ENABLING DIGITAL FINANCIAL SERVICES IN HUMANITARIAN RESPONSE: FOUR PRIORITIES FOR IMPROVING PAYMENTS

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The humanitarian sector is increasingly turning to digital payments to distribute cash-based aid, but many efforts remain fragmented around custom built solutions that miss opportunities to build strong, enduring pathways to financial inclusion and resilience for crisis-affected populations. Few solutions leverage or support the standardization and scale of existing, commercially-available digital payment systems and ecosystems that are critical to achieving robust, affordable, and enduring access to financial services for the poor. Yet the ability to meet the technical requirements does not prevent the use of these systems. Instead, a set of non-technical issues preclude the use of these standard-based, commercial systems. This brief explores four priorities to address and mitigate the most critical barriers in order to enable the increased use of commercially-available mobile wallets in humanitarian response.

Humanitarian agencies are increasingly turning to digital payment systems as the sector accelerates its transition from using in-kind to cash-based aid[i]. Digital payment systems take many forms including electronic vouchers (via mobile or card), debit cards, pre-paid bank cards, or even mobile phone based wallets. These new options offer advantages over distributing physical cash, such as heightened security, increased accountability and transparency, faster distribution, and a scalable transfer model. In addition, these systems open the opportunity to support greater financial inclusion and resilience for crisis affected populations.

Financial inclusion can have a significant impact on the individuals and communities in which humanitarian agencies work – both during and well beyond a specific crisis event. Access to financial services not only helps poor and affected households to access aid during a crisis, but also builds resilience to better manage risk and shocks in the future. At the same time, digital technology is transforming the financial services industry, and this may have dramatic effects on emerging markets. The McKinsey Global Institute recently estimated that *digital finance* – payments and financial services delivered via mobile phones, the Internet, and cards – could increase the gross domestic product of emerging markets by as much as $3.7 trillion by 2025[ii]. As the use of digital payments expands, the opportunity for further alignment at the intersection of humanitarian response and financial inclusion and resilience will grow and become more promising.

BACKGROUND

The Bill & Melinda Gates Foundation in collaboration with the humanitarian response community is exploring how Digital Financial Services (DFS) can support efficient and effective cash-based aid to improve response outcomes while also building enduring pathways to financial inclusion and resilience. As the number of humanitarian crises around the world continues to rise, the Emergency Response team at the Gates Foundation is working to adapt traditional models to crisis response by working across sectors to extend the influence of new technology and innovation. At the same time, the Gates Foundation's Level One Project seeks to enable country-level DFS systems that include the poor in the

broader and increasingly digital economy for the benefit of all. However, these systems must be open, shared, and standards-based to effectively extend the reach of financial services to the poor.[iii]

DFS systems, such as mobile money, have rapidly expanded across the world. As of December 2016, there were almost 300 mobile money deployments worldwide according to GSMA, overlapping with many countries and geographies in which humanitarians work.[iv] If the humanitarian sector were to leverage existing DFS systems, it would not only provide the benefits of digital payments but also support the standardization and scale of existing ecosystems to build robust, affordable, and enduring access for the poor and vulnerable populations that humanitarians serve.

Acknowledging an unprecedented opportunity, 25 humanitarian sector and digital payments practitioners, funders and experts convened in February 2016 to discuss how to better use digital payment systems to improve humanitarian response while enabling long-term resilience and financial inclusion. The convening resulted in eight guiding principles (referred to as The Barcelona Principles for Digital Payments in Humanitarian Response[v]; see Figure 1.). The convening revealed marked enthusiasm for financially-inclusive digital payment systems (i.e. systems that create an enduring financial account in the beneficiary's name) but also a disappointing dearth of solutions used by humanitarian agencies that fit the ultimate vision.

Many solutions employed by humanitarian agencies today are closed-loop (i.e. do not support nor interoperate with other similar

Figure 1. Barcelona Principles for Digital Payments in Humanitarian Response

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

systems) and custom built designed to fit the specifications of a particular agency or a specific project. Rarely are these solutions shared across agencies. Very few are financially-inclusive and even fewer utilize common, standards-based systems such as commercially-available, off-the-shelf DFS products. This fragmentation can be partially attributed to a lack of standardization across aspects of cash-based aid programs, including in beneficiary registration and payment delivery.

The growing use of fragmented, closed-loop, non-financially inclusive solutions particularly where commercially-available DFS systems exist raised a central question: *What is preventing humanitarian agencies from being able to leverage commercially-available, off-the-shelf DFS systems for cash-based aid disbursement?* Are there unique technical requirements that existing, commercial systems cannot offer or do non-technical barriers stand in the way?

EMERGENCY MOBILE WALLET PROJECT

To explore these questions, the Foundation's Financial Services for the Poor and Emergency Response teams partnered with Ericsson, a global telecommunications firm and mobile financial services technology leader to prototype an emergency mobile wallet. Although other financially-inclusive digital payment systems exist (such as electronic cards and bank accounts), we chose to focus on mobile wallets due to the growing global ubiquity and use of mobile phones as key channel for delivering financial services.

Ericsson's commercially deployed mobile wallet platform currently operates in 14 countries across Africa, Asia, and South America. Ericsson brings deep experience in humanitarian response as a member of the United Nations Emergency Telecommunications Cluster (ETC), a global network of organizations that work together to provide common communications services in humanitarian crises.

In April 2016, the Gates Foundation and Ericsson hosted a two-day workshop with key humanitarian stakeholders and digital payment experts to gather requirements for mobile wallets in humanitarian response crisis contexts. Based on the requirements gathered, the Ericsson team developed a mobile wallet prototype building upon their existing mobile wallet system. The Foundation then hosted three meetings between September and November 2016 to receive feedback on the prototype from World Food Programme, United Nations High Commissioner for Refugees, Mercy Corps, Save the Children, and the International Rescue Committee. These meetings served to better understand the technical and non-technical requirements for a mobile wallet to function in a humanitarian response context.

CRITICAL BARRIERS TO USE OF MOBILE WALLETS

The feedback collected revealed that commercially-available, off-the-shelf mobile wallets meet the technical needs of core payment system functions – bulk registration, bulk payment, withdraw cash, and international remittance – required by the agencies. However, the feedback surfaced a wide array of challenges related to non-technical issues that create unique and complex demands for systems that the Ericsson prototype or, indeed, any commercial mobile wallet system cannot satisfy.

These demands require customization beyond the standard requirements of commercial mobile wallet systems and lead to custom built, bespoke solutions. Not only does this prevent agencies from leveraging the standardization and scale of existing systems, but the solutions are often more expensive and less enduring for both the humanitarian agency and the populations they support. In other words, what is preventing use of these systems is not an issue of the system's ability to meet agency requirements, but rather a set of non-technical issues that preclude the use of standard, commercial systems.

Figure 2 displays the 16 most frequently cited operational and policy challenges to the use of mobile wallets ranked by severity. The regulatory challenges are further explored in recently released white paper by Ericsson.[vi] Of this set, 12 challenges (e.g. low financial literacy of beneficiaries and complex and slow to execute DFS vendor arrangements), while important and worthy of further action, were not considered insurmountable. Four issues, however, emerged as critical barriers that most commonly prevented the agencies from considering existing, commercially-available mobile

Figure 2. 16 Common Challenges to the Use of Mobile Wallets in Humanitarian Response
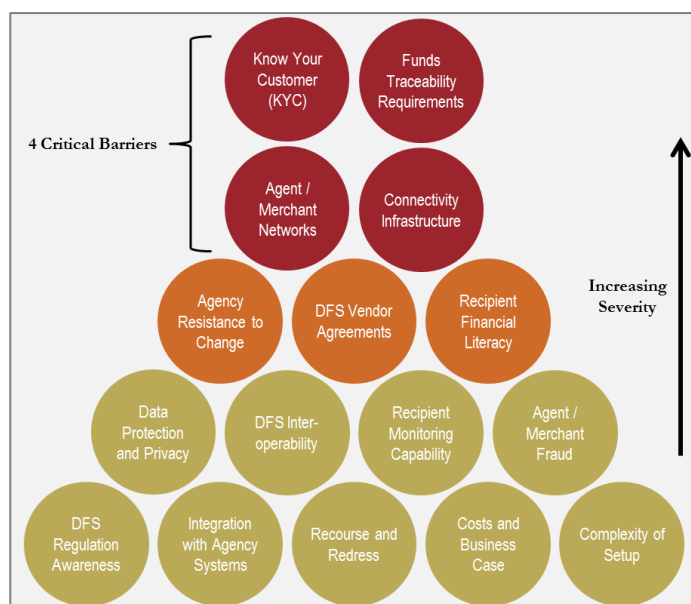
wallet systems.

Know Your Customer (KYC). Humanitarian agencies serve the poorest, most vulnerable populations including internally-displaced persons and refugees. These populations often lack the required identity documentation to open a mobile money account and crises further exacerbate this problem (e.g. lost documents, unrecognized documents in the case of refugees). Many countries have not designed KYC regulation with flexibility in mind to provide open access to these vulnerable populations in times of crisis. The agencies noted that the time and resources required to meet KYC requirements is prohibitive in many scenarios.

Funds Traceability Requirements. During the demonstrations, agencies saw the value that mobile wallets can offer as an enduring, financially-inclusive solution for cash disbursements. Yet, strict and entrenched donor reporting requirements for funds traceability, such as the need to identify when aid is received and how it is used by beneficiaries, largely prevent agencies from adopting mobile wallet systems, as they by nature reduce the control and visibility over funds. In addition, donors have inconsistent requirements for funds traceability. Donors support many types and forms of requirements, sometimes differing from project to project, which again compounds the difficulty of using common, standard solutions.

Connectivity Infrastructure. Damaged or insufficient connectivity infrastructure (e.g. electricity and mobile networks) limit the feasibility of mobile wallets and even prohibit digital options in a crisis. This constraint has propagated a wave of digital payment systems that function well in offline or intermittent connectivity environments such as card or mobile phone based vouchers. The ETC deploys temporary telecommunications equipment (such as Wi-Fi internet connectivity) to serve and support humanitarian agencies' operations on the ground but does not at this time restore or repair commercial connectivity infrastructure for the use of the general population. However, there are recent and upcoming efforts to address this gap. The ETC's 2020 Strategy and GSMA's Humanitarian Connectivity Charter are examples of initiatives to fill this gap and ensure both humanitarian agencies and affected populations have access to connectivity infrastructure in a crisis.

Agent and Merchant Networks. Robust, well-managed agent and merchant networks are a critical component of the mobile money ecosystems in order to handle the influx of cash management and disbursement needs. In many humanitarian response scenarios, these networks are non-existent, nascent, or fragile. Humanitarian agencies expressed neither the technical nor the financial capacity to set up and manage mobile money agent or merchant networks, as these are often subject to more stringent regulatory oversight than bespoke systems in response contexts.

FOUR PRIORITIES TO ENABLE DIGITAL PAYMENTS

Until we address these critical non-technical barriers, the use of commercially-available mobile wallets systems by humanitarian agencies will fail to thrive or have the envisioned positive impacts on response and resiliency efforts. To get there, we recommend four priority pathways.

1. Create a minimum data set for beneficiary registration. There is a wide spectrum of beneficiary registration processes, systems, and tools across humanitarian agencies, and the lack of standardization weakens the ability of regulators and technology providers of mobile wallet systems, like Ericsson, to coordinate with the sector. With many ongoing efforts, an opportunity exists for the humanitarian community to agree to a common minimum data set for collection and format of beneficiary registration data. Such harmonization can have three important effects.

First, a common minimum data set may enable regulators to better structure KYC regulation that allows for flexibility in a crisis situation. Second, standardization should reduce the need for solution customization, which increases the cost of these solutions for technology providers, humanitarian agencies, and ultimately for users. Third, humanitarian agencies can support existing national digital identity programs, when present, by aligning the minimum data set with the requirements of these programs and pre-negotiating acceptance into these systems.

2. Create emergency DFS regulatory templates. Increased political will in a crisis can motivate regulators to enact emergency policies to facilitate a rapid response; however identifying, negotiating, and enacting that policy is by no means guaranteed and can significantly delay or prohibit the use of mobile wallets. This identification and negotiation needs to happen before the crisis.

Emergency DFS regulatory templates could facilitate preparedness by providing a standard, structured approach to negotiating, modifying, and enacting time bound regulations that often prohibit the use of mobile wallets in a crisis such as KYC and agent and merchant regulation. Regulatory templates can present a predetermined set of regulations for regulators to modify and negotiate beforehand. In a crisis, regulators could quickly propose the pre-negotiated documents, sign and implement.

For example, regulators can reduce or even suspend KYC requirements for certain threshold accounts for a set and brief period of time (e.g. KYC requirements are minimized for 180 days). Another category in the emergency regulatory template could be temporary modification to mobile money agent management and oversight regulation, such as temporarily suspending exclusivity or management requirements for limited-scope agents.

3. Align funds traceability requirements with principles of cash-based aid. While technically possible to create mobile wallet systems with restrictions (e.g. beneficiary level sub-wallets) that provide greater control and fund visibility, this does not align with a motivating principle behind cash-based aid—to empower beneficiaries to make their own purchase decisions—and largely precludes the use of commercially-available mobile wallet systems. And, inconsistent requirements from donor to donor and project to project stymie efforts for standards-based, scalable systems that can be shared across agencies.

To meet the call from the UN Secretary General Ban Ki Moon for cash to be the preferred method of aid disbursement made at the World Humanitarian Summit in July 2016 and to support financial inclusion and resilience objectives, donors must rethink monitoring, learning, and reporting requirements so that agencies can more easily use standard, scalable, financially-inclusive systems.

Although a change to the status quo is required, mobile wallet systems may offer new monitoring possibilities. More collaboration between donors and agencies is needed to explore innovative metrics, processes, and approaches possible through the use of mobile wallets to support monitoring, learning and evaluation needs.

4. Determine the value of mobile wallets throughout crisis contexts. The use of commercial mobile wallets is not always viable, particularly when faced with insufficient connectivity infrastructure and/or agent and merchant networks. Moreover, the impact of mobile wallet solutions may vary by crisis type (slow vs. rapid onset) and phase (response vs. recovery vs. reconstruction). These differences should be better understood in order to effectively demonstrate the value of commercially-available, financially-inclusive mobile wallets for both agency operations and affected populations in the short and long term. This will be critical for motivating additional private sector investment, as well as policy and systems change.

For example, mobile wallets may be more feasible and more impactful during the "recovery" and "reconstruction" phases however, or in long-term protracted crises where these non-technical barriers may be less acute. In fact, mobile wallet solutions may be more viable and have better financial inclusion and beneficiary empowerment outcomes in a livelihoods response context like refugees or hunger response, where aid payments tend to be routine and provided for longer periods of time.

In another example, even when temporary, closed-loop digital payment solutions are required (because systems are weak or non-existent), agencies should start planning in advance to make deliberate transitions to permanent digital payment systems when viable, such as during the recovery and reconstruction phases. Whether a mobile voucher, card voucher or temporary mobile wallet was used, a transition to permanent mobile wallet system, for example, can support enduring financial inclusion for the beneficiary after response programs end.

This more intentionally supports the *response to resilience* framework espoused in the Barcelona Principles. It also strengthens the elusive link between humanitarian and development programs. For example, as social safety net protection programs increasingly shift to digital payment systems, humanitarian agencies can coordinate with governments to create smooth transitions between programs and systems. Moreover, many agencies run both immediate response and long-term recovery or development programs, yet these efforts often remain in silos with little coordination around how and if systems should be shared or transitioned to support each context. New program transition approaches to permanent digital payment systems need to be designed and tested to effectively build towards these longer term objectives of resilience and financial inclusion.

NEXT STEPS

The four priorities proposed in this brief aim to address and mitigate the most critical current barriers to the increased use of commercially-available mobile wallets in humanitarian response. However, we believe both the challenges and the priorities easily extend to all commercially-available DFS systems that the humanitarian sector does or could potentially leverage.

In 2017, The Bill & Melinda Gates Foundation in collaboration with the humanitarian response community and technology providers of DFS systems will continue to explore and drive the overlap between the humanitarian response and financial inclusion objectives, identifying specific steps to move this agenda forward as well as the principles that shape it.

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