration of point of sale technology could mean that NGOs don’t have to take on this task in the future.”

“Pre-positioned e-voucher kits could lead to faster responses, not having to reinvent the wheel with each deployment... it would be fabulous and fast!”

Pre-positioned warehouse or provider of e-voucher technology that is quickly deployable.

New methods of authentication (with a potential role for biometrics).

E-voucher solutions that don’t require dedicated POS devices.

Explore incentives for expanding acceptance infrastructure and POS devices without relying on humanitarian programs.
TRAINING ON NEW TECHNOLOGIES

CHALLENGE

New technologies can be confusing and overwhelming for staff, local merchants and participants. When poorly understood, new payment technologies put program participants at risk for exploitation.

In addition, senior management of humanitarian organizations sometimes lack expertise about cash based programming (and the supporting role of technology), and are ill equipped to support necessary strategic investments.

IMPROVED FUTURE STATE

“Beneficiaries are well equipped to engage with new technologies and are not vulnerable to exploitation.”

“All merchants have access to the same level of knowledge about the process.”

“(Senior management) make informed decisions on how cash based programming relates to decisions on strategy and planning.”

“Informed, appropriate strategies and planning enable nuanced approaches that take context into account.”

POTENTIAL SOLUTIONS

Training modules that are customizable for different programs, contexts and audiences, including program participants, merchants, in-country humanitarian staff and HQ staff and leadership.
Humanitarian agencies often rely on laborious paper-based processes for collecting, analyzing and using data. This affects every step of programs, from assessments and program participant registration, to disbursements and monitoring. Paper-based data collection and management processes can lead to high instances of errors and can make it difficult to analyze and use data in a timely manner to improve program quality.

**Improved Future State**

“No data entry, better decision making.”

“Less errors.”

“Increased accuracy and time efficiency of need assessments.”

“Access to real time usable data could help us reallocate resources and be more responsive.”

**Potential Solutions**

▷ Digital data collection tools.

▷ Tools to pull patterns and meaning from data collected – assistance with analysis in addition to data collection.

▷ Reporting dashboards that visualize data patterns and support programmatic decision making, in real time.

▷ Industry best-practice standards for minimum-required data (to avoid collection of unnecessary information).
Right now, there are limited opportunities for multiple humanitarian agencies to use platforms that are capable of “talking to each other” or working together to deliver assistance. This makes it difficult to share data between organizations, leverage previously established networks of merchants and ensure that program participants are not receiving duplicate assistance.

“Better coordination, targeting, use of resources between agencies and reduced duplication of efforts.”

“Merchants and beneficiaries could receive training once, on a single process and system.”

“Merchants can learn and use only one POS device that works with a number of agencies and programs.”

“One beneficiary account, multiple ways to give assistance.”

“Information is shared between agencies to prevent duplication of assistance to the same recipients.”

Common standards that could enable multiple solutions or platforms to “talk to each other”, while enabling individual programs and agencies to operate independently.

Shared technology platform allowing NGOs to easily share data and results (as desired/needed).
When working with third party systems and financial service providers, humanitarian agencies may not understand how data is used by 3rd parties, stored and disposed of during and after programs.

Given the ethical and protection considerations related to personally identifiable information, this is a serious concern.

**Challenges**

**Improved Future State**

“Reduced risk of exploitation and/or misuse of private beneficiary data.”

**Potential Solutions**

- Secure data management guarantees for any third party systems.
- Shared or common standards for data protection and management.
- Data disposal procedure / feature.
Establishing and managing a merchant network is challenging at many levels:

- It is time consuming to identify and vet a suitable number of appropriate merchants. It is also difficult to monitor their performance throughout a program.
- Merchants have to sell products on credit, submit receipts or invoices to the humanitarian agency and be reimbursed – a tedious process that puts smaller merchants (with more difficulty managing cash flow) at a disadvantage.

Merchants are better able to manage cash flow.

Ability to recruit and manage more merchants.

Timely and safe payments to merchants – with less waiting for merchants.

Beneficiary choice and convenience improved.

Better ability to monitor merchants.

Markets are strengthened – even small traders benefit from voucher programs.

Faster implementation.

Model or tool for “mass engagement” or acquisition of merchants; potentially a single POS and system (see challenge 6).

Tools to facilitate merchant’s access to credit (potentially through larger distributors).

Harmonized merchant selection criteria (making it easier to leverage existing merchant networks).

Tools to assess merchant stocks and restocking capacity.

Tools to monitor prices charged by merchants.

“Instant” merchant repayment tools.
While local actors engage in self-recovery, international actors, including UN agencies, the Red Cross movement and INGOs start assessing needs and conditions, including impacts on infrastructure, financial services and markets.

This when programs are defined in detail – including how participants will be selected and if aid agencies will work with local partners (like Financial Service Providers) to deliver assistance.

Program participants and local merchants are selected, trained and prepared for distributions and voucher redemption.

Vouchers are distributed to program participants and spent with local merchants. Humanitarian agencies reimburse merchants.

Aid agencies select implementation areas and start to decide on the type of support they’ll provide – in-kind, cash, vouchers, or other.

While local actors engage in self-recovery, international actors, including UN agencies, the Red Cross movement and INGOs start assessing needs and conditions, including impacts on infrastructure, financial services and markets.
This workshop offered an opportunity to jointly brainstorm on needs and opportunities. It also provided space for thinking about partnership and business models that could bring these ideas to life. At the end of the workshop, we asked both groups to outline their ideal “other”.

In the words of humanitarians, an ideal technology partner or financial service provider offers good value for money and stable solutions that are fast to deploy. The ideal partner is also flexible, reliable and honest about their capacity, while listening carefully to the needs of their humanitarian partner.

In the words of private sector, an ideal humanitarian customer understands the value of a product, implements bigger programs, gives feedback and is able to set-up framework agreements or pre-positioned agreements to reduce contracting burdens.

The Electronic Cash Transfer Learning Action Network (ELAN) brings humanitarian organizations and the private sector together in partnership to improve e-transfer programs. If you have ideas, products or services that could benefit cash and voucher programs, and would like to share or test these ideas, please contact:

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