HUMANITARIAN

IMPROVING HUMANITARIAN PAYMENTS THROUGH DIGITAL INNOVATION

CHALLENGES AND OPPORTUNITIES

AUGUST 2021

BETTER THAN CASH ALLIANCE

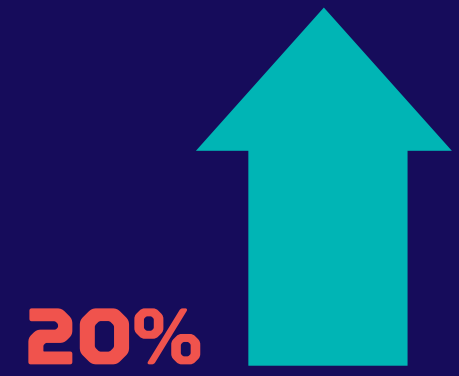
EXECUTIVE SUMMARY

Digital humanitarian payments have been evolving rapidly. According to CaLP, in 2019, humanitarian agencies transferred a total of US$5.6 billion, double the amount delivered just two years prior. These humanitarian transfers accounted for 17.9 percent of all humanitarian assistance.[1]

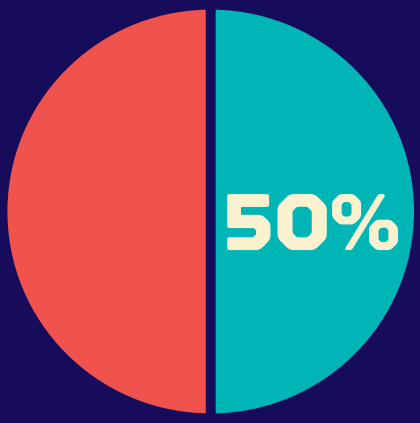
The COVID-19 pandemic has accelerated the acceptance of digital payments across the globe. However, in humanitarian crises, digital payments may not always be the most feasible, efficient, and effective solution for organizations if there is not the necessary infrastructure. Furthermore, even if digital payments are possible, with responsible practices that empower women and drive financial inclusion, they may not be the preferred option for many forcibly displaced persons (FDPs) or refugees. To truly be "better than cash", the digital payments experience must be inclusive and responsible and create pathways to financial access for all.

This report focuses on the challenges and opportunities of responsibly digitizing the delivery of humanitarian payments, notably at the last-mile: what has worked, what has not, and what does the future hold. It offers research-based analysis and practical advice for humanitarian agencies on the advantages and areas for growth of five key financial technologies in digital payments: mobile money, artificial intelligence, distributed ledger technology, QR codes, and super platforms. This advice will enable humanitarian agencies to streamline processes and drive responsible digitization of humanitarian payments.

GROWTH IN DIGITAL PAYMENTS



According to CaLP, in 2015, cash and voucher assistance (CVA) made up only **8%** of all international humanitarian assistance (IHA). **Today, it accounts for 20%**[2]



CaLP reports that **HALF** of all humanitarian transfers are delivered by 3 United Nations agencies: World Food Programme (WFP), UNHCR, and UNICEF[3]

COVID-19 has driven a global surge in cash transfers. According to the World Bank, this effort has amounted to **1,400 social protection measures that reached 1.1 BILLION people**[4]

FRAMEWORK FOR EFFECTIVE GROWTH OF DIGITAL PAYMENTS IN THE HUMANITARIAN CONTEXT

Digital payments can be faster, more efficient, more transparent, and safer than traditional methods. Yet in the humanitarian context, a number of barriers raise challenges at the last-mile.

Lack of identification in home or host country

Regulations that prevent forcibly displaced persons (FDP) from being financially included

Limited electricity and connectivity

Merchants not equipped to accept digital payments

To be effective, digital payments depend on an ecosystem to enable them. When considering whether digital payments are viable in a humanitarian context, these four areas are crucial to assess:

1

Regulation and Policy

- **Know your customer (KYC) policies**
- **Consumer protection**
- **Transaction limits**

2

Digital Infrastructure

- **Access to electricity**
- **Mobile network coverage**
- **Mobile handset ownership**

3

Financial Infrastructure

- **Proximity and prevalence of bank branches, ATMs, banking, and mobile money agents**
- **Number of mobile money and payment services**

4

User Readiness

- **ID documentation**
- **Ownership of financial account, transaction account, or debit card literacy**

REGULATION AND POLICY:

In Jordan and Turkey, refugees cannot own a bank account.

In Turkey and Ethiopia, the government selects the delivery mechanism for large humanitarian transfers.

In Colombia, Venezuelan migrants can now open digital wallets with their migrant ID cards.

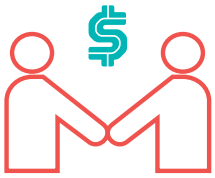
DIGITAL INFRASTRUCTURE:

In four of the countries included in this study, over 50 percent of the population does not have electricity.

In five countries, over 50 percent of the population does not have a mobile handset. A digital divide persists, with male phone ownership outpacing female ownership by 7 percentage points.

RESPONSIBLE PAYMENTS

The Better Than Cash Alliance's UN Principles for Responsible Digital Payments identify nine responsible practices for engaging with clients who are sending or receiving digital payments and have previously been financially excluded or underserved.

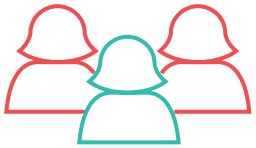


1

Treat users fairly

2

Ensure funds are protected and accessible



3

Prioritize women

4

Safeguard client data

5

Design for individuals

6

Be transparent, particularly on pricing

7

Provide user choice through interoperability

8

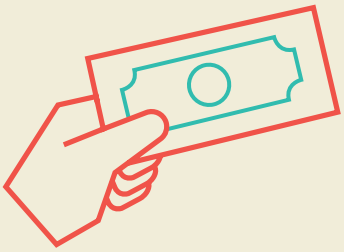
Make recourse clear, quick, and responsive

9

Champion value chain accountability

CATEGORIES OF HUMANITARIAN TRANSFERS

Last-mile humanitarian transfers fall into four categories, on a spectrum from physical cash to full digitization.

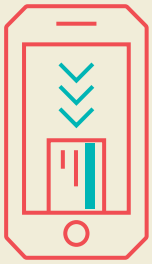


CASH-IN-HAND

Humanitarian agencies distribute cash in envelopes directly to beneficiaries. Straightforward, yet with obvious challenges.

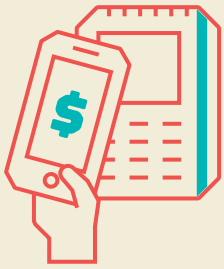
CASH-AS-A-SERVICE

Cash distribution is outsourced to a financial service provider (FSP). The transfer from the humanitarian agency may be digital, yet payments are made to beneficiaries in cash.



CASH-BASED SYSTEMS

An FSP serves beneficiaries through a card or mobile money account. Financial structures may outlast the original cash transfers, yet establishing them requires complex operations by the FSP.

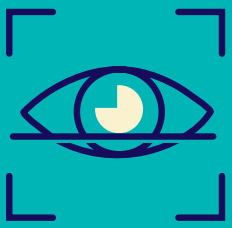


COMPLETELY DIGITAL

A cashless system in which beneficiaries receive digital value, with which they can spend with digitally-enabled merchants. Very few examples of this stage appear in the countries studied.

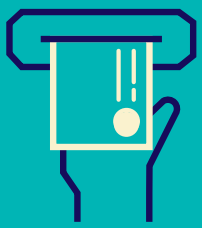
DIGITAL STORIES

In Turkey's Emergency Social Safety Net (ESSN) program, beneficiaries receive digital value on a card, which many spend at merchants via point-of-sale (POS) machines.



In refugee settlements in Jordan, beneficiaries receive value digitally through WFP's 'Building Blocks' blockchain platform. They spend the value digitally at qualified merchants via an iris scan.

Is Digital Always Best?



In last-mile humanitarian contexts, digital payments may not always be more efficient than cash-in-hand. In Somalia, one mobile money project cost US$45 (digital method) for every US$100 sent to beneficiaries, while another cost just US$11 (cash).[5] This amount was lessened due to repeat transfers to beneficiaries of large amounts, with no set-up costs and reduced transaction fees. This highlights the importance of user-centricity and developing an ecosystem to keep funds digital.

A key element in digitizing humanitarian payments is beneficiary preference and where the cost is being paid. For instance, an ATM with prepaid cards may be a 'sustainable system', yet if the ATM is 10km from a refugee or internally displaced persons (IDP) camp, and that is the closest it can get given the context's infrastructure, no amount of high set-up cost will offset the fact that the person needs to walk 10km to retrieve their money.

KEY RECOMMENDATIONS FOR HUMANITARIAN AGENCIES ON FIVE FINANCIAL TECHNOLOGIES IN DIGITAL PAYMENTS

These five financial technologies were selected and prioritized by agencies that deliver humanitarian payments. Other exciting developments in digital payments are also on the horizon, including central bank digital currencies (CBDCs).

Mobile Money

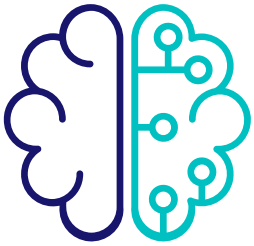
Mobile money allows people to transfer digital value from, to, and between mobile phones. It was originally designed in Africa to tackle payment challenges in emerging economies, so most systems work on the most basic handsets, over USSD channels, and only require a 2G network connection. These attributes pique the interest of humanitarian practitioners that want to deliver aid to beneficiaries living in crisis contexts with low levels of infrastructure. In the humanitarian context, approximately 3.5 percent of aid delivered by UN agencies and their partners in 2019 was in the form of mobile money.[6] In Uganda, mobile money accounts for up to 10 percent of humanitarian transfers,[7] and 15 percent in Somaliland.[8]

In Uganda, mobile money accounts for **up to 10%** of humanitarian transfers, while in Somaliland, this is **up to 15%**

These deployments are effective because there is already a vibrant mobile money ecosystem in those countries. It is essential to accurately evaluate the potential efficiency of mobile money in each context. In particular, it is crucial for humanitarian organizations to understand the viability of the business case from the standpoint of the mobile money provider. Ongoing challenges include the lack of agents and liquidity in specific locations. Mobile money may not be the best option for a humanitarian organization if the ecosystem around it is not sufficiently developed. A significant proportion of benefits delivered by mobile money is still being cashed out by beneficiaries due to limited options to spend funds digitally. Often in humanitarian contexts, if the 'pillars' of digitization (i.e., infrastructure) are absent or difficult to maintain, beneficiaries' preferences, however promising, may be impeded by the basic lack of services and usage ability.

RECOMMENDATIONS:

- Build **commercially sustainable** partnerships
- Assess the **efficacy of mobile money for humanitarian purposes in each context**
- Seek **expert advice** on design and implementation, and aim to be beneficiary-centric



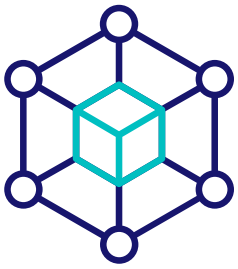
Machine Learning (ML) and Artificial Intelligence (AI)

Humanitarian agencies can use ML and AI to analyze large quantities of digital data quickly. When sufficient data is available, AI analysis can improve transparency and reduce fraud, offer better access to customer support, and provide fair, convenient, and effective recourse systems. AI can also be used to spot trends in programs, evaluate ways to improve product delivery, and make processes smoother. It can help assess how well a humanitarian program is meeting stated goals and identify areas for improvement. Predictive analytics can process data on beneficiaries' financial activities and allow organizations to offer them tools to become more self-sufficient. AI-based interactive platforms can also help humanitarian agencies better understand beneficiaries: their environment, financial situation, and what form of assistance they would prefer to receive.

For instance, in Mozambique, WFP used drones to collect data about on-the-ground conditions in the wake of Cyclones Idai and Kenneth in 2019. AI was used to dramatically cut the time it took to connect and analyze images taken by the drones. AI gave aid workers excellent information about how best to deliver aid in a matter of hours, when traditional data analysis might have taken weeks.[9] Although direct applications of humanitarian transfers are limited at the moment, it is an area that industry participants should be watching.

RECOMMENDATIONS:

- Recognize that ML/AI has **limited current application** in last-mile humanitarian payments
- Build the foundational database for ML/AI to be useful in **streamlining processes** in last-mile payments in the future
- Watch for **the right time** to consider ML/AI solutions



Distributed Ledger and Blockchain Technologies

Notably in the last decade, blockchain has reshaped the conversation on the role of money and transparency in the financial industry. In the humanitarian sector, blockchain can help organizations make payments more transparent. Since its inception, the technology has improved the transfer of remittances and other cross-border transfers, reduced fraud, and facilitated grant management. In last-mile humanitarian delivery, the challenge for Distributed Ledger Technology (DLT) is the actual transfer of value. Presently, there are very few scaled examples of DLT providing end-to-end last-mile humanitarian transfer delivery. The critical factor for humanitarian organizations in choosing this as a payment mechanism remains local ecosystem context.

In 2017, WFP launched a blockchain initiative called "Building Blocks" where cash value from WFP or its partners was stored on a blockchain, which beneficiaries could use to purchase groceries from participating stores with an iris scan at checkout. Beneficiaries did not need smartphones or internet connectivity to make a transaction. As of August 2020, the platform had hosted more than 300,000 interactions.[10] It can now also integrate with UNHCR's existing authentication technology, saving financial transaction fees, and ensuring greater security and privacy for refugees. In 2019, UNICEF launched a CryptoFund to invest in companies developing blockchain-based software solutions that invest in and bolster emerging economies. Among the awardees are companies expanding work to use their technologies to mitigate the hardships of COVID-19 on children and youth.

As of August 2020, the Building Blocks platform had hosted more than **300,000 interactions**

RECOMMENDATIONS:

- Consider all options. Perhaps a distributed **database** could work as well as blockchain in the specific context
- Determine infrastructure costs in the analysis and consider **integrating with existing platforms** to reduce costs
- Assess whether the **beneficiary** can or cannot spend the transferred value, because if not, the system is not viable

QR Codes

QR codes have been adopted widely, because of their low hardware requirements for both consumer and merchant, and straightforward onboarding. However, QR codes require smart devices and a means of performing know your customer (KYC) on users, which are not always available in humanitarian contexts.

QR codes are also being used for identification and tracking, including in last-mile delivery of payments. In Bangladesh, WFP uses QR codes to store information on vehicles coming in and out of the world's largest refugee camp. Check-in times before QR codes used to run up to 15 minutes. With the codes, they take less than one minute.

QR codes have been integrated into India's Universal Payment Interface (UPI) and now handle over

250 MILLION

transactions monthly[11]

RECOMMENDATIONS:

- Consider QR codes in contexts with **mature technology platforms**
- Create an ecosystem where **beneficiaries and businesses can interact freely**
- **Remember that standardization of processes and interoperability** of FSPs are vital

© Source: UNICEF

Super Platforms

Super platforms are apps that offer a variety of financial and non-financial applications on top of a core service, such as ride-hailing, food delivery, or e-commerce. WeChat and Alipay from China lead this segment, followed closely by Paytm India, and Rappi in Latin America. Super platforms require the use of a smartphone and a 2G connection at a minimum. Super platforms also facilitate acceptance of digital payments through a QR code, reducing the need to handle physical cash.

For humanitarian organizations, getting beneficiaries onto a digital platform is often the main battle. To be successful, super platforms must go even farther, to keep users engaged with a platform's various aspects and provide value for beneficiaries.

RECOMMENDATIONS:

- Analyze platform performance with metrics such as monthly active users and average transaction value
- Conduct ethical due diligence of platform management team
- Introduce reasonable measures to protect client data

These five financial technologies offer enormous opportunity to make humanitarian payments faster, safer, and more efficient. Yet context is crucial for success. In any humanitarian setting, the most important factor is always the beneficiaries themselves: their capabilities, needs, and preferences.

When technological innovation in humanitarian payments puts beneficiaries at the center, it will deliver not just the basic benefits of digital payments, but empower beneficiaries and drive responsible digital financial inclusion for all.

To access the full report including all sources and appendices, visit betterthancash.org

WWW.BETTERTHANCASH.ORG

About The Better Than Cash Alliance

The Better Than Cash Alliance is a UN-based partnership of governments, companies, and international organizations that accelerates the transition from cash to responsible digital payments to help achieve the Sustainable Development Goals.

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