

Descriptive mapping of the use of digital cash transfer modalities

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02/02/2022

Question

To provide a descriptive mapping (based on open access info) of the use of digital cash transfer modalities by the humanitarian sector, including who is using which types of mechanism where?

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1. Summary

The scale-up of Cash and Voucher Assistance is catalysing rapid change in the humanitarian sector: new operational models, changing use of technology, evolving partnerships with private sector actors, and stronger links between humanitarian assistance and other types of financial flows. In particular, the use of digital payments or e-transfers in humanitarian settings has increased significantly in recent years. This rapid literature review collates evidence from academic, policy focussed and grey literature on the use of digital cash transfer modalities and provides a non-exhaustive descriptive mapping of some of the modalities used by selected donors and organisations. Cash transfers are one of the most heavily researched approaches in humanitarian aid, evaluations have established that they can be effective at achieving a wide range of aims. These evaluations have also appraised the relative utility of different modalities for delivery.

In many humanitarian crises, goods are available, but affected populations have lost the means to buy them. In such cases, cash transfers can be provided, enabling beneficiaries to choose how to use the money, giving them the dignity of choice. A cash-based response is defined as the use of cash or vouchers as a means of enabling households to meet their basic needs for food, non-food items and/or services or to buy assets essential to resume economic activity.

A digital or e-transfer is defined as the transfer of money or vouchers from the implementing agency to a beneficiary. Such transfers provide access to cash, goods and/or services through mobile devices, electronic vouchers, or cards (e.g., prepaid ATM, credit or debit cards). The term E-transfer is an umbrella term for e-cash and e-vouchers. Card-based systems allow the beneficiary to access cash (or commodities) via ATMs or merchants, possibly without the need for a bank account. Mobile transfers are a form of cash transfer occurring over mobile networks.

Modalities for digital cash transfers are diverse and multifaceted influenced by context and available technologies. Modalities may include:

Card-Based Systems

- **Magnetic Stripe:** Typically cards link to a bank account. Beneficiaries can use the card to make payments and withdrawals.
- **Smart Card:** Smart cards can, but do not have to, link to a bank account, as the funds are stored digitally on a chip embedded in the card. The chip also stores relevant beneficiary information, including biometric information, in order to authenticate the identity of the holder.
- **Closed and Open-Loop Systems:** Cards can be linked to closed-loop systems, also known as “limited-purpose instruments”, or open-loop systems - “mainstream financial accounts”. Closed-loop systems restrict the capacity of the account thereby only allowing beneficiaries to access their funds via designated agents or ATMs and restricting additional deposits/savings. In contrast, open-loop systems allow much more flexibility for beneficiaries but reduce transparency for donors as they are unable to verify exactly how their funds have been spent.

Mobile Phone-Based Systems: Mobile Vouchers

- **Mobile vouchers** are similar to paper vouchers or e-vouchers where recipients are able to make purchases up to the value of the voucher. However, unlike paper or e-vouchers which are often redeemable in multiple designated stores, within a specified timeframe, the technology behind mobile vouchers, which are redeemed over the mobile network, allows beneficiaries greater flexibility to both make payments and withdraw cash in multiple transactions.

Mobile Phone-Based Systems: Mobile Money

- **Mobile money** is a more sophisticated mobile phone-based system which allows recipients to make withdrawals, transfer funds, pay bills, purchase goods and buy phone credit from their own “mobile wallet” or account. A cash transfer can be made into the account by the donor via the mobile network operator.

Biometric Technology

- This technology relies on biometric identification such as iris recognition, fingerprinting and facial recognition to authenticate transactions. Biometric identification can avoid the need for cards, phones, SIMs and PINs by acting as a standalone system which is linked to a financial service provider.

Block Chain

- The Building Blocks system effectively addresses the challenge of how to exchange value in a beneficiary context, without relying on digital currency. Because the beneficiary’s “wallet” exists on the block chain and the transaction is authorised using biometrics, there is no need for the beneficiary to have a smart device or internet connectivity with them to complete the transaction.

Despite potential benefits, practical challenges remain for programmes that try to leverage commercially provided digital payments. In a humanitarian crisis, the priority is to get payments out to those affected as quickly as possible. Often in nascent markets where digital payments do not have a large user base or supporting agent infrastructure, the logistics of using digital payments – such as signing memorandums of understanding with the private sector, registering beneficiaries and ensuring that there are appropriate cash-out locations – can cause unacceptable delays.

In light of these challenges, digital payments, if used at all, are often disbursed through closed-loop systems. These are payment platforms created abroad, often for short-term use. They do not connect recipients to an account that they can use for storing, sending and receiving funds after the humanitarian response has ended. Initiatives such as The UN Common Cash Statement (UNCCS) where UNICEF, OCHA, UNHCR and WFP agree to the following is an example of an initiative to overcome these challenges.

1. Collaborative procurement of financial services;
2. Data interoperability and systems development/ adjustment; and
3. Harmonised programming for cash assistance

2. Cash Transfers

Background and modalities

In many humanitarian crises, goods are available, but affected populations have lost the means to buy them. In such cases, cash transfers can be provided, enabling beneficiaries to choose how to use the money, giving them the dignity of choice (EC, 2021).

A cash-based response is defined as the use of cash or vouchers as a means of enabling households to meet their basic needs for food, non-food items and/or services or to buy assets essential to resume economic activity (OECD, 2017: 1). Further to this, cash transfers can be used to deliver multi-sector objectives in response to different situations including rapid and slow onset disasters, seasonal and protracted crises. However, cash transfers are not appropriate in all contexts, e.g. when the economy is not monetised or where an injection of cash risks causing inflation (DFAT, 2021). Suitability of cash transfers must be assessed in each case.

Box 1: Definition of cash-based assistance (Sphere Handbook, 2018)

Cash-based assistance refers to all programmes where cash (or vouchers for goods or services) is provided directly provided to beneficiaries. Cash-based assistance can be delivered through electronic or direct cash, or via paper or e-vouchers. In the context of humanitarian assistance, cash-based assistance refers to the provision of cash or vouchers to individuals, households or community recipients. It does not refer to cash or vouchers given to governments or other state actors. Cash-based assistance comprises a number of modalities within the broader concept of market-based programming.

The humanitarian sector has increasingly turned to cash-based forms of assistance – rather than commodity-based assistance – for populations affected by humanitarian crises. Cash transfers are one of the most heavily researched approaches in humanitarian aid, evaluations have established that they can be effective at achieving a wide range of aims e.g. improving access to food, enabling households to meet basic needs, supporting livelihoods and improving access to shelter (Bailey & Harvey, 2015). In a similar vein, OECD (2017: 2-3) outlines the benefits of cash-based responses as follows:

- Cash-based response can be more efficient and effective than in kind assistance. Evidence also shows cash-based transfers are usually cheaper and support local market recovery.
- Cash-based response gives the aid beneficiary more control. It can promote dignity, choice and the ability for recipients to prioritise their own needs. In kind commodities may not meet their priorities, and may be sold, which can distort local markets.
- Digital payments and technologies, such as mobile transfers and card-based systems can bring benefits to humanitarian response and provide a safer and more efficient way to deliver cash.
- Cash-based response has huge transformative potential in the opportunities it creates for improving humanitarian assistance. Humanitarian cash provides opportunities to link with developmental cash (i.e. safety nets and social protection systems) – building coherence between humanitarian and development responses. This can promote locally owned systems and help deliver a more sustainable impact.

Whilst the potential of cash transfers is clear, risks are still evident, these include (OECD, 2017: 9): diversion or theft of funds, corruption in the selection of beneficiaries and in transfer of cash, collusion in corruption by aid agency staff and/or money transfer staff, fraud, and security risks to staff and beneficiaries (Idris, 2017). There is also the risk that beneficiaries will misuse the cash, i.e. spending on “vice goods” such as alcohol and drugs, and that cash transfers could have inflationary effects on local markets, pushing up prices (Idris, 2017).

Cash transfers include a number of modalities, these are outlined in table 1 below.

Table 1: Cash Transfer Modalities.

Modality	Circumstances When Used	Advantages	Disadvantages
Unconditional Cash Transfers	Often the default modality unless indicators show otherwise; Security situation adequately stable; Project objectives do not restrict expenditure to specific goods and services	Minimal administrative burden; Generally, more cost efficient than vouchers; usually maximises empowerment, dignity & choice; may maximise food security & nutrition outcomes; more dynamic in responding to changing needs.	Recipients may spend money in ways not linked to project objective; Spending decisions may be made by individual family members, not in the best interests of the household; communities & govt. staff may have concerns around handing out 'free money'.
Conditional cash transfers	Specific needs have to be met (e.g. attending health clinics or building shelter); there are strong concerns amongst stakeholders about handing out 'free money'.	Agency can influence recipient behaviours to promote project objectives; may be more culturally and politically acceptable in some contexts.	Requires staff to verify conditions have been met – significantly increasing admin. burden and reducing cost-efficiency; can penalise the most vulnerable; may be incompatible with a rights-based approach.
Cash / Value Vouchers	Strong program justification needed for using. Chosen when there are concerns over the handling of cash for reasons of security, corruption or diversion.	Recipients do not directly handle cash Quality of goods & prices can be monitored May be more culturally and politically acceptable in some contexts.	Limits recipient choice to a number of vendors; requires significantly more admin. than UCTs; potentially offers less value for money for recipients, as beneficiaries are less able to hunt for sale items at a range of stores; May decrease purchase of fresh produce as beneficiaries may be more likely to buy foods in bulk at approved stores, rather than shopping daily in local markets; Traders not involved in the project may be disadvantaged; participating traders may be supplying imported goods – potential limiting impact of program on stimulating local food production & markets; vendors may increase prices.
Commodity Vouchers	Strong program justification needed for using. Offers control over the items purchased & used when there is a reason to restrict purchases to specific, identified items or when concerned that cash is spent in unhelpful ways.	In addition to the advantages listed above, agency directly controls recipient choice.	In addition to above commodity vouchers further limit the choice of beneficiaries and are more complicated to set up and monitor than cash vouchers because participating vendors must sell the chosen items and those purchases must be monitored.
Cash for Work	Public or community works are required; Equipment, technical assistance and supervision can be provided; Population has capacity to undertake work; Capacity to maintain assets is created	Can create community assets, including for DRR, or facilitate early recovery (e.g. debris clearance); potential for self-targeting; may promote community mobilisation & solidarity; may be more culturally and politically acceptable in some contexts.	Disruption to labour markets if wage rate is too high; Can take away time from other activities incl. food production, livelihoods & childcare; may increase child labour (directly, or through substitution); May exclude those without capacity to work & women with restricted mobility; complex to administer.

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Digital cash transfers

The scale-up of Cash and Voucher Assistance (CVA) is catalysing rapid change in the humanitarian sector: new operational models, changing use of technology, evolving partnerships with private sector actors, and stronger links between humanitarian assistance and other types of financial flows (IARN & CALP, 2016). In particular, the use of digital payments or e-transfers in humanitarian settings has increased significantly in recent years (Better than Cash Alliance, 2021):

- According to the CALP Network, in 2015, cash and voucher assistance (CVA) made up only 8% of all international humanitarian assistance. In 2021 it accounted for 20%.
- CALP reports that Half of all humanitarian transfers are delivered by three United Nations agencies: the World Food Programme (WFP), UNHCR, and UNICEF
- COVID-19 has driven a global surge in cash transfers. This effort has amounted to 1,400 social protection measures that reached 1.1 billion people.

A digital or e-transfer is defined as the transfer of money or vouchers from the implementing agency to a programme participant. Such transfers provide access to cash, goods and/or services through mobile devices, electronic vouchers, or cards (e.g., prepaid ATM, credit or debit cards). The term E-transfer is an umbrella term for e-cash and e-vouchers. Card-based systems allow the beneficiary to access cash (or commodities) via ATMs or payment merchants, possibly without the need for a bank account. Mobile transfers are a form of cash transfer occurring over the mobile network (OECD, 2017: 2).

The ubiquity and scale of mobile networks has made them attractive delivery channels for many types of humanitarian assistance (GSMA, 2019). As mobile technology spreads, connectivity and devices are increasingly accessible to vulnerable populations and serve as a valuable tool for delivering life enhancing services and information. Millions of dollars of cash assistance are now being delivered via mobile money, supplanting traditional methods of transporting and delivering cash.

Such shifts have required humanitarian organisations to change their internal priorities, strategies and processes, and necessitated partnerships with new entities, including mobile network operators (MNOs), to deliver interventions more effectively. At the same time, humanitarian organisations must ensure these new forms of digital humanitarian assistance are suitable for the vulnerable people they serve and meet their unique needs (GSMA, 2019).

Humanitarian contexts, by virtue of conflict and danger on the ground, risk aversion and economic constraints of aid agencies, lend themselves to the digitisation of aid. Due to the lack of humanitarian aid-workers on the ground recipients of humanitarian aid are forced to become “owners of their own recovery” whilst “digital humanitarianism stands primed to provide a remote, cost-effective, online self-help solution” (Duffield, 2016: 154).

This shift toward the provision of humanitarian aid via direct cash grants to beneficiaries creates opportunities to build markets for lasting financial services, particularly low-cost digital payment systems accessed through mobile phones and local agents (Next Billion, 2016). The use of these services can improve the efficiency and transparency of cash disbursements while continuing to help poor households manage risk and access economic opportunities during times of protracted crisis or post-disaster recovery.

To address these challenges, a number of high level principles have been devised. The Barcelona Principles are guidelines for humanitarian organisations implementing digital payments in humanitarian cash transfer programming and advise the following (Next Billion, 2016):

1. Select payment mechanisms for recipient empowerment.
2. Collect data that is relevant and proportional.
3. Safeguard the right to data privacy and protection.
4. Facilitate pathways to financial inclusion where possible and appropriate.
5. Prioritise and build on local systems and infrastructure.
6. Invest in organisational preparedness to quickly leverage digital payments, when appropriate.
7. Develop institutional and collective capacity for effective humanitarian/private sector engagement.
8. Coordinate the use of shared and multipurpose platforms.

Ford (2017) argues that the increased use of digital cash transfer technology which delivers cash to recipients using card-based and mobile phone-based systems, may provide potential opportunities for closer collaboration between humanitarian and development actors working towards achieving collective, sustainable outcomes, as well as enabling a closer link between state provided social protection and humanitarian cash transfers. Potential benefits of digital cash transfers for recipients, donors and private partners include (Ford, 2017, also see Table 2 below):

- Lower costs for donors, particularly where schemes are run over a longer period of time;
- Improved transparency and reduced opportunities for leakage;
- Lower transaction costs, increased control of finances, potential for greater financial inclusion;
- Improved personal security due to the reduction in reliance on physical cash;
- New markets for commercial partners;
- The development of infrastructure in previously hard to access areas;
- Security updates and emergency notifications from donor agencies to registered users;
- Access to large amounts of data to inform planning of future responses and accurately identify and target beneficiaries in a time of crisis.

Table 2: Summary of potential benefits of digital cash transfers

This Table has not been included for copyright reasons. The full table can be viewed at <https://www.econstor.eu/bitstream/10419/180926/1/1009211722.pdf> page 13

Source: Ford (2017)

Operational issues related to delivering digital cash transfers:

Despite potential benefits, practical challenges remain for programmes that try to leverage commercially provided digital payments. In a humanitarian crisis, the priority is to get payments out to those affected as quickly as possible. Often in nascent markets where digital payments do not have a large user base or supporting agent infrastructure, the logistics of using digital payments – such as signing memorandums of understanding with the private sector, registering beneficiaries and ensuring that there are appropriate cash-out locations – can cause unacceptable delays (Next Billion, 2016).

In light of these challenges, digital payments, if used at all, are often disbursed through closed-loop systems. These are payment platforms created abroad, often for short-term use. They do not connect recipients to an account that they can use for storing, sending and receiving funds after the humanitarian response has ended (Next Billion, 2016).

Challenges include (Ford, 2017):

Infrastructure: Within a crisis or conflict-affected environment inadequate infrastructure could hinder speedy implementation of a digital cash transfer initiative due to:

- Disrupted network connectivity due to damage;
- Insufficiently robust agent network with inadequate liquidity;
- Difficulty accessing hard to reach populations.

Financial Literacy and Inclusion: Dependent upon the recipient population there are a number of potential challenges:

- Lack of understanding of technology and forgotten PINs increase potential for leakage and increase the potential for immediate cash out and associated liquidity problems;
- Difficult to advance financial inclusion aims in a short-term humanitarian intervention designed to provide for immediate life-saving needs;
- Lack of access to technology risks excluding the most vulnerable.

Data and Privacy Regulations: Due to the urgency, complexity and number of stakeholders involved in a response to a crisis, organisations tend to work around what data and privacy regulations are in place. Particular issues of concern which may compromise the humanitarian imperative “to do no harm”:

- Inadequate data protection regulation leaves the individual’s data vulnerable to theft, fraud and transfer to third parties for purposes other than those intended;
- Donor access to data which may not be in the best interests of the individual;
- “Host nation” access to data which may not be in the best interests of the individual;

- Access to biometric data by a third party could expose identity and expose the individual to further risks.

Financial Regulations: In a crisis where speed of response is essential financial “Know Your Customer” (KYC) regulations are complex to work with and vary from country to country. There is little time to agree these in an emergency environment. Suggestions to overcome this are:

- Establish pre-existing agreements, particularly in disaster-prone environments, to limit KYC regulation in a crisis;
- Link with existing social protection cash transfer systems;
- Make the aid agency the beneficiary rather than the individual;
- Establish an Emergency Digital Data Financial Services Template;
- Use smart cards and e-vouchers as they are governed by less stringent KYC regulations.

Private Suppliers: whilst private suppliers are partly motivated by corporate responsibility there are a range of other issues:

- Requirement for a financial justification for installing expensive infrastructure into hard to access areas may lead to “push” message marketing campaign which exposes recipients to services they do not fully understand or need;
- Conflict of interest between multinationals, the government and the needs of recipients.

3. Approaches to digital cash transfers

As noted, cash transfers are increasingly provided in humanitarian responses as a substitute or complement to in-kind aid. At the same time, humanitarian agencies have capitalised on the expansion of digital financial systems globally to deliver cash transfers through bank cards and mobile money to people affected by crisis and disaster (Bailey, 2017). Digital delivery of cash transfers can also create opportunities to connect recipients with broader financial services, such as savings, credit and insurance. The High Level Panel on Humanitarian Cash Transfers recommended that, where possible, cash transfers should be delivered digitally and in a manner that furthers financial inclusion (Bailey, 2017).

International Rescue Committee (IRC) have sought to craft a definition of digital payments that would improve its ability to determine the extent and type of use of digital payments across country offices and measure progress over time (GSMA, 2019: 8 – see table 3)

Table 3: *Spectrum of digital payments*

	Cash in envelope	Paper voucher	Punch card	Remittance transfer	QR code on a token/voucher	Electronic voucher	Prepaid cards	Mobile voucher/token (OTC cash-out)	E-wallet transfer
FACTOR 1 Payment status and transaction details are reported digitally to the IRC (digital backend)	X	X	X	✓	✓	✓	✓	✓	✓
FACTOR 2 Clients receive, store and use money digitally without having to make payments directly and do not need to collect physical cash (digital payment instrument)	X	X	X	X	X	X ✓	X ✓	X ✓	✓
	Non-Digital			Digital					
	Paper-based transfers Paper-based backend + paper-based payment instrument			Stage 1 Digital Digital backend + paper-based payment instrument		Stage 2 Digital Digital backend + digital payment instrument with cashless transaction options			

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Source: (GSMA 2019:8) reproduced with permission

The Electronic Cash Transfer Learning Action Network (ELAN) undertook case studies to provide evidence on whether delivering humanitarian cash transfers through mobile money influences recipients' future use of digital financial services. The case studies examined electronic transfer e-transfer projects in Ethiopia, Zimbabwe and Bangladesh and found that (Bailey, 2017b):

- Delivering humanitarian cash transfers through mobile money creates potential opportunities to connect recipients with broader digital financial services, but does not automatically lead to widespread or sustained uptake. People may prefer to continue using informal financial systems that are more familiar, accessible and profitable.
- Exposure to mobile money through humanitarian cash transfers was not sufficient to enable recipients previously unfamiliar with mobile money to conduct transactions independently.
- Given that the priorities of humanitarian responses are to meet urgent needs, a disaster or crisis may not be the most appropriate time to invest in building digital literacy.
- Aid agencies should still be able to use mobile money delivery systems when they are the most efficient, accessible and transparent way to deliver humanitarian cash transfers.

Table 4: Examples of Digital Cash Transfer Schemes within the Humanitarian Context (Ford, 2017)

This Table has not been included for copyright reasons. The full table can be viewed at <https://www.econstor.eu/bitstream/10419/180926/1/1009211722.pdf>

Source: Ford (2017)

Many humanitarian agencies are working to strike the right balance between implementing cutting-edge technology and being attentive to the challenges faced by vulnerable persons. Humanitarian digital payments face four key recommendations (Better than Cash Alliance, 2021: 18-19).

- **Prioritise Women:** Governments, international organisations, and companies are increasingly putting money directly in the hands of women through digital transfers. A powerful, recent example is women-focused welfare transfers during COVID-19. Such efforts not only benefit women by supporting their financial inclusion and participation in the digital economy, yet they also drive and accelerate universal digital inclusion.

While these efforts are encouraging, women still face systemic barriers to accessing and benefiting from digital payments. New technologies that anchor payments systems, such as the use of AI in detecting suspicious transactions, can widen the gender gap by amplifying existing biases.

UN agencies can help overcome these challenges by supporting gender intentional programming across all UN Principles for Responsible Digital Payments.

- **Support User Choice through Interoperability:** Interoperability is a critical barrier to the efficient disbursement of humanitarian payments. Many end users become siloed with closed loop solutions. These silos prevent digital payments from achieving the same convenience, affordability, and utility as older methods.

The solution depends on how effectively governments, companies, international development organisations, and providers can converge to integrate the digital payments experience, offer greater user choice, and drive stronger demand. To succeed, these ecosystems must be built on a shared digital infrastructure that includes data registries, API-enabled information exchanges, and digital IDs.

- **Promote Accountability Across the Value Chain:** The back end of digital payments is becoming more intricate. As the use of innovative technologies expands to meet needs in the humanitarian payments space, the relationships between actors that use digital payments and actors that provide or enable these payments are becoming more complex. This complexity only increases in the last-mile.

It is vital to take a holistic approach and expand perspectives to encompass supply chains. International development organizations and governments can help to align incentives and choreograph all actors.

- **Safeguard Client Data:** The adoption of digital payments is generating data in unprecedented volumes. Leveraging this data to understand user behaviours allows entities to serve their users better and catalyse adoption of digital humanitarian payments.

Increased user data flowing through more institutions heightens the possibility of misuse and discrimination. Innovations such as AI, machine learning, and use of algorithms can expose payment systems to biases. This challenge has supercharged conversations surrounding data ownership, consent, localisation, and bias.

Data controllers must empower users as owners of their personal information. This ownership must be guarded by policies that guarantee users' basic rights.

Donors/Government

European Union

The EU promotes cash operations, which build on technological advances and innovations and use technology to strengthen interoperability and link to longer-term solutions. In particular, EU humanitarian aid prefers digital solutions, such as electronic cash transfers and digital identities, where these make sense from a cost, effectiveness or efficiency standpoint. Digitalisation has to have safeguards in terms of data protection (EC, 2021).

Cash transfers, and whenever possible digital cash, is a default modality for EU humanitarian aid. Nevertheless, a robust analysis based on the context, accountability to target groups and market analyses is indispensable to ensure the selection of the most appropriate modality for aid delivery. The use of cash transfers to deliver the EU's humanitarian assistance has grown from 24% of the total budget in 2016 to 34% in 2019 and 2020 (EC, 2021).

Haiti - Cash Assistance to Improve Food Security for the Most Vulnerable Households Affected by El Niño. In: EC (2019). EU Cash Compendium 2019: Doing More Cash, Better, EC, pp. 40-43. https://ec.europa.eu/echo/system/files/2019-02/eu_cash_compendium_2019.pdf

The project aimed to respond to acute food insecurity caused by the prolonged drought situation that affected the country from 2013 until 2016, which was exacerbated in 2015-2016 by the influence of El Niño.

The partner distributed cash through a financial service provider, Digicel®, using mobile phone e-transfer technology. Beneficiaries were provided with a SIM card and allocated an e-wallet that was credited remotely.

Targeting was innovative as communities were placed at the centre of the process around a consensual situation analysis. Integrated Food Security Phase Classification (IPC) was used to prioritise communities (areas categorised in IPC 3 with households in IPC 4), where assistance was deliberately concentrated. WFP's implementing partners within the identified areas closely engaged with an informal network of local stakeholders to establish a list of potential beneficiaries through the application of a simplified frequency list methodology.

UN Bodies

The UN Common Cash Statement (UNCCS) was launched in December 2018 by the four principals of UNICEF, OCHA, UNHCR and WFP to collaborate on cash and voucher assistance, using common cash systems wherever possible. The UNCCS signatories' commitments are organised around three pillars (UN, ND):

1. Collaborative procurement of financial services;
2. Data interoperability and systems development/ adjustment; and
3. Harmonised programming for cash assistance.

The seven UNCCS focus countries include Afghanistan, Bangladesh, Central African Republic (CAR), the Democratic Republic of the Congo (DRC), Ecuador, Niger, and Yemen. These countries were selected based on identified collaboration opportunities among the

three operational agencies, including feasible and/or existing humanitarian transfers, commitment to collaborate, and the potential for scale.

An example of UNCCS in operation can be gleaned from Bangladesh, here WFP, IOM and UNICEF are using the same transfer mechanism for e-vouchers. In addition, UNHCR is 'piggybacking' on WFP's contract with a finance service provider. Agencies are also piloting interoperability between WFP SCOPE¹ and UNHCR PRIMES² through the access and transfer of biometrics solutions developed at the global level as part of the interoperability work stream. A joint analysis has been conducted on existing post distribution monitoring data between four agencies with a view to harmonise future post distribution monitoring, and work is on-going on harmonisation (UN, ND).

Challenges persist for UNCCS country operations, including (UN, 2021: 7):

- In some contexts, limited overlaps in populations assisted exist among UNCCS operational agencies, meaning restricted trilateral programming opportunities.
- Government policies or bans on CVA are in place in some operations which constitute a blockage. UNCCS agencies have come together on joint advocacy.
- Limited capacities, staffing and resources are in place for UNCCS activities.
- Competing operational priorities (such as COVID-19, droughts) limit focus on collaboration.
- The mainstreaming of cash assistance internally within organisations is already challenging, delivering it jointly with others poses additional layers of complexity.
- Organisational cultures and different mind-sets often add complications.
- Where access to digital services for payments and beneficiary's identification is limited, implementing systems interoperability, identity or CVA digitisation can be challenging.
- Getting actors around the same virtual table, including governments but also technical and operational colleagues (procurement, finance, logistics etc.) can be difficult.
- Ensuring ownership of operational and technical work streams (procurement, data interoperability) at country level can be demanding for staff, who are already overstretched.
- COVID-19 enabled certain aspects of collaboration, but also slowed down the response, showing a reduction in frequency of UNCCS engagement.

¹ SCOPE is WFP's **beneficiary and transfer management platform** that supports the WFP programme intervention cycle from beginning to end. The SCOPE platform is a web- based application used for beneficiary registrations, intervention setups, distribution planning, transfers and distribution reporting.

² The Population Registration and Identity Management Eco-System (PRIMES) is a platform for all UNHCR registration and identity management tools and applications, including existing tools such as proGres, the Biometric Identity Management System (BIMS), the Global Distribution Tool (GDT), the Rapid Application (RApp), IrisGuard and RAIS, as well as those to be developed in the future. PRIMES applications are designed to work in offline, online and GSM environments, and will be interoperable with IT systems used by governments and partner organisations such as WFP (SCOPE) and Unicef (Primer). New PRIMES applications going forward will aim to promote direct access by persons of concern (e.g. access to personal data, entitlement accounts, identity wallet).

- Strengthening alignment between country and global priorities is key along with regular communication and knowledge management.

Pelly & Juillard (2020). Lebanon One Unified Inter-Organizational System for E-cards (LOUISE) Learning review. Key Aid Consulting.

<https://reliefweb.int/sites/reliefweb.int/files/resources/LOUISE%20Learning%20Review.pdf>

The Lebanon One Unified Inter-Organisational System for E-card (LOUISE) is an innovative Operational Model (OM) set up with the intention of streamlining the operational coordination of sectoral and multi-sectoral Cash and Voucher Assistance (CVA) in Lebanon. The model was born out of a formalised collaboration between UNHCR, WFP, UNICEF and the former Lebanon Cash Consortium (LCC). It is, and remains, the first time that three UN agencies have collaborated on a joint OM.

The LOUISE model was conceptualised as a set of systems and work streams. The initial intent of LOUISE was to build overarching, agency-neutral systems that relied on existing agency specific ones, and allowing them to communicate. The LOUISE systems are the Integrated Card System (ICS), the Call Centre, and the Common Information Management (IM) portal. Each of these systems was intended to be connected to the others (i.e. be interoperable), but also to be usable as stand-alone. These systems were intended to be supported by five work streams. The responsibility for each system and work stream has been distributed between member agencies.

In 2019, LOUISE's is primarily used a payment platform for CVA by WFP, UNHCR and UNICEF. LOUISE accession is open to any humanitarian agency whose application is approved by the governing body.

In terms of systems development and functionality, WFP acts as a Card Administrator responsible for coordinating card management, thus providing the Integrated Card System (ICS) function. WFP and UNHCR (but not UNICEF) jointly use and cost-share a call centre managed by UNHCR, as the LOUISE call centre is not yet operational. The IM portal is an active website but does not link to the other LOUISE systems

UNICEF: Pavanello, S. (2021). Digital Cash Transfers in Lao PDR: A Scoping Exercise. WFP. <https://reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000133643.pdf>

UNICEF-Ministry of Labour and Social Welfare (MoLSW) unconditional cash transfer pilot. Under the United Nations Joint Programme umbrella, UNICEF is working with the MOLSW to design and implement an unconditional cash transfer pilot targeting eligible pregnant women and children under 12 months in Attapeu and Savannakhet provinces to prevent nutrition-related diseases and chronic malnutrition in children (Joint SDG Fund, 2019). Unconditional cash transfers of 140,000 LAK (15 USD) per month will be delivered under this programme every two months to beneficiary households, for a period of 18 months. At the time of writing the pilot had not yet been rolled out, and the identification of the cash delivery mechanism and the FSP, which also included exploring options for digital payment solutions, was still underway.

World Food Programme

Better than Cash Alliance (2021). Improving Humanitarian Payments Through Digital Innovation: Challenges and Opportunities. Better than Cash. https://btca-production-site.s3.amazonaws.com/documents/616/english_attachments/Improving_Humanitarian_Payments_Through_Digital_Innovation_%E2%80%93_Challenges_and_Opportunities.pdf?1642089725

In 2017, WFP launched a protection of civilians (POC) area in Pakistan's Sindh province, called "Building Blocks," which leveraged Distributed ledger technology (DLT) to authenticate and register beneficiary transactions. Building Blocks is built on "permissioned DLT," which allows for direct, secure, and fast transactions between participants and WFP without requiring a financial intermediary to connect the two parties. After some initial trials, Building Blocks was launched in two refugee camps in Jordan later that year.

Cash value from WFP or other partners is stored in a beneficiary account maintained on the permissioned Building Blocks block chain. Beneficiaries living in the camps can then purchase groceries from participating stores. At checkout, the beneficiary's iris is scanned to authenticate them and authorise the transaction. The cost of the goods purchased is then deducted from the beneficiary's Building Blocks account. WFP settles on a regular basis with the merchant in cash, often through a commercial financial service provider.

The Building Blocks system effectively addresses the challenge of how to exchange value in a beneficiary context, without relying on digital currency. Because the beneficiary's "wallet" exists on the block chain and the transaction is authorised using biometrics, there is no need for the beneficiary to have a smart device or internet connectivity with them to complete the transaction. The merchant, however, does require connectivity and a point of sale (POS) device.

Initial trials of the Building Blocks platform have been successful, and as of August 2020, the platform had served more than 300,000 interactions. The system has the potential to lower transaction costs as there are no intermediaries involved. At the same time, it ensures greater security and privacy for the beneficiaries. No beneficiary-specific information is shared with the merchant directly. Instead, the platform is integrated with UNHCR's existing authentication technology. This saves on financial transaction fees and ensures greater security and privacy for refugees.

The Building Blocks system is a "closed-loop" system insofar as it can only be used within a subset of merchants, yet it is a promising development in the use of DLT in last-mile delivery. WFP is now expanding the program both in terms of venues and channels, including ATMs and mobile money. Usage has also expanded to Cox's Bazar in Bangladesh, where the system is helping in the fight against COVID-19 by minimising physical proximity.

Image 1: WFP's Block Chain Enabled Humanitarian Cash Transfer

This Table has not been included for copyright reasons. The full table can be viewed at https://btca-production-site.s3.amazonaws.com/documents/616/english_attachments/Improving_Humanitarian_Payments_Through_Digital_Innovation_%E2%80%93_Challenges_and_Opportunities.pdf?1642089725 p 63

Source: Better than Cash, (2021: 63)

Jordan: Since 2017, WFP has leveraged Building Blocks to support the rising influx of Syrian refugees in Jordan and to date supports 106,000 people with food assistance. UN Women joined Building Blocks in 2019 and it is channelling cash for work assistance through the network. Building Blocks has saved WFP the equivalent of US\$ 2.4 million in transaction fees in Jordan — funds that can be redirected to serve more people in need.

Bangladesh: Building Blocks serves 870,000 Rohingya refugees monthly across various programmes operating in the world’s largest refugee camp in Cox’s Bazar. Building Blocks enables the delivery of assistance through e-vouchers outlets where people can redeem different entitlements in one transaction.

Lebanon: Building Blocks served as a coordination platform in Lebanon, helping 15 different organisations streamline their operations, and coordinating the assistance before distributing it to the people. This helps avoid duplication and provides families with the right support at the right time, as efficiently as possible. In the aftermath of the Beirut port explosion, Building Blocks coordinated the distribution of US\$ 56 million in assistance.

World Bank

Pavanello, S. (2021). Digital Cash Transfers in Lao PDR: A Scoping Exercise. WFP.
<https://reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000133643.pdf>

As part of the Reducing Rural Poverty and Malnutrition project, the World Bank is working with the Ministry of Agriculture to design and implement a conditional cash transfer pilot targeting pregnant women and mothers of children ages 0–2 years in the four northern provinces of Huaphanh, Xieng Khuang, Phongsaly, Oudomxay. Conditional cash transfers of 140,000 LAK (15 USD) per month will be delivered to eligible households with a frequency of two to three months to improve nutrition, diet diversity, utilisation of health and nutrition services and practices through the conditionality attached to the transfer (World Bank, 2019).

On 25th February 2021 the MAF and UNITEL signed an agreement under which UNITEL will disburse conditional cash transfers to eligible beneficiaries using the U-Money platform: cash will be transferred to recipients’ phones and will be cashed out at “service agents at village level, UNITEL staff, and convenient counter services”. The first cash transfers were expected to be distributed in March 2021.

Indian Government

Mukherjee, A. (2021). Lessons from Bihar’s COVID-19 Assistance Program. CGD.
<https://www.cgdev.org/sites/default/files/digital-cash-transfers-stranded-migrants-lessons-bihars-covid-19-assistance-program.pdf>

For nearly a decade, India has invested in building a digital infrastructure to transfer social benefits to its citizens directly to their bank accounts. Known as the Direct Benefit Transfer (DBT) platform, it currently includes 380 schemes run by 52 ministries of the federal government. State governments can use the DBT platform for their own cash transfer schemes as well. India also has a clear strategy in place to enable digital delivery of public

services, subsidies and transfers. Known as the “JAM trinity”, the objective is to utilise universal coverage of its biometric ID system, Aadhaar, to expand bank account ownership through the Jan Dhan financial inclusion program and leverage mobile technology to reach final beneficiaries of social assistance. The COVID-19 lockdown provided a test of whether these investments in digital infrastructure would pay off and help the government deliver relief quickly and efficiently.

Bihar’s initiative addressed a critical need for cash assistance that had to be designed, directed and delivered digitally. The author, however, notes the lack of data to make a judgement on its efficiency and impact.

Bihar’s case indicates several lessons for over 200 countries delivering COVID-19 social assistance payments to over a billion new beneficiaries. Even with a unique, universal and digital ID platform, high rates of bank account and mobile phone ownership, identifying and paying migrants is a challenging proposition. Digital technologies help to quickly rollout and scale up programs but a lack of unified social registry is a serious constraint. Complex design, eligibility norms and ID verification can be critical roadblocks. Finally, receiving and accessing the cash transfer is not straightforward and bank accounts may not always be the best option to receive emergency payments especially with restrictions to mobility and access to cash out points. Exclusion remains a daunting challenge. Digital first programs often ignore people at the bottom of the digital pyramid with the least digital capacity – Bihar’s program is no exception. People with smartphones could use the Android application (iOS was not supported) to register while those without it had to overcome additional hurdles to complete the process. Last mile payment through bank accounts and many people faced problems entering correct bank account details, dormant accounts requiring KYC, and to cash out once the assistance was received. Bihar’s program could have paid to digital wallets or provided e-vouchers to cash out at bank or mobile money agent points, as was done in Togo, Namibia and Colombia – it was a policy choice not to do so.

Non-Government Organisations

Oxfam

Oxfam (2019). Electronic cash transfer and digital financial inclusion during crises and conflicts in the Philippines. Oxfam.

<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620924/cs-philippines-cash-transfers-271119-en.pdf;jsessionid=9D848BB42A5340797887C19F70F50B6E?sequence=4>

This learning brief presents Oxfam’s experience of cash transfers in the Philippines: how it evolved from an approach to humanitarian aid delivery to one which is at the cutting edge of its development strategies. It demonstrates the effectiveness of cash as an approach to meeting the diverse needs of people affected by crisis, especially of women, who often find themselves disadvantaged by gender-blind development and humanitarian aid.

During the recovery phase of the Typhoon Haiyan response, Oxfam pioneered the use of an electronic solution to cash transfers. In 2016, Oxfam worked with Visa Inc. and PayMaya, an industry pioneer in the Philippines on mobile money and payments, to develop a product that combines savings, credit, micro-insurance, and financial literacy in one single electronic platform.

The collaborative partnership of Oxfam–PayMaya was sanctioned by the Bangko Sentral ng Pilipinas in its effort to deliver financial inclusion at scale. With the confluence of a viable regulatory environment, increased mobile and internet penetration, and the emerging market for products that cater to the unbanked poor, the ground had been set for Oxfam to level up its cash transfer programming.

Around 2016, Smart Communications, the leading telco in the Philippines, rolled out PayMaya card, which allowed card-holders to facilitate cashless transactions for products and services. While its consumer base grew quickly in urban centers, it has set its sight on lower income brackets, including in rural areas. Oxfam and PayMaya with the support of Visa Inc. built the strawman model of iAFFORD (Inclusive and Financial Facilities for Resilient and Developed Filipinos) that could potentially change the access of people living in poverty to financial services.

Table 4: The iAFFORD card has a number of built-in features.

This Table has not been included for copyright reasons. The full table can be viewed at <https://oxfamlibrary.openrepository.com/bitstream/handle/10546/620924/cs-philippines-cash-transfers-271119-en.pdf;jsessionid=9D848BB42A5340797887C19F70F50B6E?sequence=4> page 11

Source: Oxfam (2019)

With the use of an algorithm, the system tracks the financial behaviour of the cardholder and matches the value and volume of transaction to a credit score that matches to a loanable amount. The micro-insurance covers livelihoods and assets. The Australian government and Google awarded the iAFFORD project the Google Impact Challenge–Technology Against Poverty Prize, a worldwide search for innovators who use technology to solve key social and development problems. This enabled Oxfam and PayMaya to translate the strawman model into a business product.

World Vision

Pavanello, S. (2021). Digital Cash Transfers in Lao PDR: A Scoping Exercise. WFP.
<https://reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000133643.pdf>

In 2021, WVI were finalising an agreement with UNITEL for the roll out a mobile money pilot to be launched in March/April 2021 in two selected provinces (see also World Bank example). Through this pilot WVI aims to test digital payments and gradually shift from cash in hand to mobile money transfers to cover allowances (e.g. transport, per diem), remunerations, and incentives to government officials and other individuals (e.g. village health volunteers, community mobilisers) attending WVI capacity building and training activities. The idea is to first test mobile money transfers with a pool of recipients who are likely to be familiar with mobile technologies, have a mobile phone, and relatively easy access to a cash out point (e.g. a UNITEL agent), and subsequently, on the basis of this experience, explore the possibility of piloting mobile money for cash transfers to beneficiaries.

Care International and World Vision

OPM (2017). Zimbabwe 'Cash First' Humanitarian Response 2015–2017 Evaluation report. OPM.

<https://www.alnap.org/system/files/content/resource/files/main/Zimbabwe-Cash-First-Humanitarian-Response-2015%E2%80%932017.pdf>

CARE International in partnership with World Vision International in Zimbabwe completed implementing a DFID-funded cash transfer programme in drought-affected southern provinces of the country, which ran from August 2015 to May 2017. This large-scale, humanitarian programme reached over 400,000 people. Its objective was to meet the immediate food needs of households through the provision of unconditional, multi-purpose cash via mobile money. The programme represented the first time that cash transfers had been used as a large-scale alternative to aid in Zimbabwe, and the first large-scale provision of cash transfers through mobile money.

Mobile Network Operators (MNO), Econet and NetOne, were engaged to facilitate cash transfer payments through their mobile money platforms, Ecocash and One Wallet. The initial plan was to deliver the cash using a single MNO. However, after conduct of a rapid assessment to verify the coverage, it was identified that NetOne had stronger coverage in two districts. It was then decided to additionally engage NetOne in order to fill this coverage gap.

The experience of Care and World Vision in Zimbabwe shows that at times, cash transfer programmes may need multiple different cash delivery systems, whether that is multiple different systems from a single agency, or multiple different agencies delivering cash using different systems based on what is most appropriate for their targeted populations. In Zimbabwe, two different mobile network operators were used, recognising that no one MNO could successfully deliver cash to all of the targeted communities. Having this flexibility to contract multiple financial service providers ensured that communities' accessibility was best supported in terms of geographical reach, network coverage, and familiarity.

International Rescue Committee (IRC)

GSMA (2019). Navigating the Shift to Digital Humanitarian Assistance: Lessons from the International Rescue Committee's Experience. GSMA.

https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/12/IRC_Report_R2_WebSpreads.pdf

IRC Chad began cash programming in 2014 using three types of modalities for distribution: mobile money, e-vouchers and hawalas³. There are currently two IRC cash assistance programmes in Chad: one in the east of the country that initially used hawalas and two in the west that used mobile money. Today, the programmes in the west have transitioned to e-vouchers and hawala due to difficulties encountered with mobile money. Both projects adopted a protection-based approach, targeting female-headed households or survivors of gender-based violence.

³ Hawala is an informal method of transferring money without any physical money actually moving. It is described as a "money transfer without money movement." Another definition is simply "trust."

Despite this preparation, challenges arose that led to the eventual discontinuation of mobile money as a modality. The main challenges were:

1. A disconnect between Tigo employees in the field and Tigo HQ. This resulted in poor communication and an inability to respond to challenges in a timely manner, exacerbating problems and causing delays.
2. Liquidity. Tigo agents accessed physical cash from local traders, which created challenges because many traders only had access to Nigerian Naira, given their proximity to the Nigerian border, and not Central African Francs, which the local population preferred.
3. Technical challenges. There were reports of blocked SIM cards, missing transfers and incorrect PINs.
4. Intermittent mobile connectivity. This limited the availability of mobile money services and increased the risk that recipients could not access their assistance when needed.

Tigo improved their services through the course of the partnership, increasing their responsiveness and capacity to respond to technical challenges. Despite these efforts, the improvements were not sufficient to continue using mobile money for cash disbursements. Ultimately, the IRC decided to switch to e-vouchers to meet operational and programmatic needs and targets.

GSMA (2019). Navigating the Shift to Digital Humanitarian Assistance: Lessons from the International Rescue Committee's Experience. GSMA.

https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/12/IRC_Report_R2_WebSpreads.pdf

Despite nascent mobile money use in Jordan in both the general population and the humanitarian context, the IRC and several other humanitarian organisations are switching to mobile money. IRC Jordan is piloting a mobile-money enabled CVA with 18 incentive workers (volunteers) in Za'atari refugee camp, with the eventual aim of a wider roll-out to pay additional incentive workers and provide assistance to CVA recipients in other camps and urban areas, where appropriate.

IRC Jordan is in the process of contracting a mobile money provider (MMP) to enable payments to recipients. It plans to contract both a primary and secondary supplier — the latter will be used if, for example, unresolvable issues arise between the IRC and the primary MMP, or the IRC plans to roll out mobile money to areas where the secondary MMP has better mobile network coverage or a more robust agent network.

IRC Jordan's MMP partner (Dinarak) is committed to actively engaging in initiatives and projects that serve vulnerable populations in Jordan, with a particular focus on women, low-income Jordanians and refugees. Dinarak provides services to the IRC and other humanitarian partners at a lower rate than their commercial operations. Dinarak is also committed to supporting the IRC in registering and training recipients to use their services, including financial and digital literacy, as well as training IRC staff to manage their services (e.g. how to use the payments dashboard and initiate payments). These preparatory steps should increase the chance of perceived potential benefits of mobile money translating into actual benefits, both for recipients and IRC operations.

Dinarak identified three areas of improvement for the tendering, procurement and contracting phases:

- provide feedback to improve future proposals,
- supply sufficient information to price services correctly
- take the time to understand Jordan's mobile money ecosystem before requesting services.

IRC Jordan also identified changes they would make in the future, including conducting a thorough market assessment before issuing a request for proposal, hiring a mobile money expert to lead the market assessment and create specifications for the services required and standardised request for proposals for easier review.

International Federation of Red Cross and Red Crescent Societies (IFRC)

IFRC (2018). Learning Review Blockchain Open Loop Cash Transfer Pilot Project.

IFRC. <https://www.calpnetwork.org/wp-content/uploads/2020/03/1557828622.Blockchain-pilot-study-KRCS-IFRC-Kenya-Oct-2018-1.pdf>

In early 2018, the IFRC applied to and won a global fintech and Islamic Finance competition, which was organised by the Islamic Development Bank and IE Business School. The award will support the piloting of blockchain technology to increase the transparency and traceability of Islamic social financing. In December 2017, the IFRC was awarded a grant by the Norwegian Red Cross and Innovation Norway to conduct the Blockchain Open Loop Cash Transfer Pilot Project to explore how blockchain could add transparency and accountability to open-loop CTP, and to investigate how the technology could provide people with digital identification.

In May 2018, the IFRC in collaboration with the Kenya Red Cross Society (KRCS) implemented the pilot project in Isiolo County, Kenya assisting over two-thousand households affected by drought. Isiolo County forms one of Kenya's twenty-three arid and semi-arid lands where drought conditions are prevalent, producing high livestock mortality and, in turn, food and livelihood insecurity.

For the pilot project, KRCS pioneered a contextualized solution designed to promote timely delivery of aid while strengthening accountability to beneficiaries and donors. Several partners came together to combine different capacities into an end-to-end system: Red Rose implemented a data management system, which was integrated via an electronic funds transfer mechanism to Safaricom's M-Pesa mobile money network. In tandem, the data management system was also linked to a private block chain built on open source technology to record transactions in an immutable manner.

Blockchain technology offers a way to improve transparency and accountability through its unalterable distributed ledger. Coupled with data management and integration with open-loop payments such as mobile money, this solution enables more efficient, timely disbursement of cash at scale, while ensuring further controls and improved quality of service to beneficiaries.

Research suggests the potential for block chain technology to undergird durable digital identification systems. This could provide an alternative identification to beneficiaries without a National ID and allow them to avail aid, particularly cash-based assistance.

Save the Children

Save the Children (2016). Digital Cash Transfers in Liberia A case study from Save the Children's Emergency Food Security Program (2015- 2016). Save the Children.

https://resource-centre-uploads.s3.amazonaws.com/uploads/digital_cash_transfers_in_liberia.pdf

In Liberia, Save the Children (SC) decided to tap into a local mobile money product provided by Lonestar MTN (Lonestar) to facilitate payments to 5,000 beneficiaries who were selected to participate in the Emergency Food Assistance for Ebola Affected Families in Liberia Program (SC Program). The SC Program targeted populations in two counties, Bong and Margibi, and provided seven disbursements of Liberian Dollar (L) \$4,400 each.

The Liberian context provided a range of challenges in terms of rolling out digital cash transfers. Liberia ranks on the lower end of enabling environments for mobile financial services (#87 out of 104 countries). Liberia's underlying banking sector also provided some challenges, particularly when it came to providing regular cash liquidity in more rural areas. While the delivery mechanism enabled SC to digitize their entire distribution process, there were still many issues they had to overcome to ensure cash was received by their beneficiaries.

Key learnings from the programme include:

- Analysis and discussions with the central bank and mobile money bank partners who provide liquidity management services should be held during the decision-making phase of a programme. Asking key questions about the way money supply is managed by the central bank and how banks manage liquidity for more rural branches will inform how cash supplies are moved around the country. Establishing a clear understanding of the roles and responsibilities bank partners of mobile money products have will also contribute to a broader sense of potential liquidity issues.
- It is imperative that more liquidity and float management partners outside of Monrovia, often times referred to as "Superagents," are put in place to avoid the need for funds to be removed from agents' mobile wallets and transferred to their bank accounts. This requires greater analysis of commercial activities in rural areas that can help identify additional partners who can provide liquidity and float rebalancing services. Lonestar can and should tap into spikes in demand created by cash transfer programs like SC's, which have the potential to inject enough commercial activity around mobile money to support the initial business case for Superagents.
- Establishing well-defined expectations and scopes of work for agents at the onset of the programme will help both the programme and the mobile money provider to set realistic and clear roles that can be integrated into an agreement. Additional commission structures should be explored either through the mobile money provider or through direct agreements with participating agents in the areas where cash outs are needed (this is what SC did for this programme). Key costs to consider are: 1) transportation, 2) agents expanded level of effort, 3) additional staff hired to manage the process, 4) withdrawal fees from banks, and 5) increased communication costs (airtime).
- Mobile money service providers should assume some direct management of the agent networks, particularly when a programme is looking to facilitate managed cash outs. This scope of work should be incorporated into the agreement, and discussions

should be held on how those management responsibilities are reflected in the pricing and overall scope of the contract. Approaching these negotiations as a partner vs. client may incite a more candid discussion with providers around the potential risks and ways to mitigate them.

- This sort of data should be used to encourage greater participation from and stronger partnerships with mobile money providers. Mobile money is considered a value added service (VAS) for many mobile network operators (MNO), meant to incentivize customers to use their SIM over their competitors'. Data like this can be used to develop profiles for beneficiaries who are likely to become long-term customers of the MNO. These profiles can be used to predict potential long-term revenues the MNO will gain from partnering with a cash transfer program, which provides quantitative evidence towards a stronger business case.
- Better brand recognition and confidence are key performance indicators for any marketing division at an MNO. SC and other humanitarian organisations should recognise their value as brand ambassadors when implementing cash transfers through mobile money platforms. This value added should be recognised within the agreement, which adds to the concept of a partnership vs. client/provider relationship.

4. References

Bailey, S. (2017). Electronic transfers in humanitarian assistance and uptake of financial services. ODI. <https://cdn.odi.org/media/documents/11747.pdf>

Bailey, S. (2017b). Electronic transfers in humanitarian assistance and uptake of financial services: A synthesis of ELAN case studies. ODI-HPG. <https://www.mercycorps.org/sites/default/files/2019-11/ETransfersinHumanitarianAssistanceFinancialServicesBrief.pdf>

Bailey, S. & Harvey, P. (2015). State of evidence on humanitarian cash transfers. ODI. <https://cdn.odi.org/media/documents/9591.pdf>

Better than Cash Alliance (2021). Improving Humanitarian Payments Through Digital Innovation: Challenges and Opportunities. Better than Cash. https://btca-production-site.s3.amazonaws.com/documents/616/english_attachments/Improving_Humanitarian_Payments_Through_Digital_Innovation_%E2%80%93_Challenges_and_Opportunities.pdf?1642089725

DFAT (2022). DFAT Humanitarian Strategy Guidance Note: Cash Transfers. DFAT. <https://www.dfat.gov.au/sites/default/files/cash-transfers-dfat-humanitarian-strategy-guidance-note.docx>

ELAN (#####). Seeking Solutions: New Roles for Technology in Cash and Voucher Programs. ELAN. <https://www.mercycorps.org/sites/default/files/2019-11/SeekingSolutionsTechCashVoucherProgELANMC.pdf>

European Commission (2021). Cash Transfers: Fact Sheet. https://ec.europa.eu/echo/what/humanitarian-aid/cash-transfers_en#:~:text=In%20many%20humanitarian%20crises%2C%20goods,them%20the%20dignity%20of%20choice.

- Ford, Emma (2017). The potential of digital cash transfers to strengthen the link between humanitarian assistance and social protection, Bath Papers in International Development and Wellbeing, No. 54, University of Bath, Centre for Development Studies (CDS).
<https://www.econstor.eu/bitstream/10419/180926/1/1009211722.pdf>
- GSMA (2019). Navigating the Shift to Digital Humanitarian Assistance: Lessons from the International Rescue Committee's Experience. GSMA.
https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/12/IRC_Report_R2_WebSpreads.pdf
- IARN & CALP (2016). The Future of Financial Assistance. IARN.
<https://reliefweb.int/sites/reliefweb.int/files/resources/The%20future%20of%20financial%20assistance%20-%20An%20outlook%20to%202030%20%28executive%20summary%29.pdf>
- Idris, I. (2017). Cash Transfer Platforms in Humanitarian Contexts (GSDRC Helpdesk Research Report 1416). Birmingham, UK: GSDRC, University of Birmingham.
<https://assets.publishing.service.gov.uk/media/5a5f37b4ed915d7dfb57d033/1416-Cash-Platforms-in-Humanitarian-Contexts.pdf>
- Next Billion (2016). Eight Principles for Digital Payments in Humanitarian Response. Next Billion.
<https://nextbillion.net/eight-principles-for-digital-payments-in-humanitarian-response/>
- OECD (2017). Cash Based Response. OECD. <https://www.oecd.org/development/humanitarian-donors/docs/cashbasedresponse.pdf>
- Pavenello, S. (2021). Digital Cash Transfers in LAO PDR. WFP.
<https://assets.publishing.service.gov.uk/media/5a5f37b4ed915d7dfb57d033/1416-Cash-Platforms-in-Humanitarian-Contexts.pdf>
<https://reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000133643.pdf>
- Sphere Handbook (2018). The Sphere Handbook. Sphere Handbook.
<https://spherestandards.org/handbook-2018/>
- UN (ND). UN Common Cash Statement (UNCCS) World Food Programme Questions & Answers. UN. <https://www.unhcr.org/5f5223f44.pdf>
- UN (2021). UN Common Cash Statement: Progress Report. UN.
<https://reliefweb.int/sites/reliefweb.int/files/resources/UN%20Common%20Cash%20Statement%20Progress%20Report%20-%20September%202021.pdf>

Suggested citation

Avis, W. (2022). *Descriptive mapping of the use of digital cash transfer modalities*. K4D Helpdesk Report No. 1093. Institute of Development Studies. DOI [10.19088/K4D.2022.053](https://doi.org/10.19088/K4D.2022.053)

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