Disaster Reponse
Mobile Money for the Displaced

Acronyms

AML/CFT	Anti-Money Laundering/Combating the Financing of Terrorism
BSP	Bangko Sentral ng Philippines
CaLP	Cash Learning Partnership
CGAP	Consultative Group to Assist the Poor
CSR	Corporate Social Responsibility
CTP	Cash Transfer Programme
DRC	Democratic Republic of the Congo
EMMA	Emergency Market Mapping and Analysis
FTS	Financial Tracking System
GPS	Global Positioning System
IDP	Internally Displaced Persons
KYC	Know Your Customer
MNO	Mobile Network Operator
NGO	Non-Governmental Organisation
P2B	Person-to-Business
P2P	Person-to-Person
WFP	World Food Programme
UCL	University College London
UNHCR	United Nations High Commissioner for Refugees
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs

CONTENTS

Introduction

The evolution of the use of mobile money in emergencies

Advances in mobile technology have opened up new opportunities, not only for communication, but also for using the mobile handset as a platform for a range of applications. The introduction of data transfer facilities and the rise of mobile financial services around the world have allowed mobile money services to evolve and grow rapidly. At the end of 2013, there were 219 live mobile money services in 84 countries, compared to 116 services just two years earlier.[1]

At the same time, cash is increasingly being used as a form of humanitarian assistance, either as an alternative to, or in conjunction with, the provision of food or other items. An analysis of funding reported to the UN Office for the Coordination of Humanitarian Affairs' (OCHA) Financial Tracking System (FTS), revealed humanitarian cash transfer programmes grew from US$5.6 million in 2007 to $262 million in 2010 before dropping to $76 million in 2011. The funding level increased again to $117 million in 2012.[2] However, while funding for cash transfers in emergency contexts has increased from 2007 levels, it still remains a very small proportion of total global humanitarian assistance. According to available estimates, when the level of funding peaked in 2010, financing for cash transfer programmes constituted 1.9% of the $13.8 billion in humanitarian funding that donor governments provided. In 2012, it fell to 0.9% of the $12.9 billion from donor governments.[3]

This increase in the use of cash in emergencies has been the result of humanitarian agencies recognising that cash is able to support a range of needs, including providing access to a wider variety of types of food and helping to rebuild or protect livelihoods. It is also increasingly acknowledged that cash can be a more dignified way of assisting affected populations, as it empowers people to determine their own needs and the best way to meet them. Cash-based interventions are a particularly effective tool in urban settings where viable market and banking systems are already in place, but can be equally useful in rural areas, where markets become increasingly dynamic as more people settle there.

Sensing the potential of mobile technology to make cash transfers more targeted, cost-efficient and rapid, the humanitarian community has begun partnering with mobile money service providers as part of their emergency response to support communities affected by conflict, disasters, and food insecurity. There has been some important work, particularly by research institutions and platforms such as the Cash Learning Partnership (CaLP), GSMA and the Consultative Group to Assist the Poor (CGAP), on evaluating the use of mobile money in emergency contexts. However, there has been less focus on the current and potential use of mobile money by refugees and internally displaced persons (IDPs). This report aims to begin to fill this gap by examining the use of mobile money in these contexts, and discussing the challenges and opportunities for enhancing the impact of mobile money on refugees and IDPs in the future.

> **This report defines "refugees" as those persons who have been forced or obliged to leave their countries of residence as a result of, or in order to, avoid the effects of armed conflict, situations of generalised violence, violations of human rights, or natural or human-made disasters. Unlike refugees, internally displaced persons (IDPs) have not crossed an internationally recognised state border and remain inside their home countries. This report refers to both sets of persons as *displaced*.**

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1. Claire Pénicaud and Arunjay Katakam (2014), "State of the Industry 2013: Mobile Financial Services for the Unbanked", GSMA. Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

2. Development Initiative (2013), "GHA Report 2013". Available at: http://www.globalhumanitarianassistance.org/report/gha-report-2013. It should be noted these figures are for projects consisting entirely of cash-based programming, and do not include funding for projects that had cash or vouchers as a component. The figures therefore underestimate the exact amount spent on cash transfers.

3. Ibid; Humanitarian Futures Programme (2013), "Financing of Cash Transfer Programming". Available at: http://www.humanitarianfutures.org/publications/financing-of-cash-transfer-programming/. The challenge of tracking funding for cash transfer programming (CTP) is that existing figures underestimate the actual amount of funding. However, capturing the full extent of the funding is unlikely to change the fact that CTP currently constitutes a small proportion of humanitarian assistance.

Mobile money services in displacement contexts: The story so far

One of the first initiatives to see mobile network operators (MNOs) working to improve connectivity for refugees was a 2007 joint project by MTN Uganda, Ericsson, GSMA and UNHCR, which provided refugees with affordable and sustainable access to a wide range of mobile services, including voice calls, internet access, and electronic learning programmes. It was hoped these services would assist in reconnecting separated families in Adjumani District in Uganda.

Since then, it has increasingly been recognised that MNOs have the potential to improve the lives of displaced persons by leveraging their scale and access to millions of subscribers. Cost-sharing models for mobile money services between MNOs, humanitarian organisations, banks, and other actors are becoming more common. For example, UNHCR, Vodafone, and mobile operator Zain struck a partnership to better facilitate mobile network coverage in Yida refugee camp in South Sudan. Vodafone provided temporary network coverage, UNHCR provided the space within their compound for Zain to use the UNHCR cell tower for more permanent roll-out, and Zain paid UNHCR for fuel to power the equipment. This cost-sharing model allowed UNHCR and other humanitarian organisations to access the mobile network coverage they desperately needed, and Zain to extend its network to new areas. Unfortunately, shortly after the equipment was up and running in January 2014, the Government of South Sudan asked Zain to switch off the network for security reasons.

More and more, MNOs are partnering with humanitarian organisations to expand the use of mobile money services in displacement settings. Table 1 features some of these key partnerships. One sign these partnerships are growing is that more mobile money pilot projects were being initiated at the time of writing. This included a pilot project to be implemented by the Norwegian Refugee Council and Airtel between July and September 2014 in Goma City, Democratic Republic of the Congo (DRC), and follow-up projects to pilots by the World Food Programme (WFP) and Airtel in Rwanda, as well as Oxfam and Airtel in DRC.

We are also beginning to see MNOs expanding their roles into the provision of additional services. One example is the Vodafone Foundation's ongoing work with Educate-A-Child to provide mobile-based education initiatives for child refugees in Yida refugee camp in South Sudan, using tablets and smartphones to provide schooling to children with no access to conventional educational facilities.[4] Souktel's work on mobile supply chain management in refugee camps in Jordan and surrounding areas where crisis-affected Syrians have fled is another example of the expanding role of MNOs in these contexts. As it became increasingly difficult for food, water, and basic medical supplies to reach the right people at the right time, Souktel saw the need to develop a mobile supply chain management system that would streamline aid distribution to Syrian refugees. This includes mobile inventory management tools that record incoming and outgoing shipments, and smartphone applications to track packages via satellite and report back on their status and GPS coordinates in real time. The end result is a faster, more efficient aid supply chain.[5]

The expansion of mobile money services in these displacement contexts appears to be driven by a combination of demand from the displaced, MNOs recognising market opportunities, and humanitarian organisations acknowledging that mobile money can have a significant and rapid impact on displaced populations. As a result, MNOs are taking the initiative to create an enabling environment for mobile money services for displaced populations. Box 1 below provides specific examples of MNOs working to enhance mobile money services for displaced populations. However, the use of mobile money services in displacement contexts is still in infancy and systematic, standardised deployments have yet to emerge, making these initiatives infrequent and ad hoc.

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4. For more information, see Vodafone Foundation (20 June 2013), "Vodafone Foundation To Deploy Mobile Network In South Sudan Refugee Camp". Available at: http://www.vodafone.com/content/index/media/vodafone-group-releases/2013/south_sudan.html

5. For more information, see http://www.souktel.org/media/news/enhancing-aid-delivery-syrian-refugees-souktel-and-partners-launch-mobile-shipment

TABLE 1
KEY PARTNERSHIPS BETWEEN MNOS AND HUMANITARIAN ORGANISATIONS TO ENHANCE MOBILE MONEY SERVICES IN DISPLACEMENT CONTEXTS

LOCATION	DATE	DETAILS
Mirebalais and Saut d'Eau, Haiti	Nov–Dec 2010	Mercy Corps transferred US$40 to 5,000 Haitians displaced by the 2010 Haiti earthquake using Voilà's T-Cash platform.
Niamey, Niger	Feb–May 2013	Save the Children worked with UNHCR and Airtel to transfer mobile money to approximately 312 refugee households, each of which was provided with a mobile phone and SIM card.
Tacloban City, Leyte, Philippines	December 2013–present	Following Typhoon Haiyan in November 2013, UNDP partnered with the Land Bank of the Philippines and Smart Communications to provide mobile money transfers to those helping clear rubble and municipal waste from roads, public buildings, schools and hospitals, through the UNDP cash-for-work scheme. Beneficiaries are provided with a Samsung mobile phone, a SIM with PHP 30 in initial airtime, and a Landbank ATM cash card. The goal of the first phase is to reach 5,000 beneficiaries and expand over time to reach a target group of 50,000 people, in areas such as Roxas City in Capiz, Guiuan in Easter Samar, and Ormoc City in Leyte throughout 2014.
North Cebu and Leyte, Philippines	January 2014–present	Mercy Corps, in conjunction with innovation firm IDEO, has provided 20,000 people displaced by Typhoon Haiyan with SIM cards and approximately $87 transferred via BPI Globe BanKO's mobile money service.
Gihembe camp, Rwanda	January 2014–present	WFP is working with UNHCR, the Bank of Kigali, Visa, MIDIMAR, I&M Bank, World Vision, and Airtel to provide 3,500 families with mobile phones and transfers $10 a month to each of the camp's 14,600 refugees via m-Visa.

BOX 1
MNOS WORKING TO ENHANCE THE MOBILE MONEY ENVIRONMENT FOR DISPLACED POPULATIONS

MTN Uganda: After assessing some of the obstacles facing refugees in accessing mobile money services in Kyangwali refugee settlement in Uganda, MTN is expanding network connectivity, setting up an additional mobile agent, and increasing the provision of cash for agents to better meet demand.

Airtel DRC: Airtel in DRC has approached Oxfam to discuss how they could improve their mobile money services following Oxfam's pilot mobile money project targeting refugees.

The increasing relevance of mobile money in displacement contexts

Whilst the use of mobile money in displacement contexts remains low, the following trends highlight why displaced populations could become a significant market for mobile money.

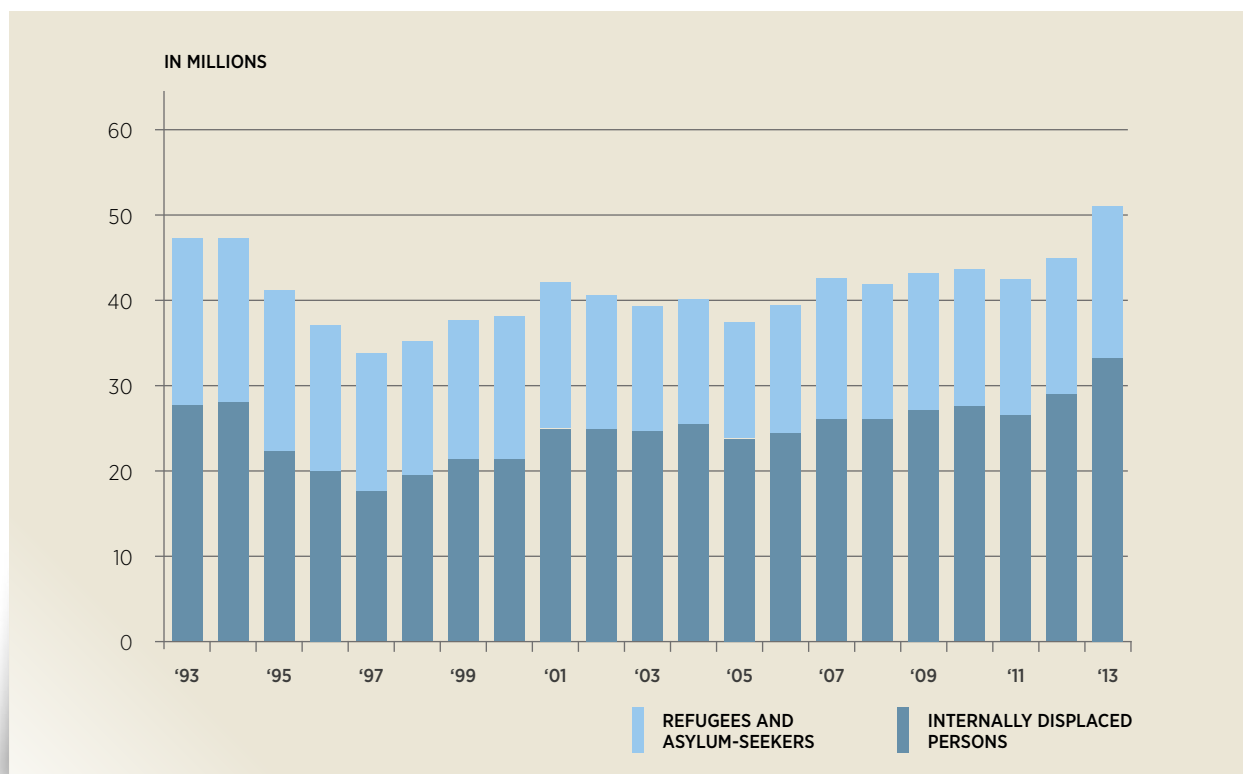### 1. The number of displaced persons is increasing

By the end of 2013, 51.2 million people worldwide were forcibly displaced as a result of conflict and persecution, the highest number since the mid-1990s. This included 33.3 million internally displaced people (IDP) worldwide by the end of the year, and 16.7 million refugees.[6] An estimated 10.7 million people were newly displaced due to conflict or persecution. This included 2.5 million new refugees, the highest number in one year since 1999, and 8.2 million persons displaced internally, the highest figure on record.[7] Figure 1 indicates the rising daily rate of displacement, including both IDPs and refugees. Developing countries host over 86% of the world's refugees, compared to 70% ten years ago.[8] Figure 2 highlights where the greatest flows of refugees originate and Figure 3 shows where the majority settle.

6.   UNHCR (2014), "Global Trends Report 2013". Available at: http://unhcr.org/trends2013/.
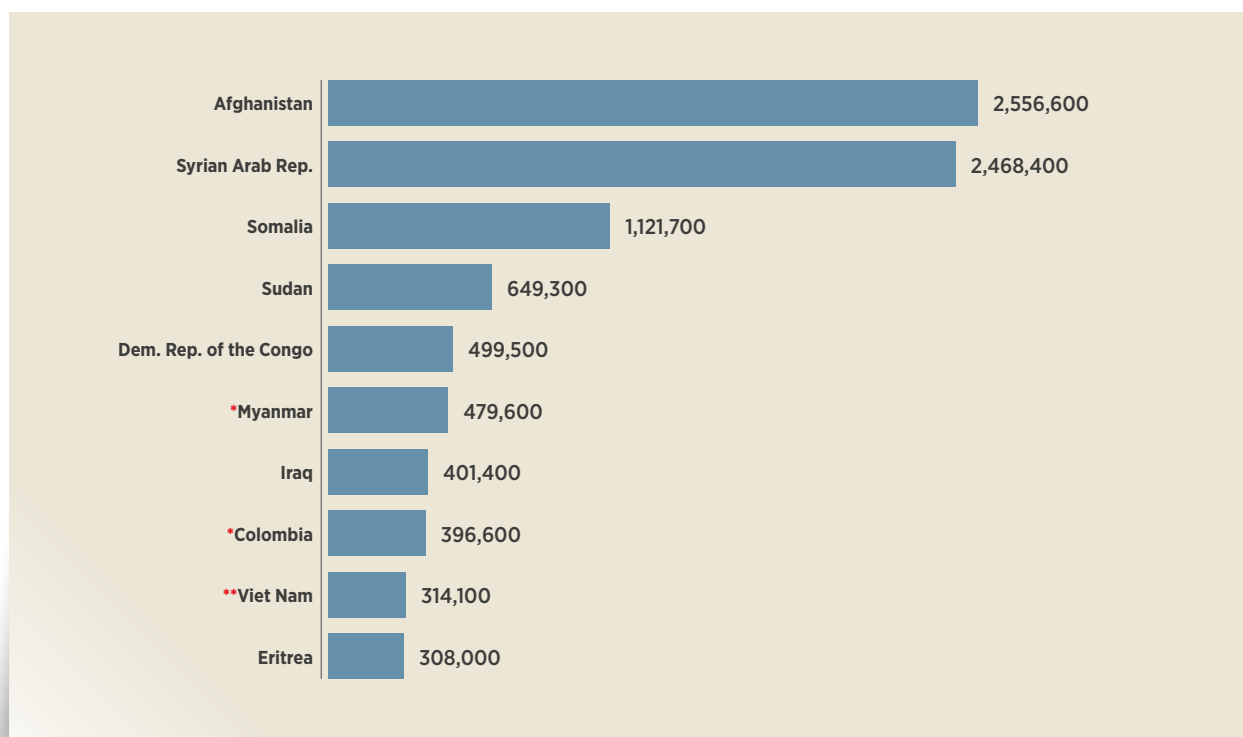7.   Ibid.
8.   Ibid.

FIGURE 1
GLOBAL FORCED DISPLACEMENT, 1993–2013 (END-YEAR)

IN MILLIONS

REFUGEES AND ASYLUM-SEEKERS | INTERNALLY DISPLACED PERSONS

SOURCE: UNHCR, "GLOBAL TRENDS REPORT 2013"

FIGURE 2
TOP ORIGINATING COUNTRIES FOR REFUGEES, END OF 2013

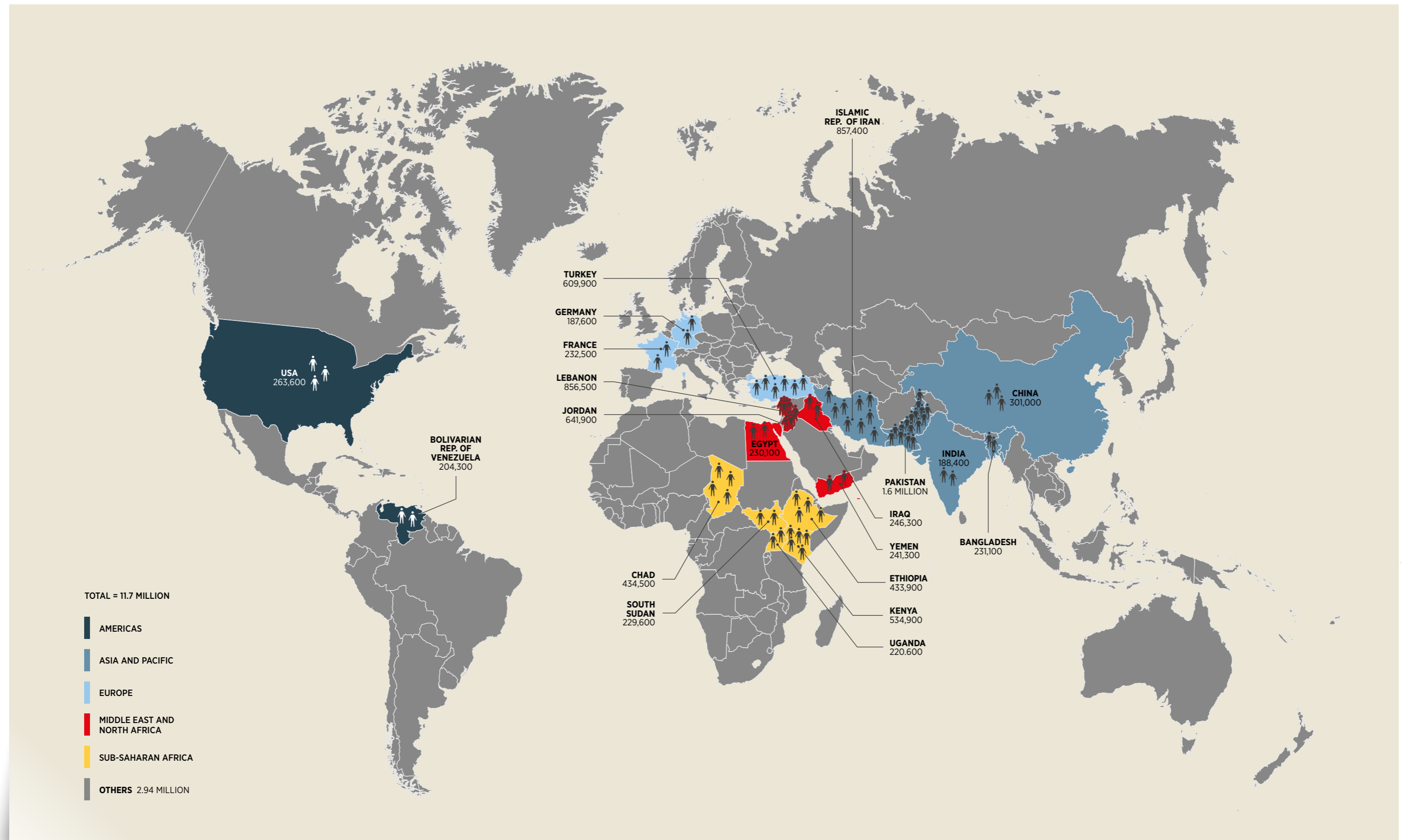| Country	Refugees
Afghanistan	2,556,600
Syrian Arab Rep.	2,468,400
Somalia	1,121,700
Sudan	649,300
Dem. Rep. of the Congo	499,500
*Myanmar	479,600
Iraq	401,400
*Colombia	396,600
**Viet Nam	314,100
Eritrea	308,000

SOURCE: UNHCR, "GLOBAL TRENDS REPORT 2013"

*Includes people in a refugee-like situation

**The 300,000 Vietnamese refugees are well integrated and, in practice, receive protection from the Government of China.

FIGURE 3

TOP 20 REFUGEE-HOSTING COUNTRIES, END OF 2013

ISLAMIC
REP. OF IRAN
857,400

TURKEY
609,900

GERMANY
187,600

FRANCE
232,500

LEBANON
856,500

JORDAN
641,900

CHINA
301,000

USA
263,600

BOLIVARIAN
REP. OF
VENEZUELA
204,300

EGYPT
230,100

PAKISTAN
1.6 MILLION

INDIA
188,400

IRAQ
246,300

YEMEN
241,300

BANGLADESH
231,100

CHAD
434,500

ETHIOPIA
433,900

SOUTH
SUDAN
229,600

KENYA
534,900

UGANDA
220.600

TOTAL = 11.7 MILLION

AMERICAS

ASIA AND PACIFIC

EUROPE

MIDDLE EAST AND
NORTH AFRICA

SUB-SAHARAN AFRICA

OTHERS 2.94 MILLION

SOURCE: UNHCR (2014), "GLOBAL TRENDS REPORT 2013"

2. Displacement is becoming more protracted

20 YEARS

THE AVERAGE LENGTH OF STAY OF PROTRACTED REFUGEE SITUATIONS

UNHCR defines a protracted refugee situation as one in which 25,000 or more refugees of the same nationality have been in exile for five years in a given asylum country. Based on this definition, it is estimated that some 6.3 million refugees (54%) were in a protracted situation by the end of 2013.[9] Significantly, this statistic does not include any of the more than 33.3 million internally displaced persons worldwide, the majority of whom are also in a state of extended and chronic displacement.

The average length of stay in these states of continuous displacement is now approaching 20 years, up from an average of nine years in the early 1990s.[10] Therefore, not only is a greater percentage of the world's refugees in protracted exile than before, but these situations are lasting longer. This is being exacerbated, as the contexts from which these groups are being forcibly displaced are becoming more complex and making return more challenging.

- **NEW FORMS OF VIOLENCE**. Conflicts increasingly involve different ethnic or religious groups, combining political, communitarian, and criminal violence. Also, as natural resources become more limited due to climate change, regional conflicts over resources will become more prevalent.

- **NEW DISASTERS.** New types of sudden and slow-onset disasters, such as technological system failures, large-scale industrial and chemical collapse, and disease pandemics will likely become more common in the future.

- **SHIFTING DISASTER LOCATIONS.** The changing climate is expected to bring about shifts in where disasters are felt and who experiences them. This has already been seen with Typhoon Bopha in 2012, which hit regions of the Philippines farther south than the usual typhoon paths, impacting people who were unprepared.

- **URBANISATION.** High rates of urbanisation are placing more populations at risk, forcing people to settle in unsafe temporary housing in high-density urban centres, and at the periphery on marginal land at risk from landslides and floods.

3. Flows of money to displaced persons are critical and expanding

Almost $529 billion in remittances were sent globally in 2012, and this figure continues to grow steadily. Information on the share of remittances sent specifically to displaced populations is not readily available, but some studies indicate flows of money to displacement contexts are indeed significant.

Remittances from overseas Filipino workers reached a record high of $25.1 billion in 2013, 7.6% higher than the previous year. The central bank of the Philippines (Bangko Sentral ng Philippines) reported remittances in December 2013 alone amounted to $2.4 billion, up 12.5% from December 2012. This spike is likely due, in part, to the devastation caused by Typhoon Haiyan in December 2013 and the flows of money from family members in response to this disaster.

In the Buduburam Liberian refugee camp in Ghana, the camp manager estimated 35% of the refugees received remittances. However, according to the members themselves, a figure closer to 99% would be more realistic.[11]

With the proliferation of new approaches to funding, such as crowd-sourced funding projects, local private funding, and social investment funds for displaced populations, the mechanisms through which these funds are dispersed will begin to be re-examined as senders and recipients demand greater speed and efficiency.

4. Refugees and IDPs have significant impact on the economy

Recent studies have indicated refugees and IDPs are not economically isolated, as is often assumed. One study conducted in Kyangwali refugee settlement in Uganda revealed that refugees crossed national, ethnic, and religious lines on a daily basis to trade and exchange. Despite their remote location, economic linkages were found to be strong both within and between settlements, as well as in the wider national economy. Ugandans were identified as the most important customers to 45% of businesses within the Kyangwali settlement. A robust trade network has arisen around refugee-grown maize, which sees Ugandan crop traders travel to Kyangwali settlement every

9. UNHCR (2014) "Global Trends Report 2013". Available at: http://unhcr.org/trends2013/
10. G. Loescher and J. Milner (2012), "Protracted Refugee Situations". Available at: http://www.prsproject.org/protracted-refugee-situations/
11. Trapp, M. (2014), "Remittances as informal aid: Livelihoods and migration in a Liberian refugee camp". UNHCR. Available at: http://www.unhcr.org/52970dab9.html

day to purchase large volumes of maize from refugee farmers.[12] Another study showed that in the Sembakounya camp in Guinea, there have been several joint business ventures between refugees and local people.[13]

As the number of displaced increases, so too will the informal economies they influence. Refugee camps are increasingly reaching the size of small cities. Dadaab in Kenya, a collective of three camps — Dagahaley, Hagadera, and Ifo — hosted over 450,000 refugees in 2012, and Jordan's Zaatari camp is now the fifth largest population centre in the country. The availability and ease with which money can be accessed in these settlements will determine how much economic influence the refugees will exert.

This research

As displacement settings become larger and more widespread, flows of cash to these settlements intensify, and the potential influence of the displaced on the economies both within and outside these settings is better understood, there is an opportunity for mobile money services to grow their business, for humanitarian agencies to reduce their distribution costs and improve their transparency, and for both to improve the lives of the displaced. Therefore, it is necessary to explore the impacts of mobile money in these displacement settings in more depth, and to understand what is currently holding MNOs and humanitarian organisations back from enabling the use of mobile money to its full capacity.

Objectives

This paper has four broad objectives:

- To enhance awareness of the patterns of use of mobile money in displaced population contexts;
- To increase understanding of the social and economic impacts of mobile money flows on displaced populations, as well as on broader communities;
- To ascertain the common barriers to mobile money services that have the greatest impact on displaced populations; and
- To identify key lessons for MNOs and humanitarian organisations operating in these contexts now and in the future.

Target audience

The primary target audiences for this report are MNOs, humanitarian organisations, financial institutions, researchers, and other cash-based humanitarian intervention stakeholders.

Relevance of the report

To MNOs: Mobile money services are becoming increasingly competitive. The majority of deployments launched in 2013 were in markets where mobile money services were already available; there are now 52 markets with two or more mobile money services, compared to just 33 at the end of 2011.[14] As such, there is a need for providers to continuously improve the quality of their services to ensure competitiveness. From this report, MNOs can gain a greater understanding of the challenges and opportunities associated with mobile money in displacement contexts, and identify key considerations for enhancing services and entering new areas in the future.

To humanitarian organisations: Crises are becoming more complex and the vulnerable harder to reach. Humanitarian organisations must therefore work to improve the efficiency of their programmes to meet the increasingly complex needs of refugees. This report can help humanitarian organisations to identify the challenges, opportunities, and next steps in enhancing their engagement with mobile money services and better meeting the needs of growing refugee and IDP populations.

To researchers: Significant research gaps exist in the study of the use of mobile money in refugee and IDP contexts. Studies that document lessons learnt have real potential to help pave the way for mobile money services that better target the needs of refugees, IDPs, and other vulnerable groups. This report takes a step towards identifying specific research needs and gaps for researchers to take forward.

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12. Betts et al (2014), "Refugee economies: Rethinking population assumption". Refugee Studies Centre, University of Oxford. Available at: http://www.rsc.ox.ac.uk/files/publications/other/refugee-economies-2014.pdf
13. Andrews (2003) in N. Omata (2012).
14. 14 Claire Pénicaud and Arunjay Katakam (2014), "State of the Industry 2013: Mobile Financial Services For the Unbanked", GSMA. Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

Methodology

This research was undertaken in two phases. The first phase involved field research in Kampala and Kyangwali refugee settlement in Uganda. This research aimed to examine in depth the patterns of use of mobile money by refugees, and the enabling environment influencing these patterns. This was explored through questionnaires and focus groups with displaced populations, as well as interviews with representatives from UNHCR and network operators MTN Uganda and Airtel Uganda. An in-depth description of these data collection methods can be found in Annex 1.

The second phase involved key informant interviews with a range of MNOs, humanitarian organisations, and mobile money experts. It aimed to explore additional examples of the use of mobile money in these contexts, the challenges that MNOs and humanitarian organisations are facing, as well as insights into opportunities to enhance the use of mobile money in displacement settings in the future. A list of key informants and advisors can be found in Annex 2.

Key findings

Patterns of mobile money use in displacement contexts

Key question: What are the critical patterns in the use of mobile money in displacement contexts that could determine the extent of the impact of these services on refugees and IDPs?

Mobile money tends to be:

Immediately withdrawn by displaced populations

In nearly all the examples examined, it was found the majority of recipients of mobile money immediately withdrew their cash, rather than accumulating it. This could suggest the increased saving behaviour sometimes observed with the use of mobile money services in non-emergency contexts, such as M-Pesa in Kenya[15] (particularly the adoption of savings tools linked to M-Pesa, such as M-Shwari), is not always a relevant benefit in displacement contexts due to the severity of the needs of displaced persons.

Immediate withdrawals are likely the outcome of a context in which P2P transfers and the use of mobile money for merchant payments are limited. In Uganda, some refugees reported using mobile money services to transfer money to businesses, but this was unusual. This is also reflective of the state of the industry as a whole.[16]

Humanitarian mobile money programmes currently targeting displaced persons rarely facilitate P2P or merchant payments, but when merchant payments are facilitated, the impact can be encouraging. At the Gihembe camp in Rwanda, WFP selected 17 merchants to accept mVISA. It was found that 30% of all payments made with money received by beneficiaries were transferred to these merchants electronically. While the majority of beneficiaries chose to cash out, as the few merchants who accepted mobile money did not have the wide range of produce they wanted, there were benefits for the merchants. For WFP-selected merchants, the extra sales to refugees represented a 10% increase above normal volumes. In addition, the mVISA agents at the camp were able to re-invest profits from withdrawal fees in stock for their shops, and they have dramatically increased sales as they have become key suppliers of food.

Shared amongst friends and family after being cashed out

In most of the examples in this study, it was common for cash from a single mobile money transfer to be cashed out and shared amongst a household or even with extended family members across multiple households.

This sharing behaviour is due, in part, to the sometimes-limited number of mobile phones owned by displaced populations coupled with a sense of community felt within settlements. A survey of refugees in Kyangwali refugee settlement in Uganda found that one-third of those who did not own a mobile phone had access to a shared handset. The practice of sharing mobile handsets amongst displaced populations can result in mobile money reaching a wider population and having a broader impact.

This sharing behaviour is also observed in humanitarian mobile money programmes. In the case of WFP and mVISA's mobile money programme in Gihembe camp in Rwanda, some beneficiaries were found to cash out their transfers and pool money to help create economies of scale. Such scale increases the impact of the cash transfer programme on dietary nutrition. Replacing physical cash transfer programmes with mobile money programmes is also designed to give choice and, ultimately, dignity to the recipients. The ability to make these choices and create such economies of scale demonstrates the achievement of this necessary goal.

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15.   See Jack and Suri (2011) for a study on the saving behaviour of M-Pesa users in Kenya.

16.   For insight into broad trends in the use of mobile money globally, see Claire Pénicaud and Arunjay Katakam (2014), "State of the Industry 2013: Mobile Financial Services for the Unbanked", GSMA. Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

Impact of mobile money in displacement contexts

Key question: What are the impacts of mobile money on displaced populations?

Mobile money services can:

Facilitate flows of remittances to and from displaced persons

46.9%

DISPLACED PERSONS INTERVIEWED IN UGANDA WHO RECEIVED MOBILE MONEY FROM FAMILY AND FRIENDS

In Uganda, a survey distributed to refugees in Kyangwali settlement and self-settled displaced populations in Kampala, revealed that 48.5% used a mobile money service. Of these, nearly all reported receiving money transfers from family and friends (96.8% of 94 displaced persons). This volume is extremely significant and demonstrates the importance of informal flows of aid and the critical opportunities for mobile money platforms to facilitate them.

A number of refugees in Kyangwali settlement also reported sending money home to family members to pay for their transportation away from affected areas. Many also reported receiving mobile money from family members in the Bubukwanga Transit Centre, where runners went back and forth to the border with currency. These transactions are often unreported, so figures are unavailable, but the extent of these cash flows should not be underestimated.

With financial resources often extremely limited, displaced persons send remittances through mobile money in part because of the lower costs of sending and receiving mobile money compared to other types of money transfer mechanisms. This has been a major factor in the growth of mobile money globally as it can replace expensive Hawalas or other cash transfer services in the daily lives of low-income populations. Table 2 below shows the comparative costs of sending $50 within Uganda using MTN Mobile Money, Airtel Money, and a MoneyGram money transfer.

TABLE 2
COMPARATIVE COSTS OF SENDING $50 WITHIN UGANDA

	COST OF SENDING $50		COST OF WITHDRAWING $50	
	TO REGISTERED USER	**TO UNREGISTERED USER**	**AGENT**	**ATM**
MTN MOBILE MONEY	$0.53	$3.19	$1.24	$1.31
AIRTEL MOBILE MONEY	$0.31	$2.75	$1.15	
MONEYGRAM TRANSFER	$5.74		$0.00	

TARIFF AND EXCHANGE RATES AT TIME OF PRINTING

The use of mobile money also reduces the time, and therefore the opportunity costs, of receiving money through other mechanisms. For example, when proximity cash-out points are available, it takes less time to collect the cash from a local mobile agent than from a central distribution point. This means less time is spent away from income-generating activities.

Facilitate flows of remittances, to women in particular

In a study by GSMA mWomen, it was found that remittances are especially critical for 31% of women, in contrast to 26% of men, who reported receiving remittances from siblings, parents, children, and spouses.[17] Because women traditionally manage the household and care for children or other dependents, they generally have a great deal of responsibility over managing remitted funds. In displacement contexts, remittances are even more critical to women due to the disruption of their families' lives and the added responsibility this

17.   GSMA (2013), "Unlocking the Potential: Women and Mobile Financial Services in Emerging Markets". Available at: http://www.gsma.com/mobilefordevelopment/unlocking-the-potential

places on them. In an assessment of Oxfam's and Airtel's mobile money programme in DRC, half of beneficiaries surveyed stated that women were responsible for the use of cash. One-quarter claimed decisions about how to spend the cash were made jointly, while one-quarter suggested this was strictly the role of men.

Of the displaced populations interviewed in Uganda, 73% of women reported using mobile money services, compared to 60% of men. This indicates a gendered flow of remittances that mobile money can facilitate when women are able to access mobile handsets and services. The figures are also significantly higher than the overall rate of mobile money use by women across Uganda: 9% as estimated by a 2012 study.[18] This suggests where strong infrastructure is in place, the use of mobile money by displaced populations can be significantly higher, particularly for women. The high use of mobile money services by women in Uganda who are displaced is confounded by the comparatively low rate of mobile phone ownership by women. Overall, 80.5% of men and 58.1% of women reported owning a mobile phone. In Kyangwali refugee settlement specifically, these figures fell to 69.2% of men and 18.4% of women. This demonstrates the importance of access to shared mobile phones. Mobile phone ownership in low- and middle-income countries has skyrocketed in the last several years, but a woman is still on average 21% less likely to own a mobile phone than a man.[19]

Contribute to recovery, resilience, and return

Mobile money in displaced contexts can provide a lifeline to the most vulnerable. The destruction of more than one-third of Haiti's bank branches and ATMs in the country's 2010 earthquake meant severe cash shortages for Haitians. In the short term, mobile money services contributed to the recovery of the country and its people by helping families and humanitarian agencies get money into the hands of individuals. In the long term, mobile money services provided financial services to displaced persons, helping them to return home and build resilience to future financial shocks.

In Kyangwali settlement in Uganda, some refugees who were interviewed reported using mobile money services to send money to their families who were still in unsafe areas to pay for transportation to safer areas.

Foster economic growth within and beyond displacement settings

As displaced populations grow and remain unsettled for longer, there is greater potential for these groups to contribute to the growth of informal economies within settlements, as well as the broader economy beyond settlement borders. In Kampala and Kyangwali settlement in Uganda, refugees reported spending cash received through mobile money services in the settlement and nearby towns to pay bills and school fees, and to buy goods and services from businesses. Some humanitarian agencies also used mobile money to pay refugees for their services in the camp.

In addition, mobile money programmes implemented by humanitarian organisations have the potential to inject a large amount of cash into the economy that can be transferred with ease between individuals. The WFP and mVISA mobile money programme in the Gihembe camp in Rwanda injected $140,000/month into the economy of the camp and the town outside the camp's borders, with merchants reporting an increase in sales.

However, without a network of merchant agents, the potential flows of mobile money and the impacts on the economy are limited. Mobile money services have the potential to create new trade networks, but only if they become more than cash-in and cash-out mechanisms, and are rolled out as fully fledged financial instruments that facilitate P2P and P2B payments.

Empower displaced populations

One of the most critical impacts of access to mobile money transfers is the empowerment of recipients, which is greater than that provided by other forms of money transfer or the provision of aid in the form of goods. This is particularly important in displacement settings where control over one's own life is a key part of building resilience. Focus groups of refugees in Kyangwali settlement found that being able to choose convenient times to cash out and decide how to spend their money increased their sense of control over their own well-being and future.

18.   Intermedia (2012), "Mobile Money in Uganda: Use, Barriers, and Opportunities. Financial Inclusion Tracker Surveys Project". Available at: http://www.audiencescapes.org/sites/default/files/FITS_Uganda.PDF
19.   GSMA and Vital Wave Consulting (2010), "Women & Mobile: A Global Opportunity. A study on the mobile phone gender gap in low and middle-income countries". Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/01/GSMA_Women_and_Mobile-A_Global_Opportunity.pdf

Improve the financial literacy of displaced populations

As displacement becomes more protracted, the need for refugees and IDPs to manage their money is increasingly relevant. In these contexts, mobile money services can help to improve the financial literacy of those who were previously 'unbanked'. Many displaced persons in Haiti, for example, reported never having stepped into a bank because they assumed financial services were only available for 'rich' people.[20] This unfamiliarity often bred distrust. As a result, using a mobile phone was viewed as significantly preferable to engaging directly with the bank, especially since they were already familiar with using mobile phones.

Increase the security of displaced populations and those implementing humanitarian programmes

Following Typhoon Haiyan in the Philippines, Mercy Corps and BanKO implemented a mobile money programme that helped to reduce the sense of insecurity IDP recipients felt with other types of cash transfer programmes. This was especially the case for women, who reported feeling safer not having to carry cash and being able to choose safe locations to cash out.[21] Banks and humanitarian organisations, which often experience looting or personal attacks after disasters, also reported feeling more secure.

Enhance the connectedness of displaced populations

Where phones and/or SIM cards are provided by humanitarian organisations as part of mobile money programmes, it is regularly reported that the ability to communicate with distant relatives is a significant additional benefit. Feeling connected has been identified as a critical factor in building resilience to stress and overcoming trauma. It has also been shown that personal networks in refugee communities have played a crucial role in enhancing economic subsistence.[22] The importance of connectivity amongst displaced populations is increasingly being recognised by humanitarian organisations, which are including components aimed at improving family connections in their interventions. Other initiatives to enhance connectedness amongst displaced populations have emerged in recent years, including REFUNITE, a tool designed to help refugees locate their family members.[23]

> **IF I DON'T HAVE A PHONE I CAN'T COMMUNICATE WITH NGOs AND THEY CAN'T COMMUNICATE WITH ME**
>
> *Congolese refugee, Kyangwali refugee settlement*

The ability of mobile money beneficiaries to communicate with and provide feedback to the organisations implementing the programme has also been identified as a secondary benefit. A report by NGO media development organisation Internews highlights the critical communication gaps between refugees and the humanitarian sector, drawing on examples of refugees in Dadaab camp in Kenya, where delivery of aid has been hampered because of these communication failures. The report states that more than 70% of the newly-arrived refugees interviewed lacked information on how to register for or access aid. It was thought that mobile money programmes could go a long way towards reducing these communication gaps if beneficiaries were given opportunities to access information and provide feedback through their mobile phones.[24] Lack of communication was also identified as an issue in focus groups of refugees in Kyangwali settlement in Uganda. Informants reported having difficulties accessing information due to language differences; troubleshooting and feedback phone lines are often exclusively in English.

Current obstacles for MNOs

Key question: What is currently holding MNOs back from enhancing the enabling environment for mobile money in displacement contexts, and what are some innovative ways to overcome these obstacles?

1. Perception of temporary displacement settings

Many service providers perceive displacement settings as small in population, short term, and therefore not financially viable, and choose to focus their attention instead on enabling a 'permanent' environment for mobile money for the unbanked elsewhere. However, as previously discussed, displacement is becoming a long-term state of being. With the average duration in protracted displacement situations estimated at 20 years, refugees and IDPs should not be seen as just temporary users of mobile money services.

20. Interview with Kokoevi Sossouvi, former program manager of Mercy Corps' mobile money programme in Haiti.

21. Interview with Mercy Corps.

22. Baruti Bihati Amisi, (2006), "An Exploration of the Livelihood Strategies of Durban Congolese Refugees", UNHCR Working Paper No. 123, New Issues in Refugee Research. Available at: http://www.queensu.ca/samp/migrationresources/Documents/Amisi_exploration.pdf

23. For more information, see http://www.refunite.org

24. Internews (15 September 2011), "Report: Serious Communications Gaps at Camps for Somali Refugees are Putting Lives at Risk". Available at: https://www.internews.org/our-stories/program-news/report-serious-communications-gaps-camps-somali-refugees-are-putting-lives-

2. Regulatory issues

The regulatory restrictions MNOs face in rolling out mobile money services are often exacerbated in displacement contexts.

Know your customer (KYC) requirements have been identified as particularly difficult to meet in displacement settings since refugees and IDPs often lose their identification documents when they flee. For example, in Egypt, all foreigners conducting financial transactions must present their passport. This has presented an obstacle for Syrian refugees seeking to use mobile money services, as many fled without their passports, and the political crisis has made it difficult to replace them. In addition, individuals in refugee contexts are less willing to give out personal information to set up a bank account because they are often worried it will affect their refugee status in some way.

The strengthening of anti-money laundering/combating the financing of terrorism (AML/CFT) rules has also made it challenging to send P2P payments between family members who have fled their country and those who remain. Maintaining financial integrity that accounts for money laundering and terrorist financing risks, while at the same time enabling financial access, is proving increasingly difficult for MNOs in displacement settings.

However, there are opportunities to overcome these regulatory restrictions.[25] UNHCR and WFP negotiated with the Egyptian government to permit the UN refugee card that is distributed to displaced persons to be used as an alternative form of ID to meet KYC requirements. The less stringent KYC rules created by the central bank of the Philippines (Bangko Sentral ng Philippines) have been key enablers for Globe and SMART mobile money services in that country. Customers who want to use mobile money services must present valid ID only once, and are allowed to present one ID from a list of 20 types of documents approved by the BSP. Following Typhoon Haiyan, these KYC rules were further relaxed to allow those who had been displaced and lost all forms of ID to still access mobile money services. In Haiti, Digicel offered ID-free registration for small transfer amounts (called 'The Mini-Wallet') whilst IDs were being re-issued.

3. Restrictions on using the full range of mobile money services

The commonly observed practice of immediate cash-out of mobile money in displacement settings makes it less financially viable for MNOs to engage in these contexts. Three main obstacles prevent MNOs from offering a full range of mobile money services:

- *Low ownership of working mobile phones or chargers*

MNOs perceive there is a low rate of mobile phone ownership amongst displaced populations that would prevent the widespread use of mobile money services. In many cases this perception is accurate, but figures tend to vary from context to context.

> **MY PHONES GOT LOST WHILE WE WERE RUNNING; WE FORGOT EVERYTHING TO SAVE OUR LIVES**
>
> *Congolese refugee*

In Kyanygali refugee settlement in Uganda, 47.8% of refugees surveyed owned a mobile phone. This was significantly lower than the self-settled displaced populations surveyed in Kampala, where the ownership rate was 90.4%. Several respondents reported having their mobile phones stolen during the journey to the camp or having to leave them with the rest of their belongings in their country of origin when they fled.

Some refugees from DRC reported their phones had stopped working once they travelled deeper into Uganda; despite attempts to use the same network (MTN), they needed a new SIM card. As a result, there were reports of refugees selling their mobile phones as soon as they realised they were not working. To purchase a SIM card in the camp, the refugees had to travel to a weekly market in the village of Kagoma, pay UGX 2,000 (approximately US $0.80), and present a passport photograph and another form of identification. Although survey respondents did not consider this too difficult a task — there were facilities to process passport photographs and official documentation of refugee status was accepted as a form of identification — it was considered time consuming.

In addition, many people interviewed in Kyangwali settlement decided to either sell their device or not purchase a new SIM card due to a perception that using a mobile phone in the camp was too expensive. Access to power for charging mobile phones is limited and provided mainly by solar panels affixed to roofs. This was reported as a disincentive to using more modern handsets that require regular charging, and instead encouraged the use of more basic longer-life handsets, which could be used for mobile money transfers just as easily.

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25. GSMA has undertaken some extensive work on overcoming regulatory constraints. For further information, see Simone di Castri (2013), "Mobile money: Enabling regulatory solutions", GSMA. Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf

Interestingly, self-settled displaced populations in Kampala had a much higher mobile phone ownership rate of 90.4 percent. This could be due to greater access to mobile phone suppliers in Kampala. It could also be due to the relationship between income and the ability to settle outside refugee camps, and the fact that income was a significant factor in mobile phone ownership in the Ugandan refugee context.

To overcome the lack of mobile phones in Gihembe refugee camp, WFP, with support from World Vision, has distributed 3,500 handsets since January 2014 to facilitate mobile money transfers. Each head of household in the camp (which has a population of 14,000 refugees) then had a secure way to receive payments. It is also important to note that displaced populations rely heavily on sharing mobile phones and other goods, and this should not be underestimated. Of those in Kyangwali settlement who did not own a mobile, over one-third had access to a shared phone. However, to ensure more secure transactions, the WFP programme in Gihembe mitigated the sharing of handsets, SIMs, and PINs.

- *Limited number of mobile money agents*

The extensive network of mobile money agents for M-Pesa in Kenya, Telesom Zaad in Somaliland, and Easypaisa in Pakistan, were critical factors in implementing and scaling up mobile money services successfully. However, in displacement settings, there is commonly a lack of individuals available to act as mobile money agents due to either the remote location of the refugee settlements or agents themselves being displaced. This limits the ease with which mobile money can be accessed and used for merchant payments. This was reported as a challenge during Mercy Corps' and BanKO's mobile money programme in the Philippines following Typhoon Haiyan, which required emergency temporary agents to be deployed. In Kyangwali settlement in Uganda, there is only one agent to cash out MTN mobile money. This is likely to cause delays in accessing cash.

- *Liquidity issues*

Liquidity is a challenge even for the most nascent mobile money services. However, due to the influx of people into remote areas in displacement contexts, high levels of remittance flows, and the common practice of immediately withdrawing cash, liquidity issues can be exacerbated. In Kyangwali refugee settlement, it was reported there was often not enough cash to meet cash-out demands. This challenge is particularly acute in rural areas, but in crisis contexts, these pressures can also be felt in urban centres.

Humanitarian cash transfer programmes have also experienced liquidity issues. Bulk payments are inherently infrequent, usually distributed on a monthly or bi-monthly basis. This exacerbates the liquidity management burden on agents since it creates sharp spikes of demand for cash, which can be pre-empted but expensive to meet when rural settlements are remote. For example, despite the extensive network of agents in Kenya, the Kenyan Red Cross and Safaricom's mobile money programme in Kisumu ran into problems due to agents being unable to meet the liquidity demands of beneficiaries.[26]

Liquidity issues are particularly critical in these contexts since displaced populations depend on flows of money for their food and shelter needs. Being unable to access these critical funds leads people to doubt the reliability of mobile money services. At the same time, when agents have to regularly leave their kiosks to access funds to meet high demands for cash-out, they have less time for their own income-generating opportunities and may have their credibility and reputation called into question.

- *Limited capacity for international mobile money transfers*

Some mobile money services allow for easy international transfers, but for others, cross-border transfers remain limited. Until services have full capacity to transfer mobile money internationally, displaced populations may continue to use other, potentially high-risk informal mechanisms to send and receive remittances from friends and family in other countries. This could include relying on runners to carry cash across borders.

Current obstacles for humanitarian organisations

Key question: What is holding humanitarian organisations back from partnering with MNOs to use mobile money in displacement contexts, and what innovative solutions have been used to overcome these obstacles?

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26. Interview with Karthik Balasubramanian, Financial Services for the Poor, Bill & Melinda Gates Foundation.

1. Limited network coverage

> "WE ARE CRYING OUT, REQUESTING MOBILE MONEY – BUT WE NEED A NETWORK TO GET IT."
>
> *Resident of Malembo, Uganda*

In displaced contexts, there is an urgent need to reach the vulnerable as soon as possible. However, following a disaster or conflict, critical infrastructure affecting mobile networks is often damaged, including cell sites. Many of the humanitarian organisations interviewed reported existing infrastructure is often not ready for immediate use of mobile money services. Also, since refugee camps and evacuation locations are usually in remote areas, network coverage is sometimes not sufficiently reliable for the processes involved in mobile money transfers. For example, Oxfam's mobile money project with Airtel in the outskirts of Goma, DRC, was held back by limited network coverage, which created technical difficulties in making bulk payments. This caused critical delays, and beneficiaries felt they could not rely on the service. In Kyangwali settlement in Uganda, network coverage was also reported to be inconsistent and inadequate for internet use.

Humanitarian organisations choose to work with certain MNOs in part because of the strength of a mobile network on the original site of a refugee camp. However, as the number of displaced increases and the camps expand to new spaces, these areas sometimes lack the network strength required. In addition to restricting the use of mobile money, it also causes communication problems for refugees, service providers, and NGOs within the camp.

However, there are a number of solutions to this obstacle, and weak network coverage no longer represents an insurmountable challenge. The Vodafone Foundation has deployed its portable mobile phone network in many displacement settings, including in Yida camp, the largest refugee camp in South Sudan. The Instant Network — a mobile phone network which fits into three suitcases, weighs less than 100 kg, can be transported on commercial flights, and set up within 40 minutes — has allowed aid workers to undertake life-saving work, enabled 70,000 refugees to contact relatives, and has the ability to facilitate mobile money transfers. In South Sudan, in conjunction with Zain Group and UNHCR, the Instant Network has also been accompanied by the distribution of handsets and the provision of free airtime to aid workers across the 3,000-acre refugee camp for a period of six months.

2. Working with different partners in a time-sensitive setting

Differences in language, objectives, and approaches have created challenges for collaboration between MNOs and humanitarian organisations in emergency contexts. Humanitarian organisations interviewed for this research indicated that, in hindsight, they would have approached negotiations with MNOs differently. Many stated a lack of understanding of each other's aims and capacities led to difficulties in later stages of joint programmes, and that in future they would pay greater attention to pre-partnership relationship building. These challenges have also been experienced in collaborations between humanitarian institutions and financial institutions. WFP started its mobile money project in Rwanda working alongside Kigali Bank, and has since successfully transitioned the project to I&M Bank.

Technological illiteracy of beneficiaries

In Rwanda, WFP's and mVISA's mobile money programme with refugees had to overcome challenges associated with beneficiaries who were illiterate and unfamiliar with operating a mobile phone. A significant amount of money and time was invested by all stakeholders, including WFP, UNHCR, Visa, World Vision, MIDIMAR, I&M Bank and the Bank of Kigali, in training beneficiaries to use the mobile-based system. In Niger, Save the Children and Airtel reported low capacity amongst some beneficiaries to use mobile technology, especially elderly populations. This was demonstrated during in the distribution phase, when more than two-thirds of beneficiaries needed support from field operators, a large proportion of whom were over 65 years of age.

Unfamiliarity with mobile technology can also lead to distrust. Some displaced persons in Uganda chose not to have a mobile phone because they stated they feared the government tracks mobile phones. Also, 53% of refugees with mobile phones interviewed reported receiving threatening or spam calls and messages, or false or unwanted information through their mobiles, including false reports of deaths or calls for assistance from family. As a result, they may less inclined to trust other information received via their phones. Focus group discussions with refugees suggested they relied heavily on word-of-mouth information from newly arriving convoys, and that radio was considered one of the most trustworthy sources of information.

A number of simple mechanisms have been used to overcome technological illiteracy: following the 2010 earthquake in Haiti, Digicel and Mercy Corps encouraged elderly beneficiaries to bring a relative to help them register and cash-out; in the Philippines, Mercy Corps and BanKO distributed leaflets and conducted training on the use of SIM cards; and in Rwanda, WFP and Airtel sent out volunteers to assist refugees with their mobile phones and mobile money transactions.

Looking forward

Mobile money is becoming a strategically important service for a growing number of providers, evidenced by the fact that 70% plan to increase their investment in mobile money in 2014.[27] However, MNOs rarely see a business case for enhancing mobile money services in displacement contexts. This is due to displaced populations rarely using mobile money services to their full extent, tending instead to withdraw cash immediately and not use it for merchant payments. In fact, MNOs have tended to pursue partnerships with humanitarian organisations in these contexts as part of a CSR initiative rather than part of its core business. Existing positive relationships between MNOs and humanitarian organisations have played a major role in many MNOs deciding to implement joint mobile money programmes aimed at crisis-affected populations. For example, mobile money programmes to support flood victims were implemented by the Ugandan Red Cross and Kenyan Red Cross, in conjunction with MTN and Safaricom respectively, and both of these joint initiatives were prompted by pre-existing relationships and past donations by the MNOs.

However, displacement settings can represent an opportunity for MNOs to capture new markets — markets that should not be seen as temporary due to the increasingly protracted nature of displacement — and for mobile money to make a real impact, extending trade networks and helping refugees and IDPs to become more resilient to future financial shocks. If mobile money services can be relied upon to enable rapid transfers of remittances to friends and family, these vulnerable groups may be able to escape more quickly, settle more safely, and continue to support their families from afar.

To take advantage of these opportunities and make mobile money a part of everyday life, the supporting infrastructure for mobile money needs to be strengthened. When agent networks are strong, mobile money is used regularly, and liquidity flows are reliable, mobile money will become a more viable option in displacement contexts.

- *RECOMMENDATION:* MNOs need to identify additional gaps in networks and infrastructure in both current and future at-risk areas, and continue to promote the use of mobile money with individuals and businesses. This may involve examining disaster risk projections and recent trends in displacement patterns to identify where to enhance connectivity in the future. In particular, this will likely involve examining rural areas just outside high-risk towns that currently lack a strong network.

- *RECOMMENDATION:* MNOs should provide training for mobile money agents working specifically in displacement contexts to help them cope better with the pressures of liquidity and insecurity.

- *RECOMMENDATION:* GSMA could organise regular workshops to share lessons learnt by MNOs in the use of mobile money in displacement contexts.

- *RECOMMENDATION:* All mobile money stakeholders need to collaboratively strengthen calls for action to government to ease local regulations that block access to international mobile money transfers.

At the same time, humanitarian organisations need to continue to experiment with mobile money programmes in these contexts, focusing their efforts on projects in countries where there are already strong foundations for mobile money. Despite the challenges these programmes have experienced, these obstacles are increasingly being overcome. For example, network coverage is slowly improving in rural and crisis-affected areas, and initiatives such as Vodafone's Instant Network[28] can provide network coverage in remote locations in a matter of minutes. In addition, the observed impacts of mobile money services on displaced populations have been significant, and once a programme has been established, additional roll-outs can be accomplished with minimal expense and training. Finally, mobile money programmes have subsequently provided humanitarian organisations with a network for disbursing messages about preparedness or relief information to vulnerable groups.

Humanitarian programmes also need to work to ensure mobile money services are used for more than simply receiving a cash transfer, and move towards mobile money being used as a fully-fledged financial instrument both during and after a humanitarian programme has ended. Currently, when humanitarian mobile money programmes are designed, attention is rarely given to facilitating the use of mobile

27. Claire Pénicaud and Arunjay Katakam (2014), "State of the Industry 2013: Mobile Financial Services for the Unbanked", GSMA. Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

28. Fionán McGrath (2012), "Mobile Network Restoration & Humanitarian Response: The Vodafone Foundation Instant Network Programme", GSMA. Available at: http://www.gsma.com/mobilefordevelopment/mobile-network-restoration-humanitarian-response

money services for P2P transfers, merchant payments, and for their own financial management; it is very much a spike in mobile money business and transient in nature. This is commonly the case in emergency contexts, as well as for G2P social protection programmes.[29]

Recommendations for programmes in progress:

- *RECOMMENDATION:* Humanitarian organisations seeking to work with MNOs should explore the commercial viability of MNO engagement in their proposed project, and emphasise the opportunities for market expansion.

- *RECOMMENDATION:* MNOs should, in conjunction with humanitarian organisations, conduct analyses of different pricing models for joint mobile money programmes in displacement contexts. This may include investigating models that use variable charges for mobile money programme delivery, based on the distance from existing infrastructure.

- *RECOMMENDATION:* Before joint programmes are implemented, additional feasibility studies should be conducted by partners to ascertain the impact and long-term sustainability of the service for the target populations.

- *RECOMMENDATION:* Humanitarian organisations need to work with MNOs to ensure beneficiaries are more aware of the full range of financial services offered to them by mobile money services.

- *RECOMMENDATION:* All programme partners need to dedicate time to clearly defining responsibilities and exploring potential challenges in the short and long term. This will make joint programmes operate more smoothly, which will enhance trust in mobile money services and increase demand for these services for their own financial management. This may include stress-testing network strength more widely in anticipation of future settlement expansion.

Recommendations for programmes that have ended:

- RECOMMENDATION: There appears to be a gap in communication between the various stakeholders involved in mobile money programmes in displacement settings. A more open and sustained dialogue could increase opportunities for more appropriate products to be developed, and boost the uptake of services by beneficiaries in the long term. CaLP could organise dialogue sessions that bring humanitarian organisations, MNOs, and financial institutions together. This could help to build relationships as well as identify the challenges and opportunities for improved negotiations. Part of this could be a joint discussion of how the Emergency Market Mapping and Analysis (EMMA) toolkit[30] could be adapted to assess the feasibility of mobile money services to meet the needs of displaced populations.

- RECOMMENDATION: Humanitarian organisations need to systematically evaluate the extent to which mobile money services are being used after the project has finished — currently not a common practice — to determine the extent to which populations are continuing to use mobile money services, and the reasons for these trends.

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29. Jamie Zimmerman, Kristy Bohling, and Sarah Rotman Parker, (2014), "Electronic G2P Payments: Evidence from Four Lower-Income Countries", CGAP. Available at: http://www.cgap.org/sites/default/files/Focus-Note-Electronic-G2P-Payments-April-2014.pdf

30. The EMMA toolkit is a set of tools and guidance notes designed to encourage and assist frontline humanitarian staff in sudden onset emergencies to better understand and make use of market systems.

Annex 1
Methodology of the Uganda field research

Fieldwork sites

With a less stringent refugee policy than neighbouring states, and due to its relative peace, Uganda is an attractive destination for refugees. As of January 2014, the country hosts approximately 317,000 refugees from diverse nationalities. These refugees are spread across several settlements throughout the country and within the capital.

Fieldwork was conducted in the capital Kampala and in Kyangwali refugee settlement. As of 2012, more than 50,000 refugees were residing in the capital, despite very little direct support from refugee-assisting agencies. Kyangwali refugee settlement is located in Hoima District, Western Uganda, and is one of the largest refugee settlements in the country, housing approximately 32,000 refugees[31] from DRC, South Sudan, and other neighbouring countries. It spreads over 57 square miles, currently divided into 14 villages, although at the time of visiting there were plans to expand to 16 villages to accommodate new arrivals. Following a recent rise in the frequency of clashes between rebel groups in DRC, the number of Congolese fleeing to Uganda has increased, with the largest influx arriving in July 2013. Many of those fleeing were housed in Bubukwanga Transit Centre, Bundibugyo District, to access initial protection services before being moved to Kyangwali settlement. Based on the latest available data, approximately 90% of the refugees in Kyangwali settlement are Congolese.

Research team

Field research was conducted in Uganda in November 2013 by the GSMA Disaster Response Team (Kyla Reid) in partnership with a University College London (UCL) PhD researcher (Elizabeth Stones). A team of Ugandan research assistants was recruited to conduct the surveys, with translation support provided by Congolese refugees in the settlement. The local research team was led by Ugandan researcher, Irene Dawa, and comprised of male and female researchers, who were provided with training and support to administer 194 surveys in the field.

Research methodologies

The following methodologies were utilised:

SURVEY	SEMI-STRUCTURED INTERVIEWS	FOCUS GROUP DISCUSSIONS
• Questionnaire conducted with a randomised opportunity sample of migrants in Kyangwali refugee settlement and Kampala. 194 in total.	• Conducted with UNHCR field staff, community leaders, and MTN and Airtel representatives.	• Three focus groups held with a diverse range of refugees in terms of age, gender, and location.

Informed consent was obtained from all those involved and translation was provided by refugees appointed by the Head of the Refugee Council within the Kyangwali refugee settlement.

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31. As of 18 October 2013, "UNHCR Uganda Kyangwali Refugee Settlement Fact Sheet". Available at: http://www.unhcr.org/pages/49e483c06.html

Research challenges

Before data collection began, the research team worked to identify potential limitations they would need to overcome. These included:

Nationality bias: The potential biased perspectives of Ugandan researchers towards refugee communities in their country might need to be acknowledged.

Gender bias: The majority of researchers were female, therefore, full acknowledgement of both male and female perspectives might need to be ensured.

Political bias: The political affiliation of translators might need to be taken into account.

Translation bias: Differences in language might introduce an element of bias into participants' understanding of the survey and recorded responses.

In general, respondents were open and response rates were very high. However, variation was seen throughout the study.

Annex 2
Contributions

We are grateful to the following people who provided interviews, consultation, and documentation:

Alban Luherne	Orange – Asia, Middle East and Africa
Alexander Betts	Refugee Studies Centre, Oxford
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Celia Pietrabono	UNICEF
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Jude Powell	Oxfam
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Zoe Jordan	NRC

Annex 3
Bibliography

Aker, J. C., Boumnijel, R., McClelland, A. and Tierney, N. (2011). "Zap It To Me: The Short-Term Impacts of a Mobile Cash Transfer Program", Working Paper No. 268. Centre for Global Development; Oxford, UK.
Available at: http://www.cgdev.org/files/1425470_file_Aker_et_al_Zap_It_to_Me_FINAL.pdf

Amisi, B. B. (2006). "An Exploration of the Livelihood Strategies of Durban Congolese Refugees", UNHCR Working Paper No. 123, New Issues in Refugee Research. UNHCR; Geneva.
Available at: http://www.queensu.ca/samp/migrationresources/Documents/Amisi_exploration.pdf.

Andrews, B. L. (2003). "When is a Refugee not a Refugee? Flexible Social Categories and Host/Refugee Relations in Guinea", UNHCR Working Paper No. 88, New Issues in Refugee Research. UNHCR; Geneva. Available at: http://www.unhcr.org/3ea55d0a4.html

Better than Cash Alliance. (2014). "Electronic cash aid gives Rwandan refugees more options".
Available at: http://betterthancash.org/wfp-mvisa-phone-transfers-feed-rwandan-refugees/

Betts, A., Bloom, L., Kaplan, J. and Omata, N. (2014). "Refugee Economies: Rethinking Popular Assumptions. University of Oxford; Refugee Studies Centre; and Humanitarian Innovation Project.
Available at: http://www.rsc.ox.ac.uk/files/publications/other/refugee-economies-2014.pdf

Brewin, M. (2008). "Evaluation of Concern Kenya's Kerio Valley Cash Transfer Pilot (KVCTP)", ALNAP; London.
Available at: http://www.alnap.org/resource/6176

di Castri, S. (2013). "Mobile Money: Enabling Regulatory Solutions". GSMA; London. Available at:
http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU-Enabling-Regulatory-Solutions-di-Castri-2013.pdf

Development Initiatives. (2013). "GHA Report 2013". Global Humanitarian Assistance; London.
Available at: http://www.globalhumanitarianassistance.org/wp-content/uploads/2013/07/GHA-Report-2013.pdf

Fajnzylber, P. and J. Humberto Lopez. (2008). "Remittances and Development: Lessons from Latin America". World Bank; Washington, DC. Available at: http://siteresources.worldbank.org/INTLAC/Resources/Remittances_and_Development_Report.pdf

GSMA. (2011). "Haiti Mobile Money: A Point-in-Time Case Study". GSMA; London.
Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/05/Haiti-Mobile-Money.pdf

GSMA. (2013). "Mobile Money for the Unbanked Case Studies: Insights, Best Practices and Lessons from Across the Globe". GSMA; London. Available at: http://www.gsma.com/mobilefordevelopment/mmu-case-studies

GSMA. (2013). "Unlocking the Potential: Women and Mobile Financial Services in Emerging Markets". GSMA; London.
Available at: http://www.gsma.com/mobilefordevelopment/unlocking-the-potential

GSMA and Vital Wave Consulting. (2010). "Women & Mobile: A Global Opportunity. A study on the mobile phone gender gap in low and middle-income countries". GSMA; London.
Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/01/GSMA_Women_and_Mobile-A_Global_Opportunity.pdf

Humanitarian Futures Programme. (2014). "Is Cash Transfer Programming 'Fit for the Future'?" Cash Learning Partnership and the
Humanitarian Futures Programme; Oxford and London.
Available at: http://www.cashlearning.org/2012-2014/-fit-for-the-future-

Intermedia. (2012). "Mobile Money in Uganda: Use, Barriers, and Opportunities. Financial Inclusion Tracker Surveys Project".
Available at: http://www.audiencescapes.org/sites/default/files/FITS_Uganda.PDF

Internews. (2011). "Serious Communications Gaps at Camps for Somali Refugees are Putting Lives at Risk". Available at:
https://www.internews.org/our-stories/program-news/report-serious-communications-gaps-camps-somali-refugees-are-putting-
lives-

Jack, W. and Suri, T. (2011). "Mobile Money: The Economics of M-Pesa". MIT. Available at: http://www.mit.edu/~tavneet/M-PESA.pdf

Johnson, P. and Stoll, K. (2008). "Remittance Patterns of Southern Sudanese Refugee Men: Enacting the Global Breadwinner Role".
Family Relations. (57) 4: 431–443.
Available at: https://www.questia.com/library/journal/1P3-1588763831/remittance-patterns-of-southern-sudanese-refugee-men

Kelegama, S. (2011). Migration, Remittances, and Development in South Asia. Sage Publications India Pvt Ltd.; New Delhi.

Leung, L. (2010). "Telecommunications Across Borders: Refugees' Technology Use During Displacement". Telecommunications Journal of
Australia, 60 (4): pp. 58.1–58.13. Available at: http://www.swinburne.edu.au/lib/ir/onlinejournals/tja/tja_vol60_no4_2010.pdf

Loescher, G. and Milner, J. (2012). "Protracted Refugee Situations". Refugee Studies Centre, University of Oxford; Oxford.
Available at: http://www.prsproject.org/protracted-refugee-situations/

McCarty, M. S. and Bjaerum, R. (2013). "Easypaisa: Mobile Money Innovation in Pakistan". GSMA; London.
Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/07/Telenor-Pakistan.pdf

McGrath, F. (2012). "Mobile Network Restoration & Humanitarian Response: The Vodafone Foundation Instant Network Programme".
GSMA; London. Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/Mobile-Network-
Restoration-and-Humanitarian-Response.pdf

Omata, N. (2012). "Refugee Livelihoods and the Private Sector: Ugandan Case Study". Refugee Studies Centre. University of Oxford;
Oxford. Available at: http://www.rsc.ox.ac.uk/publications/refugee-livelihoods-and-the-private-sector-ugandan-case-study

Parham, A. A. (2004). "Diaspora, Community and Communication: Internet Use in Transnational Haiti". Global Networks (4) 2: pp.
199–217. Available at: http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0374.2004.00087.x/abstract

Pénicaud, C. and Katakam, A. (2014). "State of the Industry 2013: Mobile Financial Services for the Unbanked". GSMA; London.
Available at: http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2014/02/SOTIR_2013.pdf

Smith, G., MacAuslan, I., Butters, S., and Trommé, M. (2011). "New Technologies in Cash Transfer Programming and Humanitarian
Assistance". Cash Learning Partnership; Oxford. Available at:
http://www.cashlearning.org/resources/library/272-new-technologies-in-cash-transfer-programming-and-humanitarian-assistance

Stuart, G. and Cohen, M. (2011), "Cash in Cash Out: The Role of M-PESA in the Lives of Low- Income People". Financial Services
Assessment. Available at: http://www.gsma.com/mobilefordevelopment/wpcontent/uploads/2012/03/cashincashoutkenya.pdf

Telenor Pakistan. (2014). "Bringing financial services to Pakistani women".
Available at: http://www.telenor.com/media/articles/2014/bringing-financial-services-to-pakistani-women/

Trapp, M. (2014). "Remittances as informal aid: Livelihoods and migration in a Liberian refugee camp". UNHCR Research Paper No. 266.
UNHCR; Geneva. Available at: http://www.unhcr.org/52970dab9.html

UNHCR. (2014). "Global Trends 2013". UNHCR; Geneva. Available at: http://unhcr.org/trends2013/

WFP. (2012). "Projet de transfert de cash dans les villes de Tillabery, Tahoua et Agadez". Niger.

Zimmerman, J., Bohling, K. and Rotman Parker, S. (2014). "Electronic G2P Payments: Evidence from Four Lower-Income Countries". CGAP; Washington. Available at: http://www.cgap.org/sites/default/files/Focus-Note-Electronic-G2P-Payments-April-2014.pdf.

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