Digital cash transfers and transitioning from humanitarian cash to social protection

Rosa Akbari,
Alexa Swift-Reeves,
Ric Goodman,
and Valentina Barca

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1. PURPOSE

Digitalisation efforts are growing within humanitarian cash transfers and government-led social assistance. FCDO, among other donors, also increasingly expects humanitarian cash and voucher assistance (CVA) to more intentionally consider government-led social protection programmes in their designs. While encouraging the use of digital payments within humanitarian cash programmes is not new, doing so alongside expectations to strengthen social protection systems is. This guidance note thus sets out the potential benefits, risks, and suggested pre-requisites when wanting to transition humanitarian cash programmes to digital payments in an inclusive and sustainable manner, in contexts where social protection (SP) alignment is also a priority.

NB: this primer is not intended to cover digital payment adoption within humanitarian CVA writ large, but rather the intersection of humanitarian CVA and social protection, with one area of alignment being approaches to digital payment.

2. FRAMEWORKS AND PRINCIPLES

Prevailing principles around digital payments are listed below as background to conversations had amongst humanitarian actors. Each material is meant to target a slightly different audience: governments, humanitarian and development practitioners, and the private sector. When distilled, however, principles tend to focus on hallmark themes such as user centricity, inclusivity, data privacy and security, reliability, and preparedness especially regarding partnerships, capacity, and systems.

<table>
<thead>
<tr>
<th>Digital principles material</th>
<th>Convened by</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barcelona Principles on Digital Payments (2016)</td>
<td>USAID</td>
<td>• Practitioners: humanitarian</td>
</tr>
<tr>
<td>UN Principles on Responsible Payments (2021)</td>
<td>UNCDF - Better Than Cash Alliance</td>
<td>• Practitioners: humanitarian, development • Governments • Private sector</td>
</tr>
</tbody>
</table>

Myriad toolkits and practitioner guides also inform how actors design, assess, and scale digital payments. Best practice guidance can be found throughout CALP and World Bank repositories, while assessment tools such as Interagency Social Protection Assessments (ISPA), USAID Digital Ecosystem Country Assessment (DECA), and USAID/Nethope Digital Payments Toolkit (among others) help build requisite contextual perspective.
3. MERGING PERSPECTIVES

Governments and humanitarian actors operationalise cash transfers differently. While end results (i.e., cash delivery) remain the same, how each actor designs programmes, identifies participants, contracts service providers, and manages sensitive data exchange is quite different. Understanding these distinctions is an important step towards identifying opportunities to work together towards common outcomes. Similarly, this understanding helps clarify where collaboration is not immediately compatible or requires additional support, where a more medium-term view is needed in order to have impact. Identifying and acknowledging these differences is a requisite step towards appreciating how each sector can work together more effectively, mutually reinforcing accountability towards those being served.

<table>
<thead>
<tr>
<th>Humanitarian CVA</th>
<th>Government (G2P) transfers via SP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme Funding cycle</td>
<td>Medium and long-term (2-5 years, up to 10-15 or more).</td>
</tr>
<tr>
<td></td>
<td>One-time payment (anticipatory/pre-emptive CVA).</td>
</tr>
<tr>
<td>Scale</td>
<td>High volume with intended national coverage, can piggyback on broader G2P systems (e.g., for social insurance).</td>
</tr>
<tr>
<td></td>
<td>Ongoing regular transfers.</td>
</tr>
<tr>
<td></td>
<td>May require distinct strategies to reach different locations in order to guarantee horizontal equity across the country.</td>
</tr>
<tr>
<td>Scope</td>
<td>Continuously supporting a variety of social protection programmes, across social insurance, social assistance and beyond (including emergency social assistance) as well as G2P payments for other sectors.</td>
</tr>
<tr>
<td></td>
<td>Socio-economic targeting.</td>
</tr>
<tr>
<td>Driving push for digitisation</td>
<td>Cost savings, transparency, accountability, desire to grow regulated financial services and expand/improve civil registries (including those supporting national ID).</td>
</tr>
<tr>
<td>Evaluation criteria for FSPs</td>
<td>Capacity to support many functions:</td>
</tr>
<tr>
<td></td>
<td>• Fast payment delivery</td>
</tr>
<tr>
<td></td>
<td>• Reach (often to new market segments and/or areas difficult to access)</td>
</tr>
<tr>
<td></td>
<td>Capacity to meet:</td>
</tr>
<tr>
<td></td>
<td>• Scale</td>
</tr>
<tr>
<td></td>
<td>• Regulatory requirements</td>
</tr>
<tr>
<td></td>
<td>Inclusion often factors relatively low unless explicitly included (e.g., during procurement).</td>
</tr>
</tbody>
</table>
|                   | **Operationally driven** to support multiple cash out options to address different needs/preferences across geographic areas and
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<table>
<thead>
<tr>
<th>Programme / cash recipient data management</th>
<th>Value for Money (VfM), including total cost to transfer ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion rates (e.g., female account holders), sensitivity &amp; experience with target communities.</td>
<td></td>
</tr>
</tbody>
</table>

**Programme-driven** to support multiple programme modalities (un/restricted, un/conditional), with possible need/desire to switch between these quickly. Vouchers still feature prominently as programme option.

**Value Proposition (for FSPs)**

| Low: comparatively smaller market share means less bargaining power & capacity to drive ‘rules of the game’. |
| High: economies of scope & scale, with ability to set and modify regulatory framework as needed. |

**Focus on inclusion, access and dignity considerations**

| High, following general humanitarian principles. |
| Can be relatively low & needs to be pushed (e.g., during procurement). |

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### 4. KEY TERMS AND CONCEPTS

Digital payments discussions require some fluency with payments and technology language that may be unfamiliar to humanitarian and public-sector actors. The list below focuses on terms and concepts relevant for digital payments. It assumes a basic level of understanding of humanitarian cash transfer programme designs as well as social protection concepts.

Cash transfers ("payment delivery") are often categorised in terms of sender ("payer") and recipient ("payee"). Differentiating between these groups helps one identify distinct supply and demand considerations, as well as the readiness of a specific payment delivery channel (and its stakeholders) to scale digitally. Payment providers also tend to specialise along these lines, honing their products and services around specific user groups or “customer segments.” Two (2) predominant forms of payment delivery within humanitarian CVA or SP include:

- **Peer to Peer (P2P) transfers**, where an individual sends cash value or credit from their account directly to another individual’s account, sometimes across borders (e.g., remittances) and/or in different currencies (e.g., Cash-in GBP >> Cash-out Somali Shilling). At surface, most humanitarian cash transfers represent some form of P2P transfer (though they would more accurately be categorised as business to consumer payments in industry terms, as partners serve as the “business” holding a contract with an FSP, with cash recipients representing the “consumers”.

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1 Or “beneficiary data management”
2 Restricted transfer modalities include voucher schemes
3 It is important to note that this calculus within humanitarian programmes often includes vested interest from other ‘third parties’ to the actual transaction (e.g., donors), many of which may serve as the actual ‘payee’—with partners only serving as intermediary implementers, similar to the role a field partner and FSP may have.
4 Commonly referred to as Financial Service Providers (FSP) by humanitarian actors.
5 P2P providers include over the counter (OTC) remittance companies as well as pre-paid (non-bank) card issuers, two commonly used FSP types for humanitarian CVA.
Government to Person (G2P), which include government-led disbursements of public sector salaries, pensions, and other forms of social assistance; these transfers are primarily made within the same country jurisdiction and in the same currency.

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6. An example of this is the use of RedRose (in Ukraine), Genius Tags (in NW Syria), or DiPocket (in Poland), where each company is formally a technology provider holding standing contracts with local FSPs, managed on behalf of their clients (MoneyGram, Cashii, and Mastercard, respectively). This contracting setup has implications on partners’ (and consequently, donors’) abilities to influence FSP service delivery as the FSP’s contractual obligation is not to the end client (e.g., NGO delivering cash) but rather the intermediary technology company they have a standing relationship with.

7. Often to the advantage of recipients who can buy more for the same amount of cash from informal sector vendors who do not accept digital payments

8. Please see Better Than Cash Alliance Defines Digital Payments

It is important to note that depending on the payment provider and payment device(s) in use, humanitarian CVA actors sometimes enter agreements with intermediary service providers that are not sanctioned as a normal financial institution. This includes providers that manage prepaid cards on behalf of Mastercard or Visa, for example, or technology companies that aggregate contracts / systems across a variety of payment providers to one portal. In these cases, the service provider may not require KYC to be conducted in the same way as a formal financial institution would, shifting liability to the contracting agency (i.e., humanitarian CVA actor) to ensure recipients meet KYC prior to distributing cards or cash directly. While options exist for humanitarian actors to pursue more flexible FSP options vis-à-vis formal financial institutions, the relative flexibility of these intermediary “non-financial” companies still remains attractive.

Payment systems facilitate transfers between payers and payees, incorporating both operational and regulatory components. Operationally, these systems rely on payment instruments and technologies (“devices”) as well as data communication channels supplied by MNOs. Digital payment systems thus encompass a combination of payment instruments, devices, and communications, with a growing constellation of service providers supporting various aspects of the process chain. It is important to note, however, payment instruments of the same type do not all operate in the same way. Each has its own levels of interoperability, accessibility, and business incentives to consider. It is far more important to understand the service providers behind each system or device, as underlying business processes and different regulatory frameworks can govern each.

Digital payments can be considered partially, primarily, or fully digital depending on how many cash in/out points occur during the transfer cycle. A shift towards digital may not completely eliminate the use or exchange of any physical cash—especially in contexts where end transactions remain cash-based. Simply put, if market or end-use infrastructure does not exist for the onwards use of digital payments (e.g. at retail points) – digitising cash transfers only digitises the transfer from an NGO (“business”) or Government to recipient (“consumer”) and not beyond. In fact, premature forced adoption of digital payments in these cases may raise opportunities for intermediaries, like mobile money agents, to exploit demands for cash.
5. EVALUATING RELEVANCE FOR DIGITAL PAYMENT ADOPTION

The five building blocks set out below unpack the factors that influence digital payments going to scale. These factors specifically focus on digital payments as one piece of a larger ecosystem supporting the delivery of social protection programmes. More importantly, they provide signposts to monitor within your context, as “whole of system” shifts towards digital payments (including by humanitarian actors) require policy makers and private sector actors to address gaps or inefficiencies within each.

5.1 Infrastructure

Governments and development donors increasingly look to strengthen digital public infrastructure (DPI) as part of broader digitalisation or “e-governance” agendas. DPI investments focus on three foundations: digital identity, payments, and secure information exchange, with network connectivity supporting throughout. These provide the operational rails for digital payments to occur and evolve, whether as market-level transactions, government-led social assistance, or humanitarian cash transfers.

» Digital identity is an expansive yet critical topic when considering digitalisation agendas of governments and payment providers. Access to foundational ID11 is part of the Sustainable Development Goals (SDGs) as without identification, a person is often unable to enrol children in school, buy a SIM card, or open a bank account. “Good ID” systems, building off the ID Principles, are operationally effective, have wide scale & scope, and interoperable & portable meaning one maintains control over their ID information including who accesses or shares it.

» Payment gateways / interfaces enable interoperability between different payment providers, allowing transfers to move seamlessly across one financial institution to another. Countries with national payment gateways, like India or Jordan, are also able to more readily establish linkages to other gateways abroad to facilitate cross-border transactions

» Network connectivity & coverage is dependent on communications connectivity, most commonly led by mobile network coverage. Mobile Network Operators (MNOs) expand their geographic footprints by investing in new connectivity infrastructure (e.g., towers) when their business cases encourage to do so. Mobile penetration rates, measured by industry bodies such as the GSMA, are another important touchstone to support these business cases; high penetration rates indicate potential market demand for new digital payment or financial service products

5.2 Regulatory and policy frameworks

Digital public infrastructure is not the only requirement for digital payments to work. An enabling regulatory (legal) and policy environment is also key. At a basic level, there should be strong data protection policies and privacy laws in place, while financial institutions should be fairly regulated to avoid exploitation or

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9 For more information, please see latest STAAR: Social Protection as a ‘Solar’ System
10 Helpful UNESCO blog post to learn more about DPI investments in India
11 As distinct from functional IDs, which are usually not government-sanctioned or recognised. Functional IDs include those provided by UN (e.g., SCOPE card) and INGOs. UNHCR / UNRWA status cards can be the exception to this, as they can be recognised by governments as a form of foundational ID for stateless populations.
12 SDG Target 16.9 aims “by 2030, [to] provide legal identity for all, including birth registration.”
13 For more information, please see Omidyar Network’s Good ID brief
14 Interoperability is very defined as the design of systems working together. This is achieved through the adoption of harmonised data standards, governance models, and business processes.
15 Donors and governments have invested in a variety of initiatives to further payment interoperability and supporting mechanisms (e.g., data standards for governments to take and adapt). Recent examples include: MojaLoop, backed by BMGF; X-Road, backbone of e-Estonia; Unified Payment Interface (UPI), part of IndiaStack - promoted international by iSpirit Foundation; GovStack backed by GIZ, DIAL (among others); SP-Convergence
monopolisation. Reform is dependent on Central Bank policy decisions. Advocacy and lobbying efforts are typically led by stakeholder pools spanning public and private actors, sometimes convened by donors.  

» **Know-Your-Client (KYC)** regulations are set by Central Banks and can be further augmented by financial institutions. KYC checks authenticate an individual’s stated identity, and usually require a recognised form of ID. They can be designed with a tiered structure to vary the requirements needed for different types of products or value of funds transferred. KYC laws can be enabling (e.g., to incorporate stateless populations) or exclusionary (e.g., national ID required to activate mobile SIM). In contexts where foundational (“national”) IDs and/or centralised KYC policies may not exist, humanitarians often substitute digital **functional** IDs as a form of auditable verification, with more awareness being raised on how to advance use of digital unique IDs in a responsible manner.  

» **Data protection** – grounded in principles of data minimisation and informed consent, payment providers and those collecting information on their behalf (i.e., implementers) should uphold responsible data management across all stages of programme delivery. While the advent of GDPR has raised actors’ commitments to these principles, it does not apply to all jurisdictions, nor does it ensure privacy-by-design. It is important for privacy policies to be practiced, not just drafted.  

» **Accountability** to prevent fraud and corruption, as well as to support people-centred decision making. At times, calls for increased digitisation by partners is to increase **auditability**, with accountability as a byproduct. Developing more accountable policy frameworks can be considered separately, for example thinking through incentive structures for private sector actors (e.g., mobile network operators, digital financial service providers) to pursue inclusive growth strategies that incorporate the needs and demands of women or other marginalised communities.  

### 5.3 Governance and coordination

Includes convening appropriate stakeholders within steering committees, working groups, or other cross-functional coordination structures. This stakeholder engagement can include various government institutions (e.g., Central Bank), private sector actors, and downstream partners who may be implementing programmes on government / humanitarian actors’ behalf. IndiaStack or Estonia's development journeys showcase working models of government-led multi-stakeholder digitalisation efforts.  

» **Payment triggers**, in support of anticipatory action or shock response social protection (SRSP) systems, require up front commitment from various government institutions and data sources to determine contextual thresholds for emergency / one-off payments, data sharing processes, and decision-making points  

» **E-Governance strategies**, such as Malawi’s, help lay foundation for technical bodies to convene and institutionalise digitalisation commitments  

### 5.4 Supply

In order for a transfer to remain digital (i.e., not cashed out), digital payments must be a widely accepted form of payment within local markets. This means merchants are equipped with necessary payment devices (e.g., Point-of-Sale machines) and network or service subscriptions. They must also trust to accept payments through these digital means.  

» **Products & Services**: digital payment setup is cost effective for small business operating in local markets. Other consumer-oriented products (e.g., virtual ATM cards) or services (e.g., cash-out points) should also be easy to use and widely accessible.

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16 See recent [Open Banking regulation](#) pushed by Central Bank of Nigeria.  
17 Identity authentication (versus verification) compares submitted ID documents / information against existing datastores or civil registries. In most cases, these registries are used / hosted by state authorities; in choice cases, non-state registries (like UNHCR’s) can also be used, if policies are approved to do so.  
18 Please see [ICRC Biometric data flows and unintended consequences of counterterrorism](#) for more.  
19 Please see [Accountability to Affected Populations and Cost-Effectiveness in Humanitarian Outcomes and Policies and Practices that Link Accountability to Affected Populations and Protection from Sexual Exploitation](#) for further information.
Merchant acceptability is bolstered by effective onboarding campaigns, led by payment providers. The wider this network is, the less restricted digital payments also become. Providers can be encouraged to invest more in their on-boarded programmes, helping build small merchants’ ability to use and maintain potentially new digital technologies.

5.5 Demand

Even when a strong digital payment ecosystem exists, programme participants still need to trust and have access to products and services (i.e., supply) for transfers to remain fully digital. In many contexts hard currency is still very much the preferred means of payment/consumer transaction. Populations with low literacy and numeracy as well as low digital literacy are much less likely to trust a digital system and much less able to use it comfortably, hence evidencing a decreased demand for digital payments. Even more so, demand does not automatically increase once a product exists. Some form of “shock” often spurs adoption, such as demonisation (e.g., India) or COVID-19 (global).

- **Digital / Financial Literacy:** Regular exposure, either through a culture of remittances or longer-term recurring payments, as with an SP programme, provide multiple opportunities to build the required familiarity with digital devices/products, payments and money storage. Programmes can incorporate digital and financial literacy training to build this familiarity. Shorter humanitarian programmes may not have the time, scope or resources to do so, and are more often designed to serve populations as they find them, rather than attempt to build skills or change behaviour over time.

- **Trust:** this can apply to trusting government systems, banking / financial systems, the small retailer’s point-of-sale (POS) device, or even an SMS received indicating you have new credit in your account. Building financial and digital literacy can help dispel many “unknowns” of digital payments to increase demand, as can user centric product development via public-private partnerships.

6. GOING DIGITAL – OR NOT?

Widescale digitalisation efforts / investments should have medium to long-term horizons and therefore may be incompatible with immediate needs assessed within humanitarian contexts. Humanitarian cash programmes looking to “go digital” should ideally leverage existing local infrastructure, and more specifically existing local payment and national ID infrastructure. While there are a number of benefits to shift to digital payments, if certain pre-requisites are not in place, these benefits quickly turn into risks. These programmes typically don’t have the time or resources to build/expand nascent infrastructure or ride out teething problems. Well-timed (and properly sequenced) interventions and investments can thus be as critical as the outputs themselves.

6.1 Pre-requisites

- **Quality cash (not voucher) programming at scale:** ‘real’ SP alignment focuses on cash transfers, where operational similarities are grounded in partnership with FSPs and other payment providers. Contexts where humanitarian voucher programmes predominate should first focus efforts to evolve programming to become unrestricted, before focusing on any updating operational rails like payment delivery.
  - **Efficacy and Relevance:** the use of digital payments inherently confirms the use of (unrestricted) cash as an appropriate (and preferred) modality for assistance. It is important to ensure applications of digital payments—especially during crisis—are indeed strengthening already validated modalities of assistance.

- **Financial & digital literacy:** across populations and geographic areas, to include marginalised communities, women, etc.

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20 This is not to discount partners’ transitions to electronic vouchers (e-vouchers). Rather, only a note that the systemic benefits of transitioning to digital payments are not fully achieved focusing efforts to digitalise restricted cash programme modalities or “closed loop” transfer mechanisms.
Stakeholder willingness to engage and coordinate investments over a medium to long term horizon. This includes institutionalising buy-in from government, donors, and private sector in addition to partner organisations, to ensure strategic continuity.21

Infrastructure: mobile network coverage and access at minimum, to include marginalised communities, women, etc.

### 6.2 Understanding drivers and indicators

Below is a non-exhaustive list of indicators to monitor when attempting to understand your contexts’ readiness for digital payment uptake. Readiness can be simply broken down along the lines of infrastructure, regulations, and people (i.e. market dynamics). For more comprehensive discussion, especially regarding the role governments can play in stoking digital payment use, please consult the World Bank G2P’s Emergency Social Assistance Key Considerations and Policy Recommendations.

<table>
<thead>
<tr>
<th>Readiness area</th>
<th>Example indicator</th>
<th>Relevance</th>
<th>Country example</th>
<th>Trackers &amp; other resources to watch</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>Remittance payments (as total value, % of GDP, etc.)</td>
<td>Indicates levels of trust / familiarity in a payment type (demand). Also highlights preference for cash-out modalities and if/when it typically occurs.</td>
<td><em>Somalia</em>: cross-border P2P transfers</td>
<td>GSMA State of the Industry Report (2022) – released annually</td>
</tr>
<tr>
<td>People</td>
<td>Small Merchant digitalisation</td>
<td>Market dynamics (supply)</td>
<td><em>Jordan</em>: despite the Central Bank of Jordan’s promotion of digital payments strategy + creation of national payment gateway (JoMoPay), findings showed a large barrier to uptake was low (merchant) acceptability rates.</td>
<td>CGAP Digitizing Merchant Payments initiative</td>
</tr>
<tr>
<td></td>
<td>% and spread of digital payment use</td>
<td>Familiarity with digital money and payment products across the country and within target populations/population and locations of concern.</td>
<td><em>Kenya</em>: mPesa is widely used across the country with an extensive agent network, though still shows low penetration in the</td>
<td>GSMA State of the Industry Report (2022) – released annually</td>
</tr>
</tbody>
</table>

21 Lessons from *Jordan*: a main blocker to linking the Government of Jordan’s (GoJ) National Aid Fund social protection system with humanitarian cash programmes was GoJ’s strong desire to keep the two systems apart (despite main UN agencies receiving funds for both sides of cash operations, humanitarian and cash delivery on behalf of GoJ).
<table>
<thead>
<tr>
<th>Regulatory</th>
<th>% of population with access to National ID</th>
<th>ID documents are a common requirement to open many forms of digital payment accounts in order to fulfil KYC protocols.</th>
<th>Pakistan: NADRA mobile units circulated to issue national IDs throughout country, sometimes in tandem to disaster relief efforts (e.g. flood responses).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory</td>
<td>% of target population able to meet basic national KYC requirements, where a national ID alone ≠ meeting KYC</td>
<td>ID penetration may be at an acceptable level nationally, but significantly lower with specific target population (refugees, displaced, historically marginalised).</td>
<td></td>
</tr>
<tr>
<td>Regulatory</td>
<td># of registered financial technology (FinTech) companies</td>
<td>FinTechs can act as catalysts for requisite changes to regulatory and legal frameworks, where regulations often come after rapid innovations or “disruptions” in ecosystem.</td>
<td>Kenya: mPesa mobile money, founded in 2002 by Safaricom, entered an unregulated market. The Central Bank of Kenya (CBK) has since issued strategies to curtail its dominance.22</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>G2P or P2G payment volume</td>
<td>Common precursor to digital payment uptake.</td>
<td>Colombia: In 2020, the Columbian government stood up Ingreso Solidario as a rapid response to economic conditions exacerbated by COVID-19, with elements financial inclusion factored into programme design.</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Mobile penetration rate or Unique subscriber penetration.24</td>
<td>Requisite to send/receive/accept various forms of digital payments. Dependent on both connectivity and device penetration.</td>
<td>Uganda: with support of GSMA, MNOs (Airtel, MTN) were lobbied by stakeholders (UN, INGOs) to extend service towers to West Nile / Bidi Bidi refugee camps.25</td>
</tr>
</tbody>
</table>

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22 See article CBK Pushes for Competition Against mPesa for more
23 Person to Government (P2G) payments are when citizens can directly pay government agencies for their taxes, state-owned utilities, and other services; these transfers are primarily made within the same country jurisdiction and in the same currency
24 Usually calculated as a ratio of SIM cards to a country population (mobile penetration rate) or the total number of people in a country that own a mobile phone expressed as a percentage of the total population (unique subscriber penetration)
25 For more information, please see GSMA M4D - Humanitarian Payment Digitization
6.3 Assumed benefits

- **Efficiency:** Use of digital transfers and payments can be more efficient when technologies and digital platforms reduce logistical, security, and human resources required to transfer cash to crisis affected people. Initial costs associated with setting up digital transfer systems are more significant in early stages but can show savings in the longer term. Digital payments can also help reinforce priority outcomes, such building resilience as supported by anticipatory action or SRSP. Digital payments provide opportunity to consolidate programmes behind interoperable payment sources, if infrastructure, governance, and programmatic alignment allow to do so.

- **Security:** In countries where a strong data protection culture and trusted jurisdiction exists, digital cash transfers can be more secure than transporting physical cash for distribution. In insecure and high-risk contexts, digital transfers can provide better security for both staff and recipients as long as recipients are still able to safely access cash-out points (e.g., ATM) or use their transfers in the last mile. These benefits are only realised if governments and cash actors are committed to respecting privacy laws and informed consent.

- **Transparency:** Digital transfers can reduce fraud and diversion, providing a clear record of the chain of delivery, and clear record of funds being transferred directly into accounts registered to recipients. Further authentication measures, such as PINs and biometrics, can add further assurances though not completely eliminate fraud in and of themselves. Ongoing due diligence and digital/financial literacy training is still required in order to ensure exploitation does not occur, despite increased technical transparency. Namely, to ensure end recipients are empowered to demand financial service delivery that upholds and protects their own consumer/customer rights.

- **Social Protection Linkages:** As governments transition social assistance programmes to use digital payments, there comes opportunity for humanitarian cash programmes to leverage the same payment infrastructure and service providers. In doing so, humanitarian actors can help reinforce government strategies to increase digital or financial inclusion. Though harmonising payment mechanisms alone does not achieve programmatic alignment or more inclusive programming. Procedural alignment (e.g., around targeting, transfer values) is still important, as is the need to ensure shifts to digital do not unintentionally exclude certain subsets of the population.

6.4 Potential risks

- **Exclusion:** Digital payments require basic access to mobile technology and connectivity. They also presume a basic understanding of (and trust in) financial services, in order to understand your rights as a customer and basic digital literacy. Meeting this threshold reduces in conflict and insecure areas, and among marginalised populations, including ethnic minorities and those living close to poorly controlled boarders.
  - **Gender:** Digital payments require the recipient to have control, and access and the ability to use the digital device funds are sent to. Understanding gender dynamics and ensuring that target participants are able to access digital devices should be a paramount consideration when designing any digitally enabled programming, including those promoting digital payments.

- **Losing trust:** Without considering broader readiness factors, premature transitions to digital payments can actually make cash delivery less efficient. One way to monitor this is to factor in conversion time when considering the appropriateness of digital payments in a certain context. The repercussions of not delivering a payment on time or promoting unreliable services ultimately affect partners’ trust in communities, which could lead to decreased access to deliver programmes of any kind. The use of digital means also inherently minimises opportunities for face-to-face touchpoints throughout a transfer cycle, unless programmes are intentionally designed to counteract this. For example, if digital payments are leveraged, partners should also ensure feedback mechanisms (for technical support, grievances, etc.) are diverse enough to include the option to request speaking with someone in person.

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26 To learn more about factors of e-transfer cost efficiency
27 Conversion time refers to the amount of time it takes for a (digital) payment to be converted into a need-based resource (i.e., paying for a good or service)
Data privacy: in challenging contexts, data protection policies and rights to privacy are often weak. Without proper cybersecurity controls and internal data protection procedures, casual applications of digital payments can indeed raise the risk profile of recipients. Even more, many challenging contexts are affected by civil conflicts. As such, affected populations themselves may be uncomfortable moving towards formal (digital) financial services or registering for an ID card, if they think it will make them more visible to certain government authorities.

Lack of Interoperability: decisions and investments to go digital (for payments or data management) should not be made in isolation. If the different dimensions of interoperability are not considered up front, especially when designing technologies or selecting service providers for humanitarian cash programmes, there is potential for partners to negate future opportunities to support humanitarian-development nexus objectives. Without proper stakeholder engagement and codified commitments, humanitarians’ cash / data systems may ultimately be incompatible with governments’ systems and approaches even if they functionally seem to be doing the same things (e.g., enrolling participants, transferring payments). So, opportunities to “hand over” pieces of digital infrastructure are lost.

7. LAST THOUGHTS TO KEEP IN MIND

Transitioning to digital payments does not completely eliminate the risk of fraud. Strong implementing teams, good practice, and clear policies and procedures do.

Political economies are important. Like other areas requiring systemic change, it is important to consider incentive structures and stated redlines across all relevant stakeholders to ensure investments made to one partner and/or part of a payments ecosystem (as example), will sustain to support broader outcomes such as greater alignment of humanitarian cash with social protection systems.

Advocating for partners to transition away from vouchers and align with SP and become more digital all at once is taxing – instead promote cash / unrestricted programming first, then digital payments to see lasting results. Sequencing (investments) is important.

Focus on eco/systems, not products. This usually requires much earlier and more in-depth engagement with government ministries responsible for digital transformation agendas to promote best practice and ensure considerations around inclusivity are incorporated.

Modularity is a design best practice—that also applies to humanitarian use cases. At a basic level, Principles of Digital Development should be followed by partners to promote open-source development where feasible. (See here for application to Social Protection.) Promotion of data responsibility and “do no harm” principles are also acutely important tenants to reinforce with partners, through statement and funding commitments.

Watch out for all-in-one digital products (incl. those built by non-profits, international organisations, or NGO-only focused companies). If the platform does not already exist in the non-humanitarian marketplace, there is likely a reason why. Do not hesitate to ask hard questions, corroborate technical performance, and seek out additional expertise if you’re not comfortable assessing proposed pilots, products, or services yourself.

- E.g., If a provider is an “expert” in closed loop technologies (e-vouchers), they’re less likely to be well versed on open loop / cash-based systems (e.g., prepaid card transfers) and the regulatory aspects in a certain country. It is important for partners to ask the hard questions and truly understand the business behind the product / service!

28 It is encouraged to promote OCHA’s guidelines for Data Responsibility where able.
29 Lessons from Jordan: a main blocker to linking the Government of Jordan’s (GoJ) National Aid Fund social protection system with humanitarian cash programmes was GoJ’s strong desire to keep the two systems apart (despite main UN agencies receiving funds for both sides of cash operations, humanitarian and cash delivery on behalf of GoJ). Despite donor efforts, stronger incentive structures were needed to forge the GoJ’s political will to support humanitarian cash systems alignment with NAF SP.
30 Please see ICRC “Doing No Harm” Digitalization of Cash Means for Humanitarian Action.
- Pay attention to the license of companies that approach you. Not all payment providers are regulated the same!

» Procurement matters. Service provider / technology partner identification & pilot designs should be vetted, if there is expertise to do so. Do not assume your partners are experts with digitally enabled piloting, as they are often learning just as you are.

» Ownership and control of funds once transferred to the recipient’s account is not always consistent across the same financial products / payment mechanisms. Simply put, not all cards or e-wallets operate the same. Who the money legally belongs once transferred to the account (recipient or transferring entity), can impact if the payer is able to recover or pull back funds.

» Target good quality CVA / implementing partners to build off strong programme foundations. Adding digital components or new service providers to poorly designed CVA (vis-à-vis data mgmt., monitoring, inclusion, compliance, etc.) will exacerbate issues, not fix them.
Blockchains are one (of many) ways to record, store, and exchange data. Cryptocurrencies use blockchain; they are not synonymous with it. Humanitarian actors have explored isolated pilots using blockchain-based data management and cryptocurrency transfers, while myriad governments continue to explore use cases as well—though under mandates to establish (digital) national IDs or new Central Bank-regulated currencies (i.e., Central Bank Digital Currencies – CBDCs). While humanitarian and government-led initiatives may seem similar in practice, the ability for humanitarian actors to scale pilots (and inherently, service providers) across peers is far less limited than governments who can mandate use within their geographic jurisdictions.

Which countries have restricted or banned cryptocurrency31?

When considering applications within CVA programming that attempts to promote linkages with social protection, a new calculus of considerations emerges—as blockchain systems and cryptocurrencies are sometimes employed in order to intentionally operate outside of traditional regulations, where some governments have banned use altogether. Complimentary to cryptocurrency, many countries have banned the use of encryption. This has severe implications on data protection and privacy culture, so should be gauged in parallel to crypto-specific restrictions or bans. While government policies do not completely negate the relevancy of blockchain and/or cryptocurrency in certain contexts, it does influence the political optics of particular programme designs, especially when attempting to partner with government.

31 As of April 2023. Rules and regulations change constantly so please check for latest on your country.
Back to basics

As with any potential transition to digital, it is important to first identify and understand the problems that need to be resolved, to then determine whether a certain technology (in this case, blockchain) is the most viable approach to solving said issues—technical, political, regulatory, or otherwise. Simply put, many of the question and considerations applied when gauging the feasibility of digital payments (e.g., mobile money) for humanitarian contexts holds true when considering applications of blockchain or cryptocurrency. It is important to still ask the basic questions regardless of the novelty of new product or service being offered: “how does this function in an offline environment?” “what does local market behaviour say?,” and most importantly “what do recipients prefer to receive?” This is doubly true when assessing service providers: past performance, business continuity, and regulatory adeptness are all still key considerations that should be considered, same as any other FSP.

There are few examples of scaled application within humanitarian responses, especially on publicly available blockchains. Blockchain pilots have mostly focused on data management. Within humanitarian CVA, this has manifested to address “deduplication” across participating actors; token-based transfer systems could also fall under this category. In these cases, it is still unclear whether blockchain is a necessary component to general digitalisation and data structuring efforts. In other words, could the same ends be achieved through different (non-blockchain based) means? Cryptocurrency pilots have also remained relatively small-scale (<5,000 HH), amounting to restricted cash delivery (that still requires cashing-out) as merchant acceptance rates still remain low in many areas of intervention. Again, when considered from the perspective of someone receiving cash assistance to meet their basic needs, the form of transfer should be immediately usable. If market dynamics (supply / demand) must shift in order for that to be the case, cryptocurrency fast becomes just another digital payment option to consider among many.

Risks and “ethical experimentation”

There are a number of opinion pieces shedding light on risks associated with blockchain-based experimentation, especially in humanitarian settings. Blockchain humanitarianism and crypto-colonialism (2022), Web3 and Communities at Risk: Myths & Problems with Current Experiences (2022) and Between Efficiency and Do No Harm (2023) are good starting points. Each touches upon country-level pilots, with Oxfam’s “Unblocked Cash” in Vanuatu and WFP’s “Building Blocks” featured prominently.

What to monitor

» Government’s exploring use of blockchain for e-Governance, especially around issuance of digital ID documents

» Many countries exploring development of Central Bank Digital Currencies (CBDC)

» Local regulatory and market contexts – as for any payment type!
  - What do majority of small merchants accept?
  - What method of payment do recipients prefer? For emergency / basic needs assistance? Other forms of cash assistance?
  - What investments / commitments are being made in order to transition to a cashless economy?

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32 This refers to platforms that do not hold and/or transfer any monetary value (e.g., cryptocurrency) within their own systems. Many ‘token-based’ systems are effectively electronic voucher (e-voucher) platforms in practice.

33 If the form of “cash” sent is not accepted in local markets, this amounts to a restricted form of transfer (i.e., vouchers) by function