



COVID-19 and digital humanitarian action: Trends, risks and the path forward

February 2021



The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 300 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai and the Mobile 360 Series conferences.

For more information, please visit the GSMA corporate website at www.gsma.com

Follow the GSMA on Twitter: [@GSMA](https://twitter.com/GSMA)



This material has been funded by UK aid from the UK government; however, the views expressed do not necessarily reflect the UK Government's official policies.

Lead Author: Zoe Hamilton (Insights Manager, GSMA)

Analysis: Belinda Baah (Insights Manager, GSMA) and Janet Shulist (Independent Consultant)

Contributors: Jenny Casswell (Director of Research and Insights, GSMA), Oly Parsons (Director, Mobile for Humanitarian Innovation Fund, GSMA), Isaac Kwamy (Senior Manager, Strategic Partnerships and Market Engagement, GSMA), Erdooyongo (Policy and Advocacy Manager, GSMA) and Jaki Mebur (Market Engagement Manager)

Acknowledgements: The GSMA would like to thank our partners and grantees who gave their time and commitment throughout this process. Additionally, the GSMA Digital Identity and Assistive Tech teams were instrumental in their contributions and reviews of this report.

GSMA Mobile for Humanitarian Innovation

The GSMA Mobile for Humanitarian Innovation programme works to accelerate the delivery and impact of digital humanitarian assistance. This will be achieved by building a learning and research agenda to inform the future of digital humanitarian response, catalysing partnerships and innovation for new digital humanitarian services, advocating for enabling policy environments, monitoring and evaluating performance, disseminating insights and profiling achievements. The programme is supported by the UK Foreign, Commonwealth & Development Office.

Learn more at www.gsma.com/m4h or contact us at m4h@gsma.com

Follow GSMA Mobile for Development on Twitter: [@GSMAM4d](https://twitter.com/GSMAM4d)

Table of Contents

Executive summary	2
Acronyms	3
Introduction	4
Research objectives	5
Methodology and research limitations	5
Report structure	6
The impact of COVID-19 on humanitarian operations	8
1. Digital infrastructure	10
Connectivity	11
Free health and education content	12
Information distribution	12
Reliance on mobile networks and connectivity	12
Digitising services and upskilling staff	13
2. New challenges, new digital channels	14
Health	17
Water, sanitation and hygiene (WASH)	17
Protection	16
3. Spotlight on mobile use cases	18
Information as aid	18
Mobile money and cash assistance	20
Data collection and use	26
4. New and existing risks	28
Exacerbating the risk of exclusion and the digital divide	29
Data protection risks	30
Other risks from increased use of technology	31
Lessons learned and looking ahead	34
Conclusion	35
Annex 1	36



Executive summary

In humanitarian contexts, mobile technology has proven it has a pivotal role to play in the response to the COVID-19 pandemic. When restrictions on movement came into force in early 2020, mobile technology was often the only channel for humanitarian organisations to deliver life-saving information and support. As the pandemic spread and the year unfolded, the humanitarian sector was forced to change how they operate and serve communities in crisis. It is important to understand these changes to be better prepared for future crises.

Through advocacy, support to partners and original research, the GSMA Mobile for Humanitarian Innovation (M4H) programme aims to understand how mobile technology can be used most effectively to accelerate the delivery and strengthen the impact of humanitarian assistance.

This report looks at how partners and grantees in the M4H portfolio have shifted or maintained their services in humanitarian contexts during the COVID-19 pandemic, and how mobile network operators (MNOs) have engaged in this process. It also highlights key trends in digital programming that have emerged since the onset of COVID-19.

The report is divided into five main sections. It begins by outlining the **impacts of COVID-19 on humanitarian operations**, providing a brief overview of the challenges the humanitarian sector has faced and early indications of impact in the future. It then delves into the research findings in five sections:



1. Digital infrastructure looks at the critical role that mobile networks and digital infrastructure has played in the response to COVID-19, how MNOs have provided essential support and how the humanitarian sector has come to rely on their services.



2. New challenges, new digital channels explores emerging issues brought on by COVID-19 and how humanitarian organisations have used mobile technology to respond to challenges ranging from health to water, sanitation and hygiene (WASH) and protection (gender-based violence and child protection).



3. Spotlight on mobile use cases features three ways mobile technology is being used in humanitarian contexts that have become particularly important during COVID-19: **information as aid, mobile money-enabled cash assistance and data collection and use.**



4. New and existing risks explores risks that have been worsened by COVID-19, including the exacerbation of the digital divide and data protection risks, and how humanitarian organisations are working to address them.



5. Lessons learned and looking ahead reflects on the lessons of the pandemic and considers the future and long-term impacts of COVID-19 on the humanitarian sector. While it is still too early to draw conclusions, three key early trends are evident:

- **The humanitarian sector relies heavily on mobile technology, and as operations become even more digitised, it is unlikely to go back;**
- **The pandemic has exacerbated the risk of exclusion and the digital divide, and it is vital to consider the needs of marginalised communities; and**
- **Partnerships are key, including those that extend beyond the traditional humanitarian sector.**

Acronyms

CDR	Call Detail Records	M4H	Mobile for Humanitarian Innovation
COVID-19	Coronavirus-19	MNCH	Maternal, Neonatal and Child Health
GBV	Gender-Based Violence	MNO	Mobile Network Operator
FCDO	Foreign, Commonwealth & Development Office	OHCA	United Nations Office for the Coordination of Humanitarian Affairs
ICRC	International Committee of the Red Cross	PPE	Personal Protective Equipment
IT	Information Technology	UNHCR	United Nations High Commissioner for Refugees
ITU	International Telecommunication Union	WASH	Water, Sanitation and Hygiene
IRC	International Rescue Committee	WFP	World Food Programme
KII	Key Informant Interview		



Introduction

As COVID-19 spread around the world, no country was untouched. Health systems were tested, economies were shuttered and travel came to a standstill. More than ever before, people turned to technology to keep them connected to loved ones, workplaces and education.

In humanitarian contexts, COVID-19 has had a severe impact. In addition to the grave health implications, the measures taken to control the virus, including lockdowns and movement restrictions, have severely affected marginalised populations. The World Food Programme (WFP) estimates that the number of people facing acute hunger could double due to the pandemic.¹ As job opportunities disappear, many do not have a safety net and as families are stuck at home, gender norms have regressed and gender-based violence (GBV) is on the rise.² The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) estimates that the coronavirus could push 71 to 100 million people into extreme poverty if urgent action is not taken.³

Through advocacy, support for partners and original research, the [GSMA Mobile for Humanitarian Innovation \(M4H\) programme](#) aims to create a better understanding of how mobile technology can accelerate the delivery and strengthen the impact of humanitarian aid. During the pandemic, many humanitarian organisations with a mandate to support marginalised communities were forced to rely on mobile technology more than ever before. This research looks at the use cases for mobile technology and the challenges and successes of humanitarian organisations and mobile operators during this tumultuous period.

¹ World Food Programme (21 April 2020), [COVID-19 will double number of people facing food crises unless swift action is taken](#).
² CARE (11 May 2020), [Gender-Based violence and COVID-19: The complexities of responding to "The Shadow Pandemic": A Policy Brief](#).
³ UN OCHA (31 August 2019), [Global Humanitarian Response Plan: COVID-19. Progress Report, Second Edition](#).

Purpose of report

To better prepare for future crises, it is vital to understand how COVID-19 has changed the humanitarian sector. This includes understanding the new challenges, solutions and risks brought on by the pandemic, as well as the lessons different actors have learned as they have adapted to this new reality. The goal of this report is to look at how

the M4H portfolio shifted or maintained services in humanitarian contexts using mobile technology, and how MNOs engaged in this process. It also explores current trends in digital humanitarian programming. While it is too early to predict the long-term effects of the pandemic on programming, this report sheds light on some short-term impacts and trends.

The M4H Portfolio

The Mobile for Humanitarian Innovation (M4H) team supports projects on the ground through two primary channels. The first is Strategic Partnerships, which provide technical support to facilitate collaboration between private sector partners, most often mobile network operators (MNOs) or technology providers, and humanitarian organisations. The team has formed 19 projects in eight countries, primarily in Africa, and has engaged with 12 MNOs to share M4H's expertise, develop projects and explore future partnerships.

The second is the [M4H Innovation Fund](#), which promotes innovative uses of mobile technology to address humanitarian challenges. It does this by providing catalytic funding, mentoring and technical support as well as access to networking and profiling opportunities for organisations developing digital humanitarian services. To date, the Innovation Fund has supported 22 grantees in 27 countries.

Methodology and research limitations

Two primary sources of information were used in this research: 1) key informant interviews (KIIs) with partners and grantees across the M4H portfolio (including project staff at the headquarter and country level, MNOs, a technology provider and

M4H programme staff) and 2) a document review of GSMA materials and external sources related to digital humanitarianism. For a complete list of interviewees and their place in the M4H portfolio, see [Annex 1](#).

Source	
Humanitarian organisations - KIIs	11
MNOs - KIIs	3
MNOs - blog series	5
Technology providers - KIIs	1
M4H programme staff - KIIs	3

It is important to note that by limiting research to the M4H portfolio, the sample was biased. The organisations contacted were already familiar, to varying degrees, with using mobile technology in their programming, as this is a condition for support from M4H. Therefore, the organisations

and individuals included in this study may represent a group already more inclined to rely on mobile technology to deliver services and information. However, there is still value in understanding their experiences with mobile technology in the context of COVID-19.

Report structure

This report has five primary sections. Before delving into research findings, the report outlines the **impact of COVID-19 on humanitarian operations**, providing a brief overview of the challenges COVID-19 has posed for the humanitarian sector and early indications of impact in the future. Sections then proceed as follows:

-  **1. Digital infrastructure** looks at the critical role of mobile networks and digital infrastructure in the response to COVID-19, how MNOs have supported this response and the ways in which humanitarian organisations have become more reliant on their services.
-  **2. New challenges, new digital channels** explores emerging issues that have been exacerbated by COVID-19 and how humanitarian organisations have used mobile technology to respond to these challenges. Three areas are highlighted: health, water, sanitation and hygiene (WASH) and protection.
-  **3. Spotlight on mobile use cases** features three use cases for mobile technology in humanitarian contexts that have become particularly important during the COVID-19 pandemic: **information as aid, mobile money-enabled cash assistance and data use and collection.**
-  **4. New and existing risks** explores some of the risks that have been exacerbated by COVID-19 and how humanitarian organisations are approaching them.
-  **5. Lessons learned and looking ahead** concludes the report with reflections and considerations for MNOs and humanitarian organisations. While it is too early to draw conclusions about the long-term impacts of COVID-19 on the humanitarian sector, this section highlights early trends and potential implications for the future.





The impact of COVID-19 on humanitarian operations

At the outset of the pandemic, interviewees noted several immediate impacts on humanitarian operations. First, restrictions on movement to limit the spread of COVID-19 had a drastic impact. According to ACAPs, 60 per cent of humanitarian organisations had less access to the areas they served, and 74 per cent of organisations reported that their implementation was affected.⁴ In more restrictive locations, such as refugee settlements in Rwanda, service providers were unable to even enter the areas they served. For example, Alight Rwanda staff were unable to provide light and cook stove programming in camp settings. In places where access was possible, additional hygiene and social distancing measures meant that **operations took more time and were more expensive.**

4 ACAPs (April 2020), [COVID-19: Impact on Humanitarian Operations](#).

"We limited staff movement, the number of occupants per car during operations and the number of meetings or participants that could meet at any one time. At times we even had to break one training into several different sessions to accommodate the populations that we were targeting. This required more time and more resources in terms of logistics."

CARE Somalia

Many interviewees described **a period of pause in which organisations and programming adapted to the "new normal"**. Staff worked to determine how to shift or continue the most important programmes, while also preparing for secondary impacts. In this period, many international staff were unable to travel, which led to increased reliance on local staff. **With the rise of a global Black Lives Matter movement and greater reflection on the decolonisation of the aid sector, this shift was welcomed by many.**⁵

"At some point, all of [our strategic partnerships] just put on the brakes [...] while they defined their organisation's internal COVID-19 response and then translated that into field operations. So it took them some time to work out: what are the implications of this? How do we handle it? Everything slowed down at that point."

GSMA M4H

Almost immediately, concern grew over the secondary impacts of the virus. In countries that had experienced a full lockdown, the informal economy was beginning to break down, posing serious risks to people around the world. Almost every sector was affected and vital services, such as access to healthcare, immunisations and education, were disrupted.

"... the real concern for people, especially for the displaced, were the secondary effects. The informal economy was breaking down in countries where there was a complete lockdown."

5 Alexander, J. (16 July 2020), "COVID-19 changed the world. Can it change aid, too?", [The New Humanitarian](#); Osofisan, W. (20 November 2020), "Opinion: Why the Black Lives Matter movement should have us rethinking humanitarian aid", [Devex](#).

All those casual jobs that people had, where they could earn some income, were gone. People couldn't pay their rent. There's a lot of urban displacement in the Middle East. People often live amongst host communities in rented accommodation. As soon as the informal employment market began collapsing and people couldn't pay rent anymore, they faced eviction."

Danish Refugee Council

With challenges mounting and with less ability to address them on the ground, **funding became an issue for many humanitarian organisations, which had to grapple with how to reallocate funds to address these challenges. Meanwhile, many technology organisations faced increased demand for digital services.** Organisations like **Viamo**, which provides interactive voice response (IVR)-based services, and **Give Directly**, which provides cash assistance, usually through mobile money, both noted greater demand from the sector for their services.

"This year was our greatest year of fundraising... People were looking to partner with an agile institution that could quickly deliver this in a manner that we could do remotely."

Give Directly

In response, the GSMA, with funding from the UK's Foreign, Commonwealth & Development Office (FCDO), launched the [M4H Adaptation Fund](#) to support existing Innovation Fund grantees to adapt their programming. The fund was designed to enable a select number of well-positioned grantees to have a positive impact on people's lives by continuing or enhancing their services. A grant of up to £50,000 was provided to six projects to support activities that would have a greater impact on end users in spite of the COVID-19 pandemic.



1. Digital infrastructure

As the pandemic continued, MNOs provided critical support to keep society functioning. **When populations worldwide were forced to stay at home to prevent the spread of the virus, mobile networks became the primary infrastructure that allowed people not only to work, but also to maintain their social lives and access critical health information.** Globally, there are five billion unique mobile subscribers, well over half of the world's population.⁶ Of these, 3.8 billion people use mobile internet.⁷ This meant MNOs could play a key role in the pandemic, and many worked closely with governments to disseminate vital information and support.

Recognising their important role, some governments deemed MNO services essential, relaxing regulations to ensure they could maintain network stability.⁸ For example, the Kenyan Communications Authority offered additional spectrum to mobile operators and other service providers to help them meet increased demand for data and internet services during the height of the pandemic. **With their network infrastructure, MNOs enabled entire economies to function, including humanitarian actors.**

Since many MNO efforts to support the COVID-19 response were market-wide, they did not directly target the humanitarian sector, but they did have a significant impact on it. There were several ways in which many MNOs supported their markets during this time, which are outlined below. More information on how MNOs in low- and middle-income countries operated during the pandemic, along with additional resources, can be found on the [GSMA Mobile for Development website](#).

⁶ GSMA (2021), [The Mobile Economy 2020](#).

⁷ GSMA (2020), [The State of Mobile Internet Connectivity 2020](#).

⁸ More information related specifically to the relaxation of KYC requirements can be found in the section, "[Spotlight on mobile money use cases -- Mobile money and cash assistance](#)".

Connectivity

At the outset of the pandemic, **the priority of MNOs was ensuring that digital infrastructure was resilient enough to maintain connectivity across their markets, especially for essential services like health and government services.** This often included offering discounted services and packages.

Examples



Vodafone focused on providing critical digital infrastructure and maintaining connectivity for essential health and government services across their markets. They deployed eHealth, eLearning and remote working solutions for their customers at scale, and helped governments and health authorities reach out to citizens with essential information and services. This included connectivity for hospitals in Egypt, Italy, Romania and the UK, and apps to tackle the virus across Sub-Saharan Africa.



Safaricom (Kenya) offered their customers discounted bandwidth and ensured that public WI-FI spots were maintained.



Turkcell (Turkey) provided free data and voice packages for all healthcare staff (5 GB data and 500-minute voice packages), contact tracing teams (15,000 minutes and 15 GB) and family physicians (10,000 minutes).

Free health and education content

Recognising the importance of access to health information and educational resources for students, many MNOs provided free content, zero-rated access to certain resources or offered additional bundles to ensure access.

Examples



Turkcell (Turkey) provided 6 GB of additional data for students and teachers until the end of the year to ensure access to e-learning. University students were provided 6 GB of free data per month.



Safaricom (Kenya) zero-rated resources for students to view educational content and schoolwork, as well as certain health resources.



Jazz (Pakistan) used their company website to provide information from the World Health Organisation (WHO) and the government, and to give customers direct access to a national health chatbot.

Information distribution

Because MNOs have the unique opportunity to disseminate information widely, many MNOs worked directly with governments to ensure that people could access COVID-19-related information.⁹ Information was distributed through a variety of channels, from hotlines to push SMS messages.

Examples



Orange (Liberia) provided a daily SMS broadcast of COVID-19 health updates through the Ministry of Health and the National Public Health Institute of Liberia. The company is also using its Facebook page to spread information and tips on how to prevent and fight COVID-19.¹⁰



Safaricom (Kenya) leveraged their customer service expertise to help the government create a COVID-19 hotline. A dedicated toll-free line was set up, and medics answered questions from callers at Safaricom's call centre.



Millicom (multiple markets) sent messages to customers about hygiene and social distancing practices.



Jazz (Pakistan) launched their "Assistance for Free" service that can be used to make calls to government offices, doctors and laboratories for free.

"From one day to the other, we started leveraging and relying heavily on GSM and terrestrial connectivity in very remote places where we operate around the world. What we rapidly realised was that in many places where we operate, we often took for granted that without power, and/or clean power, it doesn't matter what kind of connectivity you have, you are unable

to communicate to the outside world. We have agreed that as a lesson learned, preparedness must be achieved with the entire workforce in mind – those residing in capital cities, and those who are the closest to our persons of concern in remote areas where infrastructure is often not well developed."

UNHCR

Digitising services and upskilling staff

To adjust to a new reality and increasingly digitised operations, humanitarian organisations had to adjust their internal operations and strengthen the digital skills of their staff. While this has been an ongoing process over the past two decades, **the pandemic made it more urgent to recognise digital skills as a core skill for humanitarian staff.** For frontline workers, this has meant being trained to use new devices and working on programmes that allow them to either interact with customers safely or report back to headquarters using digital tools. Several organisations mentioned **training their frontline staff in mobile technologies as a critical part of their adaptation.** On the backend of humanitarian operations, this has meant **bringing the programme and IT staff together in a way that had never happened on this scale.**

As mobile technology becomes more integrated in humanitarian programming to ensure services and information are delivered safely and efficiently, it is vital that programme staff understand how the technology works, how to mitigate potential new risks and how they can use the technology to better serve communities in crisis. For many, this has meant **"digitising the mindset" of staff** to ensure that as internal systems and processes are digitised and that everyone is on board.

"Pre-COVID-19, although many of our processes were semi-automatic, our employee mindset was quite manual. Digitising that mindset and fully automating our internal systems and processes has been a very intentional journey that we have undertaken over the past year. We haven't reached our destination yet, but we are far more digitally integrated today than we were nine months ago... COVID-19 has forced us to accelerate our digital transformation and business process automation, which, in retrospect, has been a good thing for us. That's arguably the one silver lining to this COVID cloud."

Naya Jeevan (Pakistan)

The shift to a more digital humanitarian community

"During the COVID response, the role that mobile network operators played in the humanitarian context was actually the same role they played in a normal, country-specific context. The humanitarian context became one of the beneficiaries of what mobile network operators were providing."

GSMA M4H

Like other sectors, **humanitarian organisations relied on mobile networks and mobile connectivity to continue their work remotely and remain in contact with their colleagues.** This posed

challenges in some cases if homes and offices had connectivity issues or did not have access to reliable power sources.

This is a particular challenge in rural areas where it may not be commercially viable for MNOs to provide coverage. This issue received renewed attention in the context of the pandemic when it became very important for last-mile areas to be connected, and it is a challenge that MNOs, governments and humanitarians will need to work together to solve.¹¹

⁹ More information on the distribution of information by the humanitarian sector can be found in the section, "Spotlight on mobile uses cases - Information as aid".

¹⁰ Daily Observer (30 March 2020), [Orange Liberia Takes Important Measures to Ensure Safety and Uninterrupted Service](#).

¹¹ The [GSMA Connected Society](#) programme looks at this issue.



2. New challenges, new digital channels

COVID-19 has created new challenges for humanitarian organisations, introducing or exacerbating issues that had to be addressed in their operations. This section provides examples of how humanitarian programmes pivoted, using digital technology to either continue to provide services or to manage the new challenges of the pandemic. These examples span three main areas of humanitarian operations that correspond with the UN cluster system: **health; water, sanitation and hygiene (WASH); and protection.**

Figure 1

The United Nations Cluster System¹²



Health

The COVID-19 pandemic created health issues on multiple levels. First, people everywhere needed information on the virus, including how it spreads, common symptoms and where to find treatment. Second, the health crisis and the airborne nature of the virus meant that, in many contexts, it became more challenging to access non-COVID-related health services. Third, many interviewees noted an increase in mental health issues. As many were forced to remain at home with fewer opportunities for employment and social interaction, mental health issues rose in the ranks of humanitarian priorities. This section outlines the variety of ways in which the issue of health changed in the context of Covid-19 and how mobile technology was used to address these emerging issues.

¹² OCHA Humanitarian Response (n.d.), [What is the Cluster Approach?](#)

The COVID-19 response

M4H grantees and partners used mobile technology to address the spread of the COVID-19 pandemic directly in a number of ways. **In particular, it was important for communities to be able to access accurate information and remote healthcare.** Mobile technology provided that link, connecting people to information on infection rates, symptoms and preventative measures as well as, in some cases, links to medical professionals directly. As discussed in the [Digital infrastructure](#) section, MNOs in many countries worked with governments and health ministries to distribute information. In addition to providing access to information and connectivity, mobile technology was also used to train frontline workers, connect patients to medical professionals remotely and allow people to check symptoms themselves, reducing the strain on local health systems.

Disruption of non-COVID-19 health services

From the onset of the pandemic, **M4H partners recognised that non-COVID-related health services were likely to be disrupted.** Prevention and treatment services for non-communicable diseases were severely affected, and while these effects were felt worldwide, lower income countries were hit hardest.¹³ **Naya Jeevan** immediately recognised that likewise, in Pakistan, attention would be diverted

Mental health

Several organisations noted an increase in demand from their service users for mental health services. **In addition to fear, worry and stress about the virus itself, financial concerns and lack of social interaction also contributed to deteriorating mental health.** In many countries, mental health services were disrupted by the pandemic.¹⁴ Several interviewees described how they dealt with growing demand. **Sesame Workshop**, which builds social and emotional learning components into their Arabic content, aimed to reach displaced children in the

Viamo set up symptom checkers in three countries along with information on behaviour change to take some of the pressure off health systems and live hotlines. They also remotely trained community health workers in COVID-19 response in 10 countries. To date, 100,000 community health workers around the world are engaged in these remote training programmes in partnership with humanitarian organisations. **Naya Jeevan** provides telemedicine support to people across rural Pakistan. While this programming began prior to the pandemic, they have noted a significant increase in demand for their services and have expanded training for female frontline health workers in collaboration with their digital health implementing partner, doctHERs.

from essential services to the pandemic response. To continue their maternal, neonatal and child health (MNCH) programming, Naya Jeevan established a free and nationally accessible mobile helpline in collaboration with doctHERs to ensure continuity of care and uninterrupted access to MNCH services for recipients of their programming.

Middle East with their children's television series and mobile-enabled social media content. While this is part of their regular programming, during the pandemic they also included content on dealing with the anxiety. **Naya Jeevan**, the **International Rescue Committee** (IRC) and World Vision provided additional training for staff to respond to mental health requests and dedicated more staff time to mental health support.



WASH

COVID-19 increased the need for water, sanitation and hygiene (WASH) services as people had to be able to wash their hands regularly. In some cases, WASH services were disrupted by the pandemic. Although humanitarian organisations worked to provide adequate amounts of water, soap and personal protective equipment (PPE), most mobile-enabled WASH interventions centred around the distribution of accurate information. **Solidarites International** distributed hygiene and bleach kits for cleaning purposes followed up with instructional videos and information over WhatsApp.



Protection

Issues around protection, especially gender-based violence (GBV) and child protection, were noted by interviewees as areas that required more attention during the COVID-19 pandemic. **Movement restrictions and the closure of safe spaces for women and girls meant these groups were at higher risk, but as contact with others beyond the immediate household became more limited, reporting mechanisms through social networks also decreased.** It is well established that violence and infectious disease are intersecting public health crises but, in many cases, humanitarian organisations have overlooked the measures needed to prevent the reported increase in violence.¹⁵

The **IRC's CuentaNos** programme provides support to people in Latin America.¹⁶ Normally, they provide information to service providers on the locations of safe spaces and available resources, primarily for LGBTQIA communities and women. However, in the context of the pandemic, they found that service users turned to them directly for support. The IRC pivoted to produce more user-facing content and noted a massive increase in demand for digital resources and support. They have since expanded their projects in El Salvador and Honduras to Guatemala.

"In light of movement restrictions and the closure of physical safe spaces for women, girls and the LGBTQIA community, the importance of digital solutions has increased, with visits to the CuentaNos platform have increased by 500 per cent. IRC is already pivoting the existing budget to support digital engagement in El Salvador and Honduras."

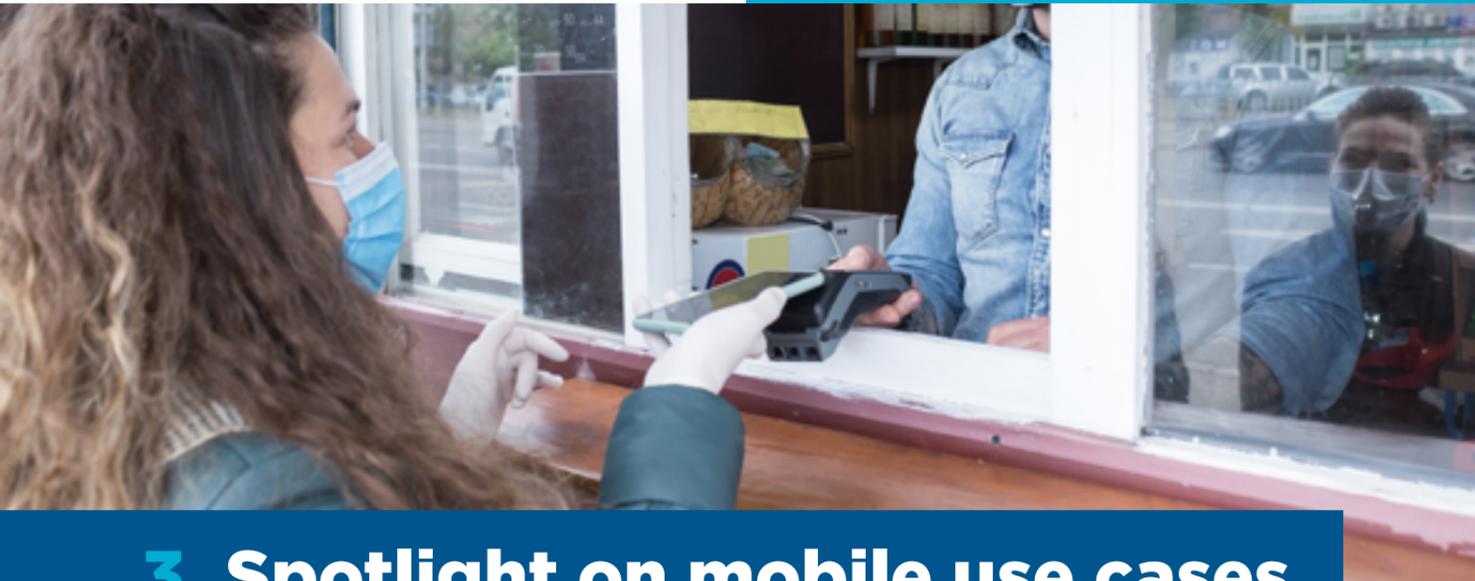
IRC

¹³ Adapted from WHO (1 June 2020), [COVID-19 significantly impacts health services for noncommunicable diseases](#). News Release.

¹⁴ WHO (2020), [Mental health & COVID-19](#).

¹⁵ Stark, et al. (2020), "[The syndemic of COVID-19 and gender-based violence in humanitarian settings: leveraging lessons from Ebola in the Democratic Republic of Congo](#)", [BMJ Global Health](#).

¹⁶ CuentaNos is part of the Signpost Project. Signpost is a consortium of INGOs – Mercy Corps, IRC and Internews – that creates community-led responsive information services in collaboration with technology companies, such as Google, Zendesk and Twilio. The objective of the project is to provide a contextualised information-as-aid response. Signpost is deployed in 12 countries with local brands, such as Refugee.info in the Mediterranean, Info Digna in Mexico and CuentaNos in the Northern Triangle of Central America.



3. Spotlight on mobile use cases

This section features three use cases for mobile technology in humanitarian settings that have become increasingly important in the M4H portfolio in the context of COVID-19: information as aid, mobile money-enabled cash assistance and data collection and use via mobile.



1. Information as aid

In a pandemic, almost nothing is as important as timely, trustworthy and actionable information. Many humanitarian organisations realised this quickly and used mobile channels to deliver vital information to the people they serve. **UNHCR's Innovation Service**, which delivers a major digital inclusion programme for UNHCR, reported at least a five-fold increase in requests from country offices for call centres, messaging apps and social media accounts to engage with refugee committees. **Viamo** also noted a spike in requests from users. Even before they compiled COVID-related information for their hotlines around the world, they experienced a huge influx of calls – an indication that people were actively searching for information. Some programming and communication infrastructure were already in place, and MNOs, as previously mentioned, played an important enabling role. In other cases, new partnerships and programming were created to respond to the crisis and communicate with affected communities.

User preferences: content localisation, responding to users' information needs and leveraging existing channels

For many humanitarian organisations and technology providers, one of the major lessons they learned when developing information for users was **the importance of responding to user preferences and information needs. This included ensuring that content was localised and disseminated in appropriate formats and on appropriate channels for the audience.** And while this is not a new lesson

for the sector, the importance of this was reaffirmed in the pandemic.

Before content is designed, it is important to meet people where they are and understand which communication channels they use most. This may require research into user needs and the channels they are most comfortable with.

“One example of this is when some digital rights activists say, ‘Oh, you should be using Telegram as the messaging app [to communicate with communities]. It’s more secure.’ But if we have communities telling us that their preference is to use WhatsApp, we’re not going to force them to change to a different channel. They have a certain degree of agency, and they have to choose and outline how they want to engage with us. We obviously want to respect that and adapt to it as much as possible.”

UNHCR

Once they had identified appropriate channels, organisations noted that identifying locally relevant information that was appealing to local audiences was important. For example, **Mercy Corps Haiti** cited customisation and localisation of content as key to the success of their hotline. They used a user-centred design approach when creating their COVID-19 hotline, first identifying the main types of users that would be accessing the hotline, and then considering their information needs, appealing content formats

and appropriate ways to target key users. Although they spent more time in the design phase of their programming, they believe it paid off as most users called the hotline more than once.

“The COVID experience has got us thinking about how we create content. What content do we create and how is it distributed through which modalities? So it reinforces that element of understanding what needs to be created from a content perspective and being agile as far as how we share it.”

Sesame Workshop

Viamo also pointed out that customisation is an important feature of their programming. For example, when designing new training programmes for community health workers, they conducted a survey to understand the types of questions health workers were receiving from patients, the COVID-19 myths they were hearing and the diseases that were most prevalent in the area. In this way, training could be tailored to local needs.

Misinformation and the importance of trust

Without locally relevant information, one of the dangers interviewees highlighted was misinformation spreading in a vacuum. While this was not a new lesson, the scale of the pandemic and the spread of ICTs in recent years have helped misinformation and disinformation to spread almost as fast as the virus itself. Humanitarian organisations noted that it was important to tackle rumours, misinformation and disinformation quickly through localised information and trusted sources.

“General health advice like the kind posted on the WHO website or the CDC website is great, but people may not be able to act on that information because it’s not really contextualised for them. For example, we’ll say, ‘Make sure to wash your hands all the time when you’re at work.’ But if they work in a marketplace where they have no access to running water to do that, then that information is seen as bogus. Those things sort of erode trust between responders and institutions, and communities.”

IRC



2. Mobile money and cash assistance

As humanitarian organisations around the world transition from in-kind aid to cash assistance, mobile money has received increased attention as a delivery mechanism. While not appropriate for all contexts, mobile money has the potential to benefit humanitarian organisations and cash recipients alike. Within the M4H programme, mobile money has long been one of the most studied use cases of digital humanitarianism.¹⁷ Several M4H strategic partners and grantees either rely on mobile money or are interested in understanding its potentially transformative impacts, including greater financial and digital inclusion. These partners and grantees have noted several trends in the COVID-19 context. It should be noted that most of the following examples from the M4H portfolio are from East Africa where many mobile money products already had a strong market presence.

A general increase in mobile money use

Interviewees reported that mobile money has had a surge in popularity during the pandemic, with huge increases in mobile money adoption in markets where these products already exist. For example, in Rwanda, the government temporarily banned physical cash transactions, leading to a massive increase in the number of transactions made with mobile money. This resulted in an over 450 per cent growth in weekly person-to-person (P2P) transfers between the first week of January and the last week in April.¹⁸ **MTN Rwanda** had to adjust their service offerings to accommodate the rapid increase in demand. Likewise, **Safaricom** in Kenya has recorded 1.6 million more customers using mobile money since the pandemic began.¹⁹

As fear grew over spreading the virus through contact with cash, many governments encouraged the adoption of mobile money as a safer alternative.

Mobile money was used in many places to purchase everyday goods, to send and receive money from friends or family and to receive transfers from the government and NGOs. This led to a massive increase in the use of these products. Even in settings like Kenya, where mobile money already had a high rate of adoption, use cases expanded. For the first time, customers could purchase rides on public transport or vegetables from the street using mobile money. Interviewees suggested this is a change that will likely stick after the pandemic subsides.

"We've seen a huge increase in the request for and knowledge around the use of mobile money both for merchants, shops, supermarkets and restaurants because people don't want to touch money."

MTN Uganda



International remittances

A major source of support during the pandemic was international remittances. Although not often considered in traditional humanitarian literature, remittances from family members working abroad are a huge source of international financial flows and, in many ways, one of the most significant forms of international support. Mobile money is a much cheaper way to send remittances than many of the other options available.²⁰ While some have reported that remittances decreased overall due to the financial impact of the virus, so much support was sent to East Africa from the global diaspora during the pandemic that mobile money providers had to increase wallet limits to accommodate financial flows.²¹

"I saw international transfers bolstered by mobile. Safaricom added PayPal and increased their capacities for Western Union and international transfers. The same thing is happening in Somalia with an increase in wallet limits ... a lot of cash was also coming from the diaspora because people were struggling and people abroad would send money home."

GSMA M4H

Relaxation of government regulation

To encourage the shift to digital payments, many governments changed mobile money regulations to remove barriers to uptake. The GSMA has created the [COVID-19 Response Tracker](#) to monitor mobile money regulatory responses to the pandemic.²² The tracker collates data from 32 countries across

Africa (17), East Asia and Pacific (7), South Asia (4), Middle East and North Africa (3) and Latin America and Caribbean (1). It found that fee waivers and increasing transaction and balance limits have been the most commonly used regulatory measures to fight the immediate impacts of COVID-19.

¹⁷ For example, GSMA (2019), [Mobile money enabled cash delivery: Essential considerations for humanitarian practitioners](#); GSMA (2019), [Mobile money enabled cash aid delivery: Operational handbook for mobile money providers](#); and GSMA (2019), [Mobilising cash and voucher assistance programmes: the case for mobile money](#).

¹⁸ Carboni, I. and Bester, H. (19 May 2020), "When Digital Payment Goes Viral: Lessons from COVID-19's Impact on Mobile Money in Rwanda", NextBillion

¹⁹ Reuters Staff (24 June 2020), [Kenya's central bank extends mobile payments relief by six months](#).

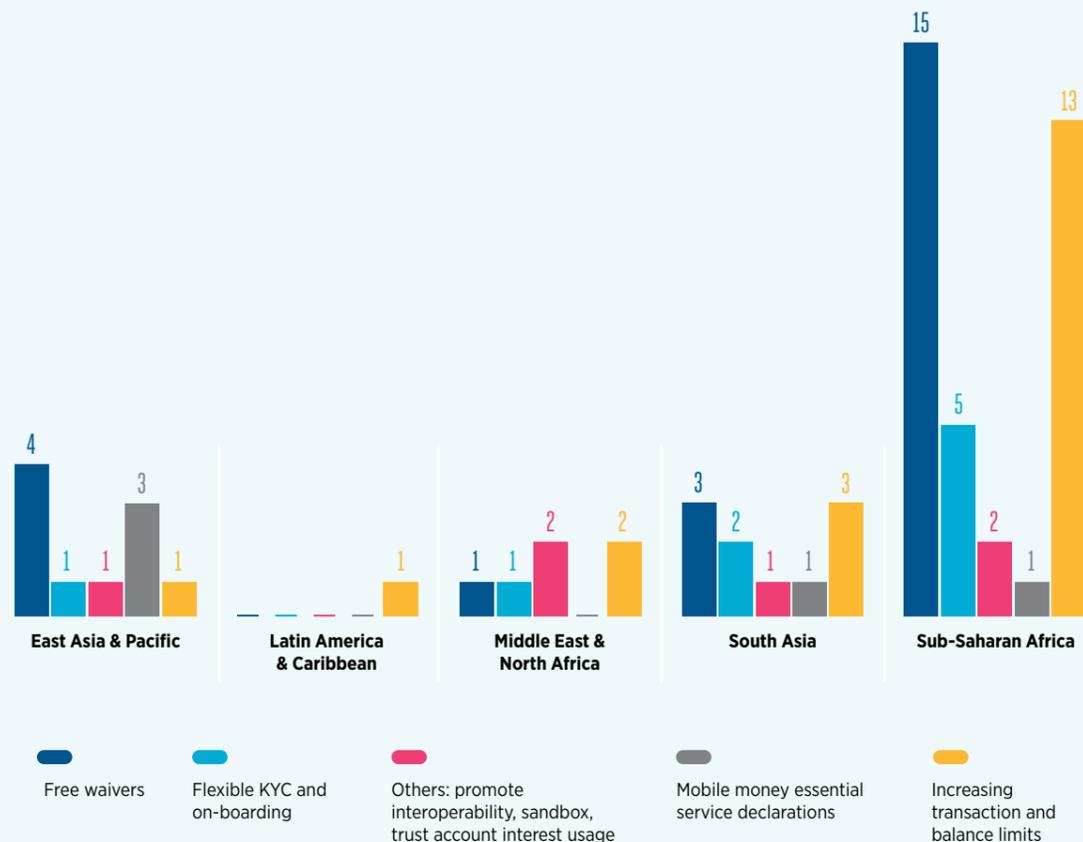
²⁰ Naghavi, N. and Scharwatt, C. (2018), [Mobile Money: Competing with Informal Channels to Accelerate the Digitisation of Remittances](#). GSMA Mobile Money.

²¹ Reiff, S. (16 December 2020), [Remittance Consumers Report Meaningful Increase in Economic Needs of Family Members Abroad Going into Unprecedented Holiday Season](#); The World Bank (October 2020), [COVID-19: Remittance Flows to Shrink 14% by 2021](#), Press Release.

²² Chadha, S., Kipkemboi, K. and Muthiora, B. (2020), [Tracking mobile money regulatory responses to COVID-19](#), Mobile for Development Blog.

Figure 2

Mobile money policy response type by region



KYC remains a barrier in humanitarian settings

While regulatory relaxations have removed many of the barriers to accessing mobile money products, Know-Your-Customer (KYC) requirements still pose many challenges, especially in humanitarian settings. These regulations, which require individuals to provide a form of identification to register for a mobile money account, create a barrier for marginalised or displaced peoples who do not have formal IDs. **During the COVID-19 pandemic, mobile money gained prominence as a delivery mechanism for social support cash interventions**

from both humanitarian organisations and governments, exacerbating KYC issues.

Countries that had digital identity systems before the pandemic, such as India, Peru and Thailand, were in a better position to deliver targeted large-scale support.²³ In the M4H portfolio, **CARE Somalia** was in the process of rolling out a biometric identification system using voice identification. This system became very useful during the pandemic because the verifications that had already been conducted in person could be done entirely remotely.

23 Davidovic, S. and Prady, D. (25 June 2020), "You've got money: Mobile payments help people during the pandemic", World Economic Forum Blog and IMF Blog.

Changes to KYC ID requirements in response to COVID-19

According to the World Bank, one billion people globally lack access to proof of identity. This means they are likely to be excluded from accessing services that could lead to greater socioeconomic inclusion and well-being. This includes access to mobile money, which can make a real difference in people's lives, particularly the unbanked.

In 2020, some governments changed or maintained earlier changes to ID requirements for KYC procedures to enable unbanked individuals and marginalised communities to access mobile money services during the pandemic. The [GSMA Digital Identity programme](#) undertook research to document these changes and the effects they have had (or are having or may have) on the financial and/or digital inclusion of vulnerable groups.

The research uncovered the following country-level findings:

- **Colombia:** Local authorities and service providers relaxed KYC requirements for Venezuelans residing in Colombia by recognising expired and alternative ID documents.²⁴
- **Ghana:** The central bank simplified basic mobile money account on-boarding to allow customers to register using the same information they provided for SIM registration.
- **Jordan:** The central bank allowed digital on-boarding for mobile money services. Consumers can register remotely by scanning their ID.
- **Pakistan:** The central bank pushed back the deadline by which branchless banking (i.e. mobile money) providers must complete biometric verification of customers.
- **Senegal:** The central bank authorised issuers of e-money to activate mobile wallets based on data in telco databases. Providers must send an SMS to consumers to conduct remote identification.

More on this research can be found in the Digital Identity team's 2020 [Access to Mobile Services and Proof of Identity](#) report.²⁵

In some countries, governments chose to relax KYC requirements as a temporary measure to respond to the pandemic. In Ghana, Rwanda, Kenya and Zambia, these measures have been made permanent.²⁶

Mobile money, cash assistance and social safety net payments

Alongside the trend of increased mobile money use generally, **one of the most significant trends in humanitarian contexts during the pandemic was the dramatic rise in the use of mobile money for cash assistance and social safety net programming.** Across Africa, over 80 per cent of relief measures announced since the start of the pandemic are in the form of cash transfers.²⁷ Mobile money was the

preferred delivery mechanism for these transfers as it reduced the physical contact that comes with physical cash, and it was perceived as a safer and more efficient tool for transferring money.²⁸

Within social welfare programming there has been a significant increase in cash delivery as a primary support mechanism.²⁹ World Bank researcher

24 Kondakhchyan, A. and O'Leary, E. (18 May 2020), "COVID-19, sanctions, counterterrorist financing and CVA", The Cash Learning Partnership.

25 Yongo, E. and Theodorou, Y. (2020), [Access to Mobile Services and Proof of Identity 2020: The Undisputed Linkages](#). GSMA Digital Identity.

26 Chadha, S., Kipkemboi, K. and Muthiora (2020), "Tracking Mobile Money Regulatory Responses to COVID-19 - Part 2", Mobile for Development Blog.

27 Davidovic, S. and Prady, D. (25 June 2020), "You've got money: Mobile payments help people during the pandemic", World Economic Forum Blog and IMF Blog.

28 Chadha, S., Kipkemboi, K. and Muthiora (2020), "Tracking Mobile Money Regulatory Responses to COVID-19 - Part 2", Mobile for Development Blog.

29 CGAP (September 2020), [Social Assistance Payments in Response to Covid-19: The Role of Donors](#).

Ugo Gentilini estimates that cash assistance now accounts for half of all social safety net programming by governments globally, with 190 countries and territories planning, introducing or adapting social protection measures in response to COVID-19.³⁰ Although social safety net programming has not traditionally been considered part of humanitarian response, the pandemic has blurred this line considerably. Marginalised communities around the world, from the US to India, have been pushed over the financial edge as a result of COVID-19 and the economic crisis that followed.

In addition to social safety net programming, cash assistance in more traditional humanitarian contexts have also shifted to mobile money. **World Vision**

Partnerships

Interviewees highlighted the importance of partnerships between MNOs and humanitarian organisations. A common theme in M4H's work and indeed one of the purposes of the programme, interviewees noted that having good cross-sector working relationships in place makes it easier to work effectively when a crisis strikes.

"They ask us to support them with KYC. [...] They ask us to support them by ensuring there's enough cash so that when customers cash out, or beneficiaries cash out, there's enough float in the areas. There's also network boosting. Sometimes we provide support with on-the-ground activity mobilising communities...There's a lot to do in partnerships like those."

Safaricom

Relationship to the mobile money business model

Despite the rise in mobile money use during the pandemic, **the elimination of mobile money transaction fees in many countries caused mobile money providers to face a loss.** This was compounded by the economic crisis, which led many customers to make fewer transactions or transact in small amounts.

International expanded the scope of their cash assistance by targeting internally displaced persons (IDPs) in Afghanistan. **Alight Rwanda** simplified their cash assistance process by using mobile money to send it to informal workers they supported through their programme.

MNOs and humanitarian organisations have both learned important lessons from the increased use of mobile money in cash assistance programming.

These lessons relate to three themes outlined below: the importance of partnerships, the relationship to the mobile money business model and the importance of building a strong foundation for a digital ecosystem.

One new trend that emerged from the pandemic was the need for humanitarian organisations to collaborate more closely with government as the coordinating body. Because the crisis was not restricted to the humanitarian sector, organisations had to learn to work beyond their traditional partners. For example, **GiveDirectly** worked directly with governments to share information on how they were targeting cash recipients.

"After three months of the government regulation and the safety measures that were put in place, we've seen that transactions have begun to get back to where they were pre-COVID. We can't say that we are really back there yet, but there is growth and improvement compared to when we started with COVID."

Safaricom

The extension of fee waivers in some countries has had a negative impact on the business model of mobile money providers, with potentially negative implications for long-term sustainability.³¹ While higher mobile money usage in recent months may spawn a new customer base, it is unclear whether these new customers will continue to use products

as fee structures return to normal. While **Safaricom** saw an increase in mobile money customers, they saw a decrease in revenue from M-Pesa.³² **Finding a balance between accessible financial services and a sustainable business model will be important to address in the transition to a post-COVID-19 world.**

Supporting agent networks

For many mobile money providers, ensuring that services were resilient during the pandemic meant supporting agent networks to be prepared to respond to increased demand. Agent networks remain the backbone of mobile money offerings in many areas, and it is important to support them through this difficult time. Agent commissions have halved during the pandemic, limiting their livelihood opportunities.³³ **Safaricom** and **MTN Uganda** had to ensure their agents received proper training on risks and how to mitigate them, and had access to PPE. Other MNOs have revisited fee and commission structures, in some cases led by governments, to ensure that agents have the resources available to create pandemic-specific financial plans and address float management challenges properly.³⁴

Building a foundation for mobile money

A third lesson that emerged was the need to ensure that when mobile money is being used as a delivery mechanism for cash assistance, end users can access the technology and are comfortable using it. For example, when the pandemic forced the **Danish Refugee Council** to pause their programming for mobile money-enabled water ATMs in Uganda, they refocused their efforts on building digital literacy

and awareness in the community to ensure people had a base of digital skills. **MTN Uganda** recognised the importance of digital and financial literacy in the uptake and use of their products, and has been training their local employees to spread information on how to use their products, mobile phones and mobile money.

³⁰ Gentilini, U. (2020), *SP Links May 22 – global social protection Covid-response paper v.10.*

³¹ Chadha, S., Kipkemboi, K. and Muthiora (2020), "Tracking Mobile Money Regulatory Responses to COVID-19 – Part 2", Mobile for Development Blog.

³² Reuters Staff (24 June 2020), *Kenya's central bank extends mobile payments relief by six months.*

³³ MicroSave Consulting and Caribou Digital (2020), *The Role of DFS Agents during the Covid-19 crisis.*

³⁴ Singh, N. and Robinson, J. (24 September 2020), "Maintaining a Critical Link to Last-Mile Customers: Challenges and Opportunities Facing Financial Service Agents During COVID-19", NextBillion.



3. Data collection and use

Data has played a particularly important role in the pandemic, in both service delivery and shaping global responses. When COVID-19 began to take hold, humanitarian organisations in the M4H portfolio started to rely more heavily on mobile technology to collect data and design programming.

Usage data from MNOs

Several organisations mentioned that they partnered with MNOs to leverage call detail records (CDR) data to target users and messaging. For example, in Pakistan, **Viamo** worked with MNOs to better understand their users' literacy levels, geographic locations and typical account balances. This helped them target the nine million people they were sending messages to with information about COVID-19. **Mercy Corps** also worked with MNOs to identify cell towers in areas with lower account balances to invite users to access their hotline.

Usage data from mobile interventions

Data generated from user interactions has also helped humanitarian organisations improve their programming in an agile and adaptive way. **Sesame Workshop** monitors the content users are engaging with to understand what people enjoy. They use this information to improve their programming and ensure they are creating enjoyable, targeted content for their users, and that the information, in this case

It should be noted that using data in this way introduces risks, so the GSMA recommends that when considering requests for access to mobile operator data to respond to the spread of COVID-19, MNOs only share this metadata with governments or agencies where it is lawful to do so.³⁵ These data-related risks are discussed in more detail in the next section, [New and existing risks](#). The GSMA has also developed [data protection and policy guidelines](#), including [guidelines specific to COVID-19](#).

on COVID-19, will have a positive impact. Likewise, **Viamo** uses data generated from their programming to help governments respond to COVID-19 more effectively. They provide aggregated data from their symptom checkers to the government to help target health programming in areas where symptoms are appearing more frequently.

Data collection

Another important application of mobile technology is data collection. While most data would normally be collected through face-to-face surveys, the pandemic made this impossible. Not having up-to-date information on the situation on the ground, especially about the most marginalised groups, was one of the biggest challenges interviewees mentioned. Many organisations relied on remote data collection, usually via mobile phones, to fill this gap.

"We have quite a big flagship data analysis unit – the mixed migration centre – where they normally interview migrants personally on the main migration route into Europe. They shifted very quickly to phone surveys, building on existing contacts in the community where the migration

basically passes through. [...] They have actually, quite amazingly, continued to be able to produce very high-quality survey data as a consequence."

Danish Refugee Council

Many organisations said they quickly learned how to adapt to remote data collection and gather high-quality information. **They also noted that collecting data in this way was much more efficient as they were able to collect larger quantities of data at lower costs.** Of course, one of the risks of data collection through mobile technology is that data is not collected from users who do not have a mobile phone. This may result in a biased sample and erase the experiences of digitally excluded communities. Additionally, **UNHCR** noted the risk of spamming users through phone surveys.

User feedback data

Another use case for mobile money that became more prominent during the COVID-19 pandemic was the ability to collect user feedback remotely and efficiently.

"In terms of technology and the mobile platform, you're able to get feedback from the beneficiaries, which is also a faster mechanism."
CARE Somalia

GiveDirectly provides cash transfers through mobile money to marginalised communities. Typically, they follow up with recipients using post-distribution surveys, often conducted face to face. Under normal circumstances, they could conduct 1,000 household surveys per month in Rwanda. In 2020, GiveDirectly conducted 35,000 surveys remotely. They had a success rate of 80 per cent for their SMS surveys and were therefore able to limit phone surveys to those recipients who required further follow up.

³⁵ For example, in many jurisdictions, if it is in the individual's vital interest, provided through valid consent or a law specifically requires it.



4. New and existing risks

The COVID-19 pandemic both introduced new risks and exacerbated existing risks associated with digital humanitarianism.³⁶ This section outlines three risks highlighted by interviewees: the **widening of the digital divide, increased data risks and other risks created by greater reliance on digital channels.** The M4H team has long focused on these issues and has published tools to help humanitarian organisations and MNOs reduce the risk of exclusion posed by greater reliance on mobile technology.³⁷

"I think it's important that we find a middle ground, otherwise we are somewhat hamstrung. On the one hand we want to move, but some people say the risks are too high so maybe we shouldn't do anything. I don't think that's an

optimal solution, and we need to find creative ways to address risks and mitigate them as much as possible without necessarily letting it hamper our operations."

UNHCR

³⁶ Ramos, M. (30 July 2020), "Covid-19 could widen the digital gap. Here's what's needed now", World Economic Forum Agenda.

³⁷ Casswell, J. and Hamilton, Z. (2020), Mobile money-enabled cash assistance: user journeys in Burundi and Human-centred design in humanitarian settings: Methodologies for inclusivity. GSMA Mobile for Humanitarian Innovation (M4H). Hamilton, Z. and Casswell, J. (2020) The digital lives of Kenyans and refugees with disabilities: A human-centred design approach to identifying mobile-enabled opportunities"

Exacerbating the risk of exclusion and the digital divide

The impacts of the pandemic on the lives and livelihoods of the world's most marginalised people are immense, both in terms of the scale of people infected and the economic crisis that has followed.

The individuals and populations who were at greater risk before the pandemic, in terms of exposure to violence, digital exclusion and food and financial insecurity, are the same people facing the most hardship during the pandemic.

The implications of digital exclusion in this period are vast.

The digital divide has long been a major obstacle to digital humanitarianism.³⁸ In many humanitarian contexts, there are still a significant number of people who, in addition to other intersecting challenges, face barriers to mobile phone ownership, access and use. Low digital literacy, prohibitively expensive handsets or airtime and social norms, can all have a negative impact on mobile phone access and usage.³⁹ As more humanitarian services and information are delivered through mobile devices, the risk that these groups will be further excluded is very real. **The pandemic has accelerated this risk, putting already vulnerable individuals and communities at further risk of falling through the cracks. As the humanitarian community relies more heavily on connectivity and mobile networks, accessing humanitarian support may become more difficult for marginalised populations.**

Interviewees observed this risk on several levels. First, people may not have the ability to access vital information and support. If they do not have sufficient functional or digital literacy, or if the support is delivered in an inaccessible format, they may not be able to access that support even if they have access to a mobile phone. For example, persons with disabilities are disproportionately affected by

COVID-19 and require specific support, which may make measures like social distancing more difficult to implement.⁴⁰ In some contexts, persons with disabilities are also less likely to own mobile phones and be able to use them independently.⁴¹ Without accessible sources of information – both in terms of formatting on mobile channels and the inclusion of offline channels – these groups risk missing out on potentially life-saving information and services.

Second, when collecting data and user feedback remotely using mobile technology, those with low levels of digital and functional literacy or without access to mobile devices are almost necessarily excluded. This includes people who cannot access devices due to financial barriers and social norms that can act as barriers to access. **World Vision** noted that, under normal circumstances, special efforts would be made to include these more marginalised populations through in-person surveys. However, this became virtually impossible during the pandemic.

Third, the challenge of communal services being delivered at an individual level poses a particular challenge in contexts where most individuals do not have access to a mobile device of their own. In humanitarian settings, many individuals or households share devices.⁴² In the context of the pandemic, sharing devices between households is dangerous due to the risk of transmitting the virus. Even within households, multiple family members may have an urgent need to use the device at the same time, whether to access educational resources or to run their business. Generally, transitioning communal activities like education, which is normally conducted in a centralised location, to individual homes is a particular challenge in resource-poor areas.

³⁸ Bryant, J., Holloway, J. and Willitts-King, B. (2019), The humanitarian 'digital divide', ODI.

³⁹ Downer, M. (2019), Bridging the mobile disability gap in refugee settings. GSMA Mobile for Humanitarian Innovation and AssistiveTech.

⁴⁰ Aranda Jan, C. and Pitcher, S. (2020), "Adapting services for digital inclusion during COVID-19: Grameenphone's Sign-Line", Mobile for Development Blog.

⁴¹ Casswell, J. (2019), The Digital Lives of Refugees. GSMA Mobile for Humanitarian Innovation.

⁴² Ibid.

Mitigating the risks of excluding marginalised populations

Several organisations described the methods they had used to mitigate the risks of the digital divide and excluding already marginalised communities.

Accessible content and channels

Several organisations mentioned the importance of accessible content and channels. **Sesame Workshop**, for example, includes a sign language segment in every episode they produce, and they have specific playlists of accessible videos on YouTube. Likewise, **Viamo** makes information available via SMS and voice calling to ensure multiple channels are available for various user needs. Additionally, they ensure that their 3-2-1 hotlines are free of cost, removing the potential cost barrier.

Access to handsets

GiveDirectly addresses the barrier to handset ownership through their programming. Because they prioritise delivering cash assistance through mobile money, they believe it is important to offer recipients the chance to buy their own handsets. GiveDirectly buys handsets in bulk, procuring a better deal for recipients and sells them at cost, subtracting the cost of the handset from the overall cash transfer cost. It is up to the end users to decide whether they would like to opt into this aspect of the programme.

Data protection risks

Risks of data ownership and privacy have, rightfully, gained attention since the COVID-19 pandemic began.⁴³ As governments and organisations around the world work to trace contacts and the spread of the virus, many are concerned about civil liberties and the protection of personal data. These concerns are even more pronounced when working with marginalised populations, such as displaced persons and those with lower levels of digital literacy.

As mentioned earlier, many organisations are transitioning very quickly to digital channels to deliver humanitarian support. Embedding robust data protection measures, and building data literacy

within organisations, is a complex process and many feel they are learning as they go. It is possible that humanitarian organisations will come to rely on technology providers and MNOs to ensure data protection policies are implemented properly.

“It’s a plane that’s being fixed while flying. [...] There will be huge reliance on tech partners and MNOs, and it’s going to be up to them to earn the right to serve the humanitarian sector... So they will be relying on a much more informed partnership that has the best interest of both sectors.” – GSMA M4H

43 Espey, J. (15 April 2020), [Big Data in a Time of Crisis: Maximizing its Value – And Avoiding its Risks – In the Fight Against COVID-19](#).



Mitigating data protection risks

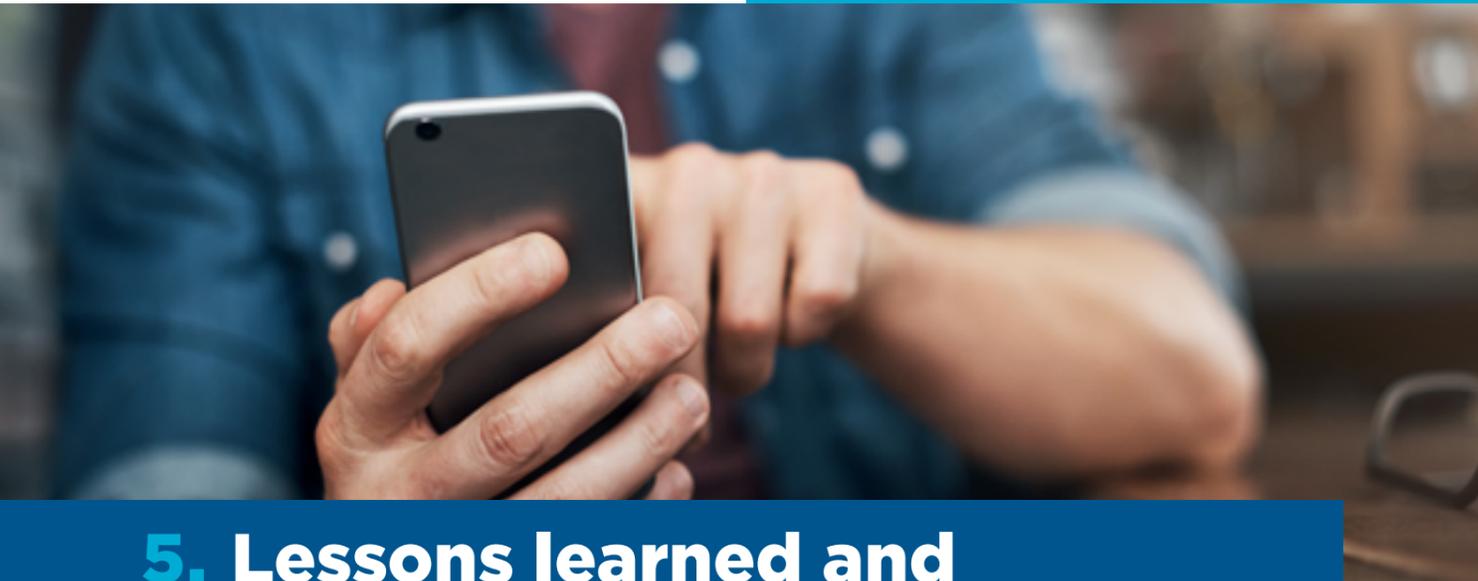
Several organisations described the steps they were taking to reduce data protection risks. **First, staff training** was cited by several organisations as vital. **World Vision**, for example, has developed an online course on data protection and privacy that all staff are required to take. They work with frontline staff to ensure they are aware of the risks and taking appropriate protective measures. **Second, ensuring correct standards and policies are in place.** **UNHCR** noted that organisations must be clear about their own responsibility and accountability within the organisation. **Third, ensuring that end users are aware of their data rights.** This was highlighted by organisations such as the **International Committee of the Red Cross (ICRC)**, which pointed out that in times of uncertainty, it is especially vital that new innovations are trialled transparently so users know how their data is being used.⁴⁴

Other risks from increased use of technology

Given that the humanitarian system is increasingly reliant on digital technologies, it is important to consider the resilience of the hardware and software. **For example, some noted there had been an increase in malware and ransomware since the onset of COVID-19.** As users spend

more time on their devices, and potentially share more information, it is important to ensure that programming is designed to be secure and that users have appropriate levels of digital literacy to know how to manage these risks.

44 Ibid.



5. Lessons learned and looking ahead

The impacts of COVID-19 are likely to be far reaching and complex, and while it is too early to understand the full implications of the pandemic, there are some early indications of how digital humanitarianism will be affected. Further research will be needed as time goes on to fully understand the full range of implications for end users, MNOs and the humanitarian sector.

What has been made clear, as outlined in the first section, is the extent to which humanitarian organisations have relied on mobile technology in the pandemic, both to communicate with staff

and with the communities they support. Below are several lessons and considerations, for both MNOs and humanitarian organisations, as humanitarian operations continue to digitise and look to the future.

A digitised sector is unlikely to go back

Early McKinsey research demonstrated that digital adoption by consumers and businesses was launched five years forward over a period of about eight weeks at the start of the pandemic.⁴⁵ The same trend has been seen in the humanitarian sector as **many organisations reported they had digitised their internal processes and service offerings very quickly.** They have developed the internal processes and skills they need to ensure digital programming was embedded in their operations. Some interviewees noted benefits such as wider reach

at lower cost, increased operational efficiencies and greater resilience to shocks. At the same time, digitisation has introduced new challenges, and the sector must continue to work on mitigating risks.

"We certainly have learned a lot about adapting and rethinking how we normally do things. COVID-19 forced us into remote and often telephonic and over-the-internet interactions, and I think sharpened the way we approach things to an extent." – Danish Refugee Council

It is unlikely that these organisations will revert to previous ways of working after the pandemic subsides. New processes have been integrated in their routines and staff have been trained in new digital skills.

"I'm pretty sure that this pandemic had a positive impact on changing mentalities about the need for digitisation and the use of mobile technologies... before, the WhatsApp project was seen as an interesting innovation for the future, while now it's more like, 'yes, this is mandatory.'" – Solidarites International

As the pandemic restricted movement and travel, and digital technologies allowed continuous communication between offices, in many cases this led to greater reliance on local staff.

Given current global discussions about decolonising aid and the need to localise operations, there is an opportunity for a global power shift to national operations that should not be ignored.⁴⁶

The risk of exclusion and the digital divide has been exacerbated by the pandemic

The widespread shift to digital during the COVID-19 pandemic has made it more important than ever to address the digital divide. As humanitarian organisations come to rely more heavily on mobile technology to deliver information and support, there is a danger that those without access to mobile devices will be left behind. While this is certainly not a new issue, it has been exacerbated by COVID-19.

The pandemic has highlighted the need to ensure that connectivity and access to mobile-enabled services is equal around the world. This will require various actors to ensure certain prerequisites are in place, including mobile infrastructure, access to devices, digital literacy and accessible content.

Considerations for MNOs:

- Humanitarian organisations may require additional technical support as operations are continuously digitised. There may be opportunities for mutually beneficial partnerships to provide this support.⁴⁷

Considerations for humanitarian organisations:

- Continue to strengthen internal processes and staff capacity around digital processes, especially around digital risks and digital do-no-harm policies. As programming becomes more digitised, measures should be put in place to protect against new digital risks.
- Consider using the pandemic as an opportunity to localise operations and shift power to local staff and actors.

"I'm not expecting that mobile phone ownership will grow exponentially from the start of COVID until now. It's still low in humanitarian contexts, but what COVID has done is pushed the humanitarian sector to change the narrative, to change the way they're thinking. If mobile device ownership is a critical means by which an affected community can be reached, can access aid and can receive messaging critical to saving their lives and the lives of their loved ones, then you start seeing the imperatives of not only owning a mobile device, but also having a robust network – the infrastructure to support it."

GSMA M4H

⁴⁵ Baig, A. et al. (14 May 2020), "The COVID-19 recovery will be digital: a plan for the first 90 days", McKinsey Digital.

⁴⁶ Barbelet, V., Bryant, J. and Willitts-King, B. (2020), 'All eyes are on local actors': Covid-19 and local humanitarian action. ODI.

⁴⁷ Baah, B. and Downer, M. (2020), Partnering During Crisis: The Shared Value of Partnerships between Mobile Network Operators and Humanitarian Organisations. GSMA Mobile for Humanitarian Innovation.

These processes are developing at the global level through international policy. The [UN Secretary General's Roadmap for Digital Cooperation](#) focuses on areas of the world that are still disconnected, a large portion of which includes displaced persons. These frameworks provide the foundation for further work on the inclusion of refugees and people affected by humanitarian crises, and they also provide strategic guidance for organisations like UNHCR and the International Telecommunication Union (ITU) to work together to ensure the benefits of connectivity are shared equally.

In the meantime, while certain segments of the population remain excluded from accessing or using mobile devices, **it is important to maintain face-to-face services to ensure these populations are not further marginalised. It is vital to acknowledge that not all areas of humanitarian programming can or should be delivered through digital channels.** Protection, for example, is one area that poses a major challenge to humanitarians in the current climate. Face-to-face contact will always be important in this type of programming.

Considerations for MNOs:

- A fully functioning digital ecosystem is vital, not just in terms of profits and sustainable business models, but also to ensuring that customers' needs are being met. Customers can include both humanitarian organisations and end users themselves.
- It is important to work with governments and humanitarians to ensure that connectivity is available throughout a country. Think creatively about how to extend coverage to populations living in the last mile, including ways to share commercial risk.
- MNOs can collaborate with humanitarian organisations on addressing barriers related to

digital literacy, accessibility and affordability.⁴⁸ They can also help to build a digital ecosystem more broadly.

- MNOs can work with other actors, like humanitarian organisations, to address the barriers that KYC requirements create for marginalised populations.

Considerations for humanitarian organisations:

- Humanitarian organisations can work to close the mobile access and usage gap, and build the digital ecosystem by tackling major barriers, such as affordability and digital literacy. Research should be conducted to understand the barriers in a given context. The GSMA has developed a [toolkit](#) to help humanitarian organisations better understand connectivity needs and usage in local contexts.⁴⁹
- Understand international policy frameworks and the best way to collaborate with national and international actors to close the digital divide.
- When developing digital programming, it is important to consider how to make materials as accessible as possible and designed around user needs and preferences.⁵⁰ This includes:
 - Understanding the local landscape of information communication technologies and how they are currently used; and
 - Creating accessible, localised and actionable content that is available in multiple formats to accommodate various user needs.
- When developing digital programming, consider who might be left behind and what issues cannot be addressed through digital channels. Some issues, like protection, will continue to require face-to-face contact.

Partnerships are key: beyond the development-humanitarian nexus, beyond the humanitarian sector

The importance of partnerships was revealed in several ways through this research. First, as the humanitarian sector became increasingly reliant on mobile networks during the pandemic, organisations needed to work closely with MNOs. Those that already had established relationships were able to scale up the dissemination of information, cash assistance or other potentially life-saving programming more quickly. However, major challenges remain in terms of ensuring that MNOs and humanitarians are “speaking the same language” and have effective relationships in place. This is a challenge that the M4H programme has been working to address, both in research publications and through strategic support provided to partners.⁵¹

“If you don't know how to communicate with an MNO, and if you don't know how to leverage what the MNO can offer, you're missing out on a lot. That's something that we are trying to work on, bridging that gap – that communication gap.”
UNHCR

Second, significant coordination was required to cope with the far and indiscriminate reach of the COVID-19 pandemic. This often included working with governments as coordinating bodies, but also with other humanitarian organisations. **Coordination of efforts was absolutely necessary and pushed staff beyond their typical scope of engagement.**

Considerations for MNOs:

- MNOs should work to better understand the language of humanitarianism, understand the motivations of the humanitarian sector and find ways to develop mutually beneficial partnerships.
- Before the next crisis, MNOs should understand their role with local government bodies. More resources can be found in the GSMA report, [Partnering During Crisis: The Shared Value of Partnerships between Mobile Network Operators and Humanitarian Organisations](#).

Considerations for humanitarian organisations:

- To be a better partner to MNOs, humanitarian organisations should work to understand them better, including the language they speak and how they operate.
- It is important to consider working beyond the traditional model of limited-engagement with national governments, especially in the context of the COVID-19 pandemic. Coordination with government bodies and other humanitarian actors, especially in a global emergency, can be critical.

Conclusion

Very few of the challenges and lessons of the COVID-19 pandemic are new, but many have come into sharper focus. Underlying weaknesses, inequities and inequalities in the global humanitarian system were revealed, and steps must be taken to prevent the sector from repeating its mistakes. In times of transition, there is an opportunity to change the status quo and make real and lasting change. As humanitarian work becomes more digitised in this tumultuous period, it is important to think about the future and how humanitarian organisations can work across sectors and borders to create a more equal post-COVID world.

⁴⁸ MNOs and humanitarian organisations may find the GSMA's [Mobile Internet Skills Training Toolkit](#) useful.

⁴⁹ Baah, B. and Downer, M. (2021), [The Connectivity, Needs and Usage Assessment Toolkit](#), GSMA Mobile for Humanitarian Innovation.

⁵⁰ Ibid.

⁵¹ Baah, B. and Downer, M. (2020), [Partnering During Crisis: The Shared Value of Partnerships between Mobile Network Operators and Humanitarian Organisations](#), GSMA Mobile for Humanitarian Innovation.

Annex 1

Key informant interviews (KIIs)

Type of organisation	Organisation name (headquarters or country office)	Relationship to the M4H programme
Humanitarian organisations	WorldVision (HQ)	Strategic partner
	Alight (Rwanda)	Strategic partner
	UNHCR (HQ)	Strategic partner
	Danish Refugee Council (Uganda)	Innovation Fund grantee
	GiveDirectly (Rwanda)	Strategic partner
	IRC (El Salvador, Honduras, Guatemala)	Innovation Fund grantee
	Naya Jeevan (Pakistan)	Innovation Fund grantee
	Sesame Workshop (HQ)	Innovation Fund grantee
	Solidarites International (Lebanon)	Innovation Fund grantee
	Mercy Corps (Haiti)	Innovation Fund grantee
	CARE (Somalia)	Strategic partner
MNOs	Safaricom (Kenya)	Strategic partner
	MTN (Uganda)	Strategic partner
	Telesom (Somaliland)	Strategic partner
	Econet's Cassava Fintech (Burundi) - read the blog post	Strategic partner
	Vodafone (HQ) - read the blog post	Humanitarian Connectivity Charter signatory
	KDDI (Japan) - read the blog post	Humanitarian Connectivity Charter signatory
	Turkcell (Turkey) - read the blog post	Humanitarian Connectivity Charter signatory
	Millicom (HQ) - read the blog post	Humanitarian Connectivity Charter signatory
Technology Providers	Viamo (HQ)	Strategic Partner

gsma.com



For more information, please visit the
GSMA website at www.gsma.com

GSMA HEAD OFFICE

Floor 2
The Walbrook Building
25 Walbrook
London EC4N 8AF
United Kingdom
Tel: +44 (0)20 7356 0600
Fax: +44 (0)20 7356 0601