

Digital Access, Inclusion and Participation

Access and agency

Digital refugees and the future of protection in the context of ubiquitous connectivity

UNHCR Innovation Service



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Digital Access, Inclusion and Participation

2019 Research briefs - an exploration

The initiative previously called Connectivity for Refugees and supported by Luxembourg is as of 2020 called 'Digital Access, Inclusion and Participation'. 'Connectivity for Refugees' exists as a work stream but will start to operate under the name Digital Access, Inclusion and Participation Programme. In this document we refer to the initiative as Connectivity for Refugees.

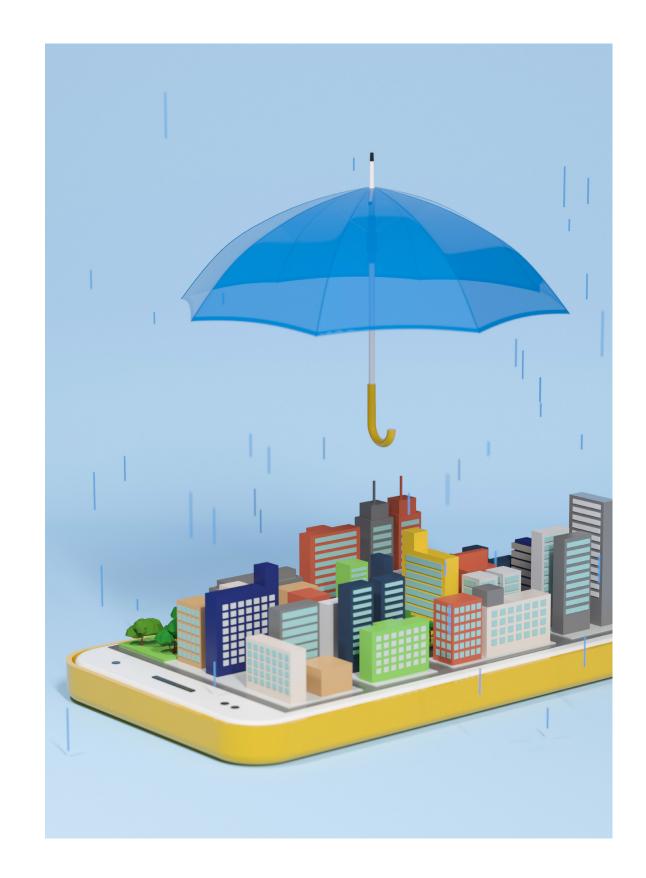
Through research and advocacy, capacity building, field experiments, and strategic partnerships, UNHCR's Digital Access, Inclusion and Participation programme works towards a future where all refugees, regardless of age, gender and diversity, have the right and the choice to access Internet connectivity. It seeks to ensure that refugees' voices are heard in humanitarian programming and that they can leverage connectivity to fully participate in the digital space. The Connectivity for Refugees initiative is part of this programme, and specifically focuses on barriers to digital access inclusion and works systematically across the aforementioned pillars

Research serves as a crucial precursor to bring insights into the complexity of digital connectivity, inform and challenge dominant views and narratives around access and inclusion of displaced persons in increasingly digital societies. The objective of Connectivity for Refugees' research stream is to provide a comprehensive outlook on connectivity, from different angles and different perspectives, to understand how connectivity intersects with other domains and fields.

This research is an exploration and aims to support future experimentation; bringing in topics that are on the margins so that UNHCR remains future-focused and at the forefront of developing trends in connectivity. Understanding how displaced communities find gateways to access the Internet, which factors influence and determine their choices, what UNHCR's mandate of protection means in a digital space, or the extent to which specific technologies or tools can reduce or exacerbate inequalities, will inform and shape future efforts in providing connectivity to refugees in a safe, adapted, and dignified manner.

This publication is a part of a research brief series where UNHCR's Innovation Service has collaborated with a range of researchers to explore topics including Internet governance, digital transformation, diversity and inclusion. The briefs are all unique and reflect the author's style and individual voice.

Although the team has been extensively involved in shaping the themes and questions, and provided editorial advice, the views expressed in the publication are the views of each author. It is important to note that space was given to the authors intentionally to express their independent views and that these do not represent UNHCR. We welcome differing views and divergent perspectives and believe in the importance of challenging our own thinking, assumptions and ideas. Research offers us a platform to do this constructively and in a manner that is based on evidence and science, that ultimately helps us advance conversations on topics we identify as critical to a more just access and participation in the digital space.



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List of Acronyms

Al Artificial Intelligence
ID Identity Document
IT Information Technology

ITU International Telecommunication Union
LMIC Low And Middle Income Countries

MNO Mobile Network Operator

NGO Non Governmental Organization

WFP World Food Programme

Introduction

Managing protection of vulnerable people, particularly refugees, in an increasingly digital context is a fundamental challenge for the humanitarian community. Processes of 'digitalization' and 'datafication' in providing refugee assistance are changing relationships between refugees and aid organizations. At the same time, refugees' own use of mobile devices, particularly smartphones, has changed the experience of forced migration and temporary asylum, generating both benefits and potential harms.

In higher income countries, these benefits and harms are on full display. Digital services, offered by aid agencies and volunteer technologists alike, provide new options for refugees. Programs using digital storytelling give agency to refugees, enabling them to share their stories and raise awareness as well. However, alongside the benefits, risks of loss of privacy, data theft, exploitation, also surface.

These wealthy environments are also not representative of the low-and-middle-income countries (LMICs) where most of the world's refugees have fled. There, issues of network availability and affordability hinder widespread mobile phone adoption and use. Widespread digital access for the refugee population requires coordination between humanitarians, service providers and others who have attempted to close global digital divides for the past decades. However, network access is only one piece of the puzzle. Affordability presents a potentially more challenging issue.

The challenge for the humanitarian community is to face these issues simultaneously, drawing on the lessons learned in high-income countries to chart, where applicable, a more just and equitable course in other contexts. Underpinning the challenges in both contexts is the fundamental nature of protection. Protection for vulnerable populations includes those persecuted and traumatized in the past, as well as those who, due to their forced migration, and its associated poverty, as well as lack of citizenship rights, face new, continuing or exacerbated vulnerability. Digital technologies create new forms of vulnerabilities that often intersect with the poverty, interrupted education, and lack of citizenship rights that oftentimes forced migration entails.

This research brief considers the risks and benefits of ubiquitous connectivity with an eye toward informing future conceptualizations of protection. However, before tackling fundamental questions of protection a number of more basic questions need addressing. First is an understanding of the changing nature of the 'digital refugee' where connectivity is ubiquitous. What uses of digital technologies are being pursued and what benefits and harms do they bring? Second, for environments without ubiquitous connectivity, what approach can be taken to foster greater network availability and affordability? Finally, given all this attention to digital processes and practices, what of those who chose to remain unconnected?

These questions are addressed in the following sections, starting with digital refugees, wherein digital services and digital storytelling are discussed. This is followed by ubiquitous connectivity, discussing access, affordability, and agency for those wishing to remain unconnected from mobile networks. Finally, the piece concludes with a discussion of protection and suggestions for future research.

Digitalized services

The digitalization of aid has multiple implications for protection. From an operations perspective, two dimensions emerge: in direct services to refugees and in back office operations. In the former, digitalization of aid contributes to the shrinking distance between non-humanitarian actors and refugees. Large organizations, such as banks and mobile network operators (MNOs), interact directly with refugees registering for bank cards or 'cashing out' digital monies distributed via SIM cards and mobile transfers. Similarly, small organizations, such as food retailers, play a greater role in the choices available to refugees.

These increasingly direct interactions raise protection questions related to direct interactions with vulnerable communities. First, in registering and managing bank cards, financial institutions have taken on an ongoing relationship with refugees. As compared to a one-time account registration effort by these organizations, their *ongoing relationship* increases the difficulty of ensuring that rotating bank staff are properly trained to work with a vulnerable community. Similarly, ongoing relationships with food vendors put them in a position to accept or deny credit on a continual basis, when payment problems occur. Consequently, through this transfer of relational power from humanitarians to these private entities, the latter can directly affect access to sustenance. Second, the control and management of refugee financial transaction data enables analyses that might uncover purchase patterns, locations of transactions, as well as to whom and from whom monies and/or remittances are transferred.

Regarding direct interactions with persons of concern, early trials of digital cash for food conducted by the World Food Programme (WFP) worked closely with local food vendors (Maitland, 2018b). The small businesses were vetted and trained on interacting with vulnerable populations, ensuring access to nutritious foods, enforcing policies on prohibited purchases, and maintaining systems for receiving digital payments. Frameworks such as UNHCR's 2015 "Guide for Protection in Cashbased Interventions" are useful in considering some of the risks that these programs can encounter (UNHCR, 2015). However, the ongoing challenges of monitoring in program management over the long term, emphasizing the relational rather transactional elements, are considerable and have received scant attention. Also, as these digital payments programs scale and the range of organizations involved expands, control over these interactions weakens. A fundamental question for protection is whether such control is necessary or desirable.

Expanding interactions with a wider variety of organizations may instigate a transition from 'persons of concern' to 'consumers'. The World Economic Forum provides guidelines developed in cooperation with several UN agencies, NGOs, and others to 'Protect, empower and serve the customer' recommends (1) understanding recipients' needs, behaviors and risks when using payment services; (2) designing payment mechanisms to enhance recipient value and empowerment; and (3) ensuring adequate training and information (World Economic Forum, 2016). These recommendations on the 'supply side' of services might be complemented by 'consumer protection' campaigns targeted at persons of concern.

While digital cash payments receive a great deal of attention, digital technologies are deployed across a range of services, such as education and health. Digital education systems range from

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technology-assisted formal education to fully digital vocational training and informal learning. Language learning online is a popular digital application (see e.g. Abou-Khalil, Helou, Flanagan, Pinkwart, & Ogata, 2019). Similarly, digital technologies are used in a variety of healthcare settings. A 2016 literature review of digital health technologies already found published accounts of 50 technologies used in refugee settings (Mesmar et al., 2016).

A second element of aid digitalization is data brokerage, which raises concerns regarding the emergence of relationships between humanitarian organizations and technology firms. Partnerships between humanitarian agencies and tech companies have the potential to improve data management, spur insightful analyses, and provide robust digital identities. But, at the same time, they may represent targets for hacking or encounter conflicts of values between organizations (Kinstler 2019). Raymond et al. (2019) identify a number of policy changes necessary to protect refugee data in these types of partnerships, including increased attention to human rights to information and digital protections, improving procedures governing digital partnerships, and establishing incident management systems for the inevitable security breaches.

A deeper reflection on data brokerage and the fundamental nature of humanitarianism, particularly in conflict zones, is presented by McDonald (2019). He also recognizes the transition, noting that humanitarian organizations are changing "from direct service providers to managing a network of digital vendors, public/private partnerships, local partners, and governments." The analysis highlights data-related challenges inherent to these relationships, including the pros and cons associated with data localization, the uncertainty host country agreements pose for data protection, security breaches, and the need for - but also the impossibilities of - data licensing.

McDonald offers four recommendations, including open contracting, due diligence frameworks, limited data licenses, and supply chain accountability mechanisms. The latter two, to some extent, are taken up through non-disclosure agreements and contracts. However, to the author's point, open contracting and due diligence frameworks are needed. Otherwise, the lack of visibility hinders enforcement, and by extension, an understanding of the true level of protection contracts provide. Absent such monitoring, trust in the humanitarian community in the future could suffer (McDonald 2019).

The digital refugee

These organizational technology trends occur alongside the rapid uptake of mobile phones by displaced persons across the globe. Together, they have given rise to the notion of the 'digital refugee.' Initially coined in an analysis of biometrics in refugee registration (Jacobsen, 2015), the concept of the 'digital refugee' has expanded to include both the data gathered by humanitarian organizations as well as those gathered and shared by refugees themselves (C. Maitland, 2019b; C. F. Maitland, 2018a). Armed with mobile phones, refugees capture and post pictures, blog about their lives and journeys, and share information in support of one another. At the same time, as implied above, humanitarian organizations use refugees' mobile phones as a platform for delivering information, cash and services. Both refugee and humanitarian uses present important opportunities and risks that need to be considered (Frouws and Brenner, 2019).

One opportunity is the apparent expansion of sources of assistance and a surge in innovations. As highlighted in a 2016 workshop "Civil Society 4.0 – Refugees and Digital Self-Organization," techsavvy volunteers, some refugees themselves, and students show-cased a plethora of applications aiming to help asylum-seekers in Europe (Mason 2016). Some provided information helpful to new arrivals, such as asylum application procedures. Others served as brokers, matching those willing to offer rooms with those in need, or skilled refugees with employers.

Many of these efforts and their applications however were often duplicative and had only minimal uptake. This situation generated calls for greater coordination for developers and their funders, alike (UNHCR 2016a; Mason 2016). Benton (2019) goes further, issuing a call for removal of 'digital litter' – the numerous applications and portals neglected, now offering only broken links and out-of-date information, as well as calling out the potential harm posed by outdated information and limited data protections.

The European refugee situation also gave rise to applications that took on a more political and activist stance, confronting national and regional policies. One example, WatchTheMed Alarm Phone, in 2014 established a phone-based support system for migrants in crisis while crossing the Mediterranean. These supportive efforts were, in some cases, in conflict with European policies attempting to limit access to its territorial waters. These efforts provide an interesting counterbalance to (inter)governmental uses of technology.

Increased awareness, made possible by growing media attention and associated imagery, may have sparked these efforts. The media serve as additional contributors to 'digital refugee' construction. A comparison of media coverage of the French Calais camp demonstrated a fivefold increase in the number of images between 2009 and 2015 (Ibrahim, 2016). On the one hand, imagery increases awareness of the plight of refugees, which can generate pressure for policy change and support. On the other, the images promote a public 'gaze' into private lives divorced from the usual intimacy such proximity requires (Ibrahim 2016). Images used by media outlets include those of seasoned journalists as well as user-generated content. Images depicting violence at Calais were taken by passersby, civil society organizations, and refugees, as well as immigration opponents capturing scenes of refugees breaking into vehicles to cross into the UK. Images depict refugees themselves as well as the physical site of the camp, bringing the public gaze into the private sphere of hearth and home. As noted by Sajir and Aouragh (2019), who analyzed the effects of refugee imagery, "although shocking images can awaken compassion toward the oppressed, they do not necessarily translate into movements of solidarity, but can rather degenerate into ineffective forms of pity" (Sajir & Aouragh, 2019).

Digital storytelling

Refugees also seek to control the narrative of their lives through digital storytelling. Programs and workshops promoting this process build upon photo and video skills acquired through mobile phone use. Digital storytelling is considered therapeutic, used to treat and research refugee mental health (Lenette et al., 2019; McDonough & Colucci, 2019). While analog storytelling has for long been a way to conserve memories and a form of catharsis, the availability and ease of use of mobile phones to both capture and disseminate digital stories opens new opportunities and risks.

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Bonini Baldini (2019) notes that, in such programs, the refugee-narrator's well-being derives from control over sharing their story. For those with the desire to share, doing so has the potential to activate a form of agency, allowing the narrator to perceive themselves as an agent of potential personal and social change (Bonini Baldini, 2019).

The need for content and dissemination control is exemplified in Gifford and Wilding's (2013) analysis of a digital storytelling program for resettled Karen refugee youth in Australia. The researchers analyze the youth's thwarting of assimilationist program goals, by using mobile phone video to construct their own narratives. The narratives reflect the uniqueness of refugees' stories. Their social media distribution strategies also differ and reflect the variety of individuals' perspectives. One story, positioning the teen's current situation while looking back at his camp experience, targeted an audience of those with similar experiences. A second, fully focused on the teens' current lives, targeted the audience of the program, demonstrating their becoming 'at home' in Australia. The third, more forward looking, used music to speak to a purely global youth audience through YouTube (Gifford & Wilding, 2013). The variety of approaches here demonstrates the flexibility, complexity and uncertainty of understanding the 'digital refugee' and the role of storytelling in an increasingly digital world.

Analyzing the risks of digital storytelling requires balancing the potential agency and awareness-raising benefits with potential harms. Possible harms include unanticipated emotional effects, a lack of control over dissemination, and exposed privacy - with possible implications for future interactions with authorities in asylum hearings, security checks, and repatriation. As for emotional effects and control over dissemination, the ability to easily connect mobile phone media skills with the potential for catharsis, increases the likelihood that program staff may be inadequately trained to manage the complex reactions storytelling can evoke. Once told and captured, programs may pressure refugees to share their stories widely as evidence of program impact. However, empirical evidence of storytelling-induced emotional harms are difficult to find. Storytelling program evaluations tend to focus on the positive outcomes (Johnson and Kendrick 2016). Upon deeper inspection, analyses are often conducted with tools and processes subject to 'social desirability,' where refugees report only what they believe program staff want to hear. This approach risks perpetuating a one-sided perspective on the impact of digital forms of storytelling

One program, #MeWeSyria¹ and its broader incarnation #MeWe, appears to present a holistic approach, wherein refugee storytelling is explicitly positioned as a psychosocial support tool. The program description differentiates itself from the 'give refugees a camera' programs - solely focused on self-expression and less likely to include staff with psychological training - , to a more comprehensive understanding and use of storytelling as a tool to encourage sharing and foster peer support networks. However, the impact of such programs too is still unknown as findings from psychosocial evaluations are not readily available or accessible.

It is also important to mention that not all refugees benefit from digital storytelling. For some, as poignantly articulated by refugee and scholar Tammas (2019), digital storytelling can lead to feelings of disempowerment and tokenization. Tammas describes problems, not with refugee-driven and controlled storytelling, but instead with the potential exploitation of these stories. As

Tammas points out, "although refugees are free to choose the content of their stories, there is an expectation that they should include some details about their past in order to 'move the audience' and inspire sympathy." He notes that the implicit narrative logic of 'tragedy to success,' or 'hell to paradise,' marginalizes and oversimplifies the complex context surrounding refugees' stories and argues that refugees should not be treated as 'objects or vehicles of inspiration and sympathy.' He explains further, that "by repeatedly requesting refugees to share stories of why they have sought refuge, we essentialise their identities. People with disabilities face similar objectification when people treat their very existence and ability to lead their lives as inspiring" (Tammas, 2019). Tammas also warns that fetishizing refugee success stories can lead to programs and policies that ignore the painful reality that for many refugees, surviving and adapting is often "overwhelming, difficult and painful." Instead of seeking only stories of the past, which risk triggering painful memories, he suggests supporting refugees by also highlighting stories of their present and future.

In addition to risks of triggering painful memories, or downplaying their longer-term effects, digital storytelling presents risks, particularly for refugees in temporary asylum. Humanitarian organizations store sensitive refugee data, but with the exception of identity data, those data are typically administrative in nature. In comparison, a life story can be far more revealing of personal details. For refugees in temporary asylum, the digital stories they tell, whether shared on social media or stored on a mobile phone, may create problems for future asylum cases or even repatriation. Such stories reflect many levels of truth, including the event, the memory of the event, and reflection on the memory of the event (Bonini Baldini, 2019). A digitally captured narrative could negatively affect a family asylum case which often considers consistency between recollections of events and other sources of information.

Finally, issues of data privacy in repatriation infrequently are discussed, leaving the implications of digital storytelling an open question. UNHCR's 2018 Data Protection Policy mentions refugee rights, particularly with regards to consent, concerning forms and processes for voluntary repatriation. However, voluntary and publicly distributed refugee stories may have negative implications for refugees upon return that are beyond the humanitarian community's control and heartfelt stories told in asylum could be used in harmful ways.

Ubiquitous refugee connectivity

Achieving ubiquity

Much of this analysis presumes ubiquitous refugee connectivity, which has not been achieved and faces the hurdles common to marginalized communities. Generally, across the globe, network coverage gaps are closing (GSMA, 2019a). However, affordability of mobile services and handsets remain problematic (GSMA, 2019a). Effective use of connections also requires skills, relevant content, and understanding of safety and security implications for refugees and marginalized communities alike. A connectivity challenge specific to refugees is the need to provide identification to obtain a SIM card. Policies and practices should account for refugees' frequent lack of identification. However, efforts to provide digital identity documents (IDs) to refugees and migrants are underway (Latonero, Hiatt, Napolitano, Clericetti, & Penagos, 2019).

¹ https://meweintl.org/

To achieve the goal of ubiquitous refugee connectivity, at a basic level where public infrastructures are concerned, a purely 'rights-based approach' to connectivity for refugees should include host communities as well. The right to information, enshrined in international human rights law, provides a foundation for pursuing connectivity for all. By doing so, humanitarians can contribute to the 'relief and development nexus' (Bennett, 2015; Hinds, 2015) by joining efforts of the international development community pushing for 'universal service' (Arakpogun, Wanjiru, & Whalley, 2017; Gharib & Khamis, 2019).

The unique opportunity this presents for the expansion of network infrastructure cannot be overstated. It is rare in the context of international development to be able to shine a spotlight on the need for connectivity in rural areas. However, in a refugee crisis, the resources poured into rural areas can serve as a springboard for overcoming long-standing deficits. Of note are the demands for connectivity made by humanitarian agencies assisting refugees. The influx of human capital, national and international social networks, and technical skills humanitarians bring, amplify the voices of rural residents. Humanitarian agency national offices and international networks can push back against concerns of telecommunications firms about lack of demand for services. Collectively, humanitarians can wield power and influence, and pressure national governments to enforce coverage obligations written into telecommunications licenses. These actions are evident in the effort of international NGO, NetHope, which carried out a Demand Aggregation project in Uganda. In that effort, NetHope member organizations, many working in the Uganda refugee response, influenced mobile network operators to expand coverage.²

Arguments for such pressure are twofold. First, the opportunity humanitarian resources (and the accompanying demand for connectivity) create may be time limited. This timeframe is shorter than those associated with international development goals, sometimes spanning a decade. Second, humanitarian crises may generate opportunities for new sources of investment to build out infrastructure (World Bank, 2019), thereby reducing costs for achieving network coverage for any one entity.

Humanitarians joining established efforts for 'universal service' underpins the strategies articulated in the 2019 Global Broadband Plan for Refugee Inclusion (Broadband 4 Refugees, 2019). The plan draws on over 150 established national broadband plans for achieving universal service, aiming to promote connectivity for all. These plans typically include items addressing the supply of telecommunication services, but also demand factors such as availability of content and relevant digital services. In addition to reducing the legal barriers to connectivity for refugees, the plan suggests strategies, including (1) collection, sharing of market information, analysis, and dissemination among stakeholders; (2) improving purchasing power related to devices and services for refugees and their support ecosystem; (3) improving the economics of network deployment; and (4) improving the utilization by refugees and by service providers through developing a platform and other tactics that facilitate innovation, constant improvement, and more efficient service delivery mechanisms and a digital first service delivery framework. The strategies envision collaboration by an ecosystem consisting of UN agencies, (I)NGOs, civil society organizations related to broadband, mobile and fixed network operators, and government regulators. These are ambitious goals, but

 $2\ https://solutionscenter.nethope.org/program-areas/connectivity-infrastructure/demand-aggregation-for-improved-connectivity$

they chart a path enabling full exploitation of technology, ensuring humanitarian operations keep apace with international developments.

Paying for it - refugees charging for their data

The GSMA notes the usage gap in mobile services is four times greater than the network coverage gap (GSMA, 2019a). A major challenge is affordability of service and handsets. Refugees, particularly those prohibited from work or living where unemployment is high, struggle to afford connectivity. Reports have found refugees paying for connectivity with cash intended for food and other items (UNHCR, 2016b). Humanitarian efforts to subsidize refugees' costs of connectivity, categorizing it as a necessity akin to food and shelter, have made headway. However, often the subsidies are tied to programs, which eventually end. This 'ethereal' connectivity presents problems for refugees and humanitarian organizations alike (C. F. Maitland, 2018c). Also, adding categories to funding appeals appears to ignore the reality of general budget declines, as well as potentially contradict the Global Compact on Refugees' objective of promoting refugee self-sufficiency (UNHCR, 2018b).

As in all marginalized communities, affordability of mobile services for refugees is a vexing challenge. This is particularly pressing for a humanitarian community barreling into digital services premised on refugees not only having mobile phones but the airtime to use them. If the humanitarian community is to fully embrace refugee self-sufficiency, the transition requires viewing refugees as true partners, whose time and, in turn, data have monetary value. This may also provide a partial solution to affordability, as refugees could use data payments to subsidize their own connectivity.

Outside the humanitarian community, the value of and control over data have dominated discussions by privacy advocates, economists, legal scholars and technologists, alike. Hill questions the fundamental business model of tech giants and their use of data:

"Instead of charging for their products, they give them away in exchange for vacuuming up our personal data and monetizing it in various ways. Initially this business model seemed benign—beneficial even—because it provided some useful services for free." (WIRED, 2019)

The author goes on to explain a proposal by some Silicon Valley leaders that individuals become "data shareholders," able to sell their personal data. One model suggests Internet companies purchase data by distributing profits to users. However, in an open economy, with billions of users, this analysis suggests that selling personal data to companies would profit a merely \$9 per year to individuals (WIRED, 2019).

Others, pursuing even bolder ideas, suggest that in a future rife with artificial intelligence (AI), which requires data, the value of personal data would increase, making 'data charging' viable. Professors Eric Posner and E. Glen Weyl describe data agents, offering data to a variety of firms and agencies that would provide compensation. Such possibilities are being touted as a possible antidote to future unemployment wrought by AI, and a more palatable option for governments when compared with universal basic income (WSJ, 2018). Weyl's research suggests the current power imbalance faced by consumers could be ameliorated by competition, a data labor movement, or thoughtful regulation (Arrieta-Ibarra, Goff, Jiménez-Hernández, Lanier, & Weyl, 2018).

These proposals open the door for considering other models for refugees. Even though the humanitarian system can be considered a closed economy the idea of 'vacuuming up of personal data' likely rings true for refugees. However, unlike big tech companies, their data are not strictly monetized and, as the above discussion of storytelling suggests, all refugee data are not of equal value or concern (WIRED, 2019).

Data gathered during registration is used to plan and manage humanitarian programs as well as contribute to accountability requirements of donors. As refugees, this data can be considered, in some respects, equivalent to data held by national governments about their citizens (demographics, identity). In contrast, data gathered in needs assessments or monitoring and evaluation efforts are more akin to public opinion polling and consumer behavior surveys. Refugee stories, a form of data often used in public appeals, may represent a new and entirely different type (McDonough & Collucci 2019).

Humanitarian data collection for monitoring and evaluation is influenced by broader trends in survey research, data collection processes, and technology use. In Western countries, public opinion polling and survey research have suffered steady declines in response rates, even where remuneration is offered. In a 2015 blog post by noted US polling organization Pew Research, the declining survey response rates are attributed to a perception of surveys being burdensome and for concerns over privacy (Pew Research Center, 2015).

To address this problem, pollsters and researchers have turned to digital platforms enabling exchanges of micropayments for survey responses. A well-known example is Amazon's Mechanical Turk, a crowdsourcing marketplace for digital work, including small tasks such as answering survey questions. Another approach, forming a perpetual online survey panel of so-called 'trusted respondents,' is also gaining steam. Pew Research reports their 'American Trends Panel,' a nationally representative panel created in 2014, is now the primary source of data for their US public opinion research. In 2018, new panel participants were paid \$2 in advance, with the promise of \$10 if they filled out the survey (Pew Research Center, 2019b).

While paying research subjects in high income countries has become status quo, for research conducted in low-and-middle-income countries such practices, despite greater acceptance, troublingly continue to raise concerns. Hopefully, recent research supported by the World Bank, will finally put these concerns to rest. The research, conducted via controlled field experiment, found no difference across a wide range of survey questions between responses from households receiving payment and the control group (Stecklov, Weinreb, & Carletto, 2018).

Given these trends in payments and digital data collection, systematic payments to refugees participating in online surveys for monitoring and evaluation programs may be close at hand. Certainly, the idea of paying refugees for survey responses is nothing new. As 'cash for work' programs use mobile phone airtime for payments, it is easy to imagine such payments routinely being made on a one-off basis for survey answers³.

3 Research conducted on smartphones with refugees in Germany paid participants. However, the researcher found the payments did not increase participation of on-going passive data collection (Keusch, Leonard, Sajons, & Steiner, 2019).

One potential hurdle to development of such a platform is the unstated assumption that refugees provide data in exchange for assistance. Their need and vulnerability, as well as associated perceived or real lack of power, may hinder the community's acceptance of their right to charge for their data. On the one hand, many humanitarians might find such an implicit trade-off distasteful and contrary to the fundamental premise of humanitarianism. Also, while merely speculation, it is possible refugees themselves may feel doing so would generate the appearance of being ungrateful.

Yet, the pressures of humanitarian operations and the need for data may drive people to this state. Again, refugee scholar Tammas (2019) provides valuable insights into the issue:

"While most of these [humanitarian] organisations are well-meaning and do not directly coerce refugees to share their stories, there is often an expectation that refugees owe the wider public their stories. Thus, the expectation of sharing one's story can transform into an obligation. I realised this when I politely declined an invitation to share my story from an institution that supported me in the past. Instead of the usual understanding response, a senior staff member at the institution said he was "very disappointed" that I could not save a few minutes of my time to help with their outreach work given what they have done for me." (Open Democracy, 2019)

If refugees were charging for their data this would have implications for established power and cost structures. Such a scenario could have the potential to address what Madianou labels as technocolonialism in humanitarian response (Madianou, 2019). Based on interviews, fieldwork and digital ethnographies conducted over several years, Madianou describes problematic elements of digitization and datafication of refugee assistance. She characterizes some technical innovations as 'extraction,' tapping into established processes of colonization. As she explains, "refugees produce value through their data which is then extracted to justify the funding of aid projects" (Madianou, 2019). By placing a monetary value on their data, refugees' contributions to the system are made explicit. In line with the thinking of Arrieta-Ibara et al. (2018), this recognition could moderate power imbalances.

Such a system would also change cost structures as free refugee data would now have an associated cost for humanitarian organizations. These costs would likely be covered by monitoring and evaluation program budgets. A similar transition occurred during the past twenty years as costs for computers, tablets and software transitioned from central IT to program budgets in humanitarian organizations around the globe. Donor acceptance of this change was and would be key.

Donors might find such an arrangement has multiple benefits. An empirical cost comparison of simply collecting data using mobile phones versus paper in humanitarian contexts demonstrated cost savings⁴. A fully digitalized data collection system, such as that envisioned by Keusch et al. (2019), would likely generate even greater cost savings. As noted by Pinsky and Steinhauser

⁴ https://www.ennonline.net/fex/49/nutritionsurveys

(2018)⁵, digital transactions in the banking sector were estimated to be 50 times cheaper than face-to-face services.

Refugees charging for their data may also help the humanitarian community fulfill its goals for greater coordination in data collection and management. Joint assessments and other coordinated data collection processes tend to occur serendipitously, when conditions are right or a collaborative atmosphere exists. However, once required to pay for refugee data, humanitarian organizations would have a stronger economic incentive to coordinate on data collection and to share data where appropriate. An economic incentive would help expand such efforts.

A further benefit of refugees charging for their data is it resolves certain dimensions of the sometimes troubling issues of refugee consent, data management, and control. Refugee consent has many dimensions, such as the ability to understand the risks associated with providing data, power differentials influencing individuals' desires to participate, shared records of consent, and the ability of individuals to review and correct recorded data. Once refugees can charge for their data, they will likely become incentivized to understand the risks and potentially seek, through competition, to sell their data to those offering the best protections and control. Further, payment transaction records would provide a digital 'paper trail' linking consent records and refugee entries.

Transaction records could, in some ways, mimic certain aspects of data licenses. As noted by McDonald (2019):

"Humanitarian organizations are unlikely to ever become data license brokers – but the lack of credible enforcement infrastructure for limited data licenses undermines the credibility of humanitarian data stewardship in-line with its principles. If an organization can't make credible promises about access and re-use of the data they collect, it is hard to prove it was used in line with humanitarian principles."

The transaction records for refugee data would help create bottom-up evidence of data transfers. It is often the case that within organizations, financial systems are the most robust and auditable. Even for small humanitarian organizations, finance and accounting are often areas most likely to receive IT investments. Refugee data payment records would allow auditing of the magnitude of data collection operations by others in the humanitarian supply chain. Top-down contracts could be monitored through bottom-up data charges.

A full embrace of refugee self-reliance might see refugees becoming more in charge and carrying out data collection processes for themselves. Through entrepreneurial endeavors, refugees could self-organize a data portal, undertake data collection and then wholesale data products as well as generate tailored analyses for humanitarian organizations. Such analyses might benefit from a reduced distance between refugee researchers and their subjects. Recent research has demonstrated nascent potential for refugees collecting, managing and analyzing their own data in both camp and urban environments (Xu & Maitland, 2017, 2019). Naturally, additional training would be required to further develop refugees' data analytic skills, similar to efforts within humanitarian organizations.

5 https://news.itu.int/online-services-half-world-unconnected/

Even on a smaller scale, for refugees, charging for their data could potentially generate some benefits. First, it would provide income, which if applied to mobile services, could help address the aforementioned affordability issue. Selling data is unlikely to generate significant income, but could help stretch limited official assistance. Second, charging for their data might underpin refugees' sense of agency, making explicit the value of their time, involvement and contribution. Such agency could help promote the self-reliance that the humanitarian sector is counting on to help address budget shortfalls.

Systems of refugees charging for their data are premised on further digitalization, with accompanying risks. Such systems can also exacerbate the challenges posed by the unconnected in contexts awash with digital services. Below, these challenges, and their ties to international development efforts, are addressed.

The unconnected – an exception and a right

Increasingly, humanitarian agencies, seeking to reap digital service efficiencies, find handling refugees without mobile phones - the unconnected - challenging. Workflows, once established and hardened into digital tools, struggle to accommodate analog or paper-based information. In systems parlance, they are labeled 'exceptions.' For digital services, unconnected refugees create exceptions.

Exception handling is not unique to humanitarian operations. Across the globe, in wealthy and poor countries alike, governments, social services agencies, schools, and civic organizations are transitioning to digital platforms. They all must contend with the unconnected.

Devising humanitarian solutions for the unconnected first requires a greater understanding of their circumstances and motivations. Studies of the unconnected suggest various categories, including forced, reluctant, partial, and selective use (Wyatt, 2014), and lapsed, rare, and non-users (Selwyn, 2006). These categories presume availability and use as a choice. However, many of the unconnected, particularly among refugees, are simply poor. A better schema for use here is four categories: resisters, rejecters, the expelled, and the excluded (Wyatt, 2014). Resisters and rejecters exercise control in their non-use – it is a choice. The expelled typically have violated online social norms, and hence, also maintain a level of control. In contrast, the excluded are typically those lacking access due to poverty.

Understanding the unconnected requires moving beyond industry reports, due to their understandable pro-connection bias. Academic studies of non-use highlight resistance and growing concerns of privacy, mental health, and erosion of private time and work/life balance as motivations for non-use in wealthy countries (Hesselberth, 2018). The latter has led certain countries to enact legislation limiting access to workplace technology in off hours.

If such concerns are not yet universal, growing ubiquity will make them more likely so. In fact, concerns over online safety and security are also a barrier to mobile Internet use. As the case of Latin America shows, such concerns trumped affordability (26% versus 25%) among barriers to mobile Internet use (GSMA, 2019a). Also, poor, rural women in Kenya similarly articulated

concerns related to security and threats to personal life as reasons for remaining offline (Wyche & Olson, 2018). Research in Bangladesh chronicles online harassment on anonymous social media, confirming a fear that can inhibit use or drive people offline (Nova, Rifat, Saha, Ahmed, & Guha, 2019).

Understanding the unconnected also requires consideration of societal and cultural norms surrounding gender. In many countries, gender norms significantly restrict women's mobile phone use. Sterling, Dodson, and al-Rabaan (2014) document norms limiting use in Morocco, particularly prohibitions on communicating with men, other than members of their own families. Without knowing the gender of a caller or callee, both women and men were hesitant to make or receive calls from unknown others (Sterling, Dodson, & Al-Rabaan, 2014). Kumar (2015) further highlights norms influencing women's use, highlighting the lack of free time for using phones, but also phone use for entertainment during precious downtime (Kumar, 2015).

Such analyses are conducted in general populations rather than with refugees. An exception are two studies conducted by the GSMA in East Africa. They explain the lack of gender analyses is due, in part, to a lack of gender disaggregated data in refugee response (GSMA 2019b). Their findings reflect those conducted in general populations, particularly in the limited access by women and girls. They also note how digitalization of aid, combined with the higher prevalence of women in refugee populations, potentially combine to put women at greater risk in refugee crisis situations. Certainly, more research is needed.

Such research should also consider that the choice to use a phone or not may reflect agency in negotiating social norms or simply personal preference. Research among non-refugees on devout orthodox Quaker and Jewish women's Internet use suggests their non-use is a decision they make for themselves, as a reflection of their devotion (Neriya-Ben Shahar, 2017). These insights provide a counter narrative to the inevitability of ubiquitous connectivity. Humanitarians, similar to organizations worldwide, must treat individuals choosing to remain unconnected with respect and dignity.

Individuals' rights to non-use also extend to *how* phones and airtime are used. Non-instrumental use (i.e. entertainment) is an important component of nearly everyone's technology use. Nemer (2015), in research on computing centers in Brazilian favelas, highlights the ways in which Internet use helps residents overcome conditions of poverty, such as a lack of state interest in providing means to promote well-being and having access to training and development courses. He argues teenagers' game playing and seeking information online to pursue hobbies is not just entertainment but a form of development (Nemer, 2016). Nevertheless, programs subsidizing Internet and/or mobile phone access and use, often face pressure to control or are premised on specific uses. Rights-based approaches that provide financial support for connectivity must navigate these pressures, and providing refugees a revenue stream to support their own connectivity avoids the conflict.

In their digital programs, humanitarian organizations should devise unique strategies to deal with the various states of (unwanted) unconnectedness. For refugees with lapsed connections, specifically having no airtime but with active SIM cards, a new service could prove valuable. As reported by

the International Telecommunication Union (ITU), an innovative new service that reverses data use charges can help organizations provide services online when their customers or beneficiaries lack mobile air time. The service is akin to traditional toll-free calling such as via "1-800" number⁶.

For those with neither airtime nor an active SIM card, organizations can issue both. As previously mentioned, such efforts must confront policies of SIM card registration. Organizations may be willing to presume, for those without, that refugees can borrow a handset. For instance, in the response to the South Sudanese crisis in Uganda, digital cash programs using SIM cards were rolled out quickly. When asked about the issue of providing payments to the unconnected, staff members reported they relied on refugees to help one another. Also, they pointed out that mobile network cash agents had handsets refugees could use when cashing out. For the most part, this was a pragmatic approach to a chaotic response process relying on typical behaviors. Research has shown extensive sharing of handsets and SIM cards between refugee family members and friends, and have positive impacts on use and sense of community (C. Maitland, 2019a). However, humanitarian staff were also realistic about how the need to rely on others opened vulnerable refugees to further exploitation. For instance, they recognized the possibility that those lending handsets could exploit the lack of technological knowledge of their fellow refugees to steal some or all of their digital cash.

Finally, for those opposed, who choose to remain unconnected, digital service workflow designs should handle these analog exceptions. Such exceptions might actually help more carefully identify the most vulnerable, a difficult task necessary in more constrained budget environments.

The likely greater vulnerability of the unconnected points to a conundrum in connectivity. The most vulnerable - those suffering trauma, having complex disabilities, the elderly - are less likely to be connected, and therefore spared the risks associated with connectivity. Yet, connectivity (and its risks) can help overcome or ameliorate some of the sources of vulnerability. These effects point to the complexities associated with protection in a ubiquitous digital environment.

Connectivity's implications for protection

This report highlights numerous aspects of connectivity posing challenges for refugee protection. Articulation of all dimensions is beyond the scope of this report. However, consideration of the digital refugee, and in particular both humanitarian organizations' and refugees' role in its construction, lays the groundwork for investigations of an expanded notion of protection.

Refugee protection in digital humanitarian services

To date, much of the focus on refugee protection in digital humanitarian service focuses on data protection and specifically on policies and practices for operational data management protection. Yet, as noted by Raymond (2019), high-level systems integration enacted through interorganizational partnerships, require new approaches. These include increased attention to human

⁶ https://news.itu.int/online-services-half-world-unconnected/

⁷ Personal communication, 2018. In March 2018 the author conducted field research in Bidi Bidi settlement, Uganda. There she interviewed several NGOs about their use of mobile phones for digital cash payments and the challenges encountered.

rights to information and digital protections, improving procedures governing digital partnerships, and establishing incident management systems for the inevitable security breaches.

These goals are likely achievable where the organizations are large, with adequate budget, personnel and skills. However, as the number of organizations offering assistance proliferates, these bureaucratic procedures may be difficult to undertake. The plethora of innovation efforts launched by students and digital volunteers may lack the capacity, for example, to monitor data breaches. Also, the recommendations presume a level of authority and control at odds with flexible connections inherent in an emerging digital environment.

Many of these recommendations depend on organizations protecting refugees. While valuable, they represent only one side of the equation. As refugees' commercial-style relationships grow in number, monitoring of organization-led protections may become too numerous to evaluate. Instead, refugee digital protections might also aim to educate refugees on their rights as well as strategies for asserting those rights. Such efforts take the emerging 'refugee as consumer' to its natural conclusion. Drawing on consumer protection approaches and consumer civic action tactics, protection programs might target refugee digital protection training.

This logic raises a variety of questions. In a fully digital environment, with a plethora of organizations offering assistance, how far does the responsibility for protection extend? Where do organizationally-driven protections end and refugee-as-consumer-driven protections begin? With mobile cash payments, which of refugees' multiple transactions for services (e.g., housing, food, education, healthcare) require protection? More fundamentally, is a 'consumer protection' orientation to digital transactions appropriate? Is this the natural trajectory of refugee self-reliance? And, finally, is a digital consumer protection approach within the mandate of humanitarian protection?

Refugee protection in digital life

As exemplified in the discussion of the digital refugee, digital lives can present both opportunities and risks for a vulnerable population. As compared to those associated with digital humanitarian services, managing risks refugees take of their own volition is an expansion to most current approaches to digital protections. However, where digital humanitarian programming provides the platform for this risk, the system would appear to incur some responsibility. Further, where programming involves generating and disseminating digital content, such as digital storytelling, responsibility would be greater. Also, as interrupted education is an ongoing source of vulnerability, educating refugees of online risks could be seen as within the purview of protection.

Similar to the aforementioned consumer protection approach, existing programs on digital and media literacy may provide a foundation for such efforts. Digital and media literacy programs differ from established refugee digital skills educational programs. Instead of teaching digital skills that might lead to employment through a livelihoods program, digital and media literacy programs educate on use. While numerous programs target resettled refugees in high-income countries, fewer efforts target refugees and migrants in LMICs. In an extreme version of accepting digital literacy as a fundamental component of protection, one could imagine a requirement that all organizations providing digital cash programming first certify the digital literacy of each refugee beneficiary.

Naturally, such a thought experiment raises numerous questions: Where does the protection responsibility for the digital lives of refugees begin and end? Within those bounds, who is responsible for protection? What role might refugees play in their own protection?

If the scenario posed herein, of refugees charging for data, should arise, these questions will become more pointed. In a sense, the hypothesis of refugees charging for their data could be seen as a logical extension of self-reliance in a digital world. The proposal advanced here is one in which refugees act as partners in establishing an enduring digital platform, for one-off or panel survey responses. Such entrepreneurial refugees organizing this type of system might also fall under a digital literacy certification mandate. In this context, self-reliance extends to digital literacy, fostering community responsibility for the online safety of one another. As refugees have always played a central role in their own protection, the future will demonstrate how and to what extent this extends into the digital realm.

Protection for the unconnected

Finally, in establishing the bounds of protection in a digital environment one might also consider the unconnected. Humanitarian organizations face pressure to cut costs and digital services can present opportunities to fulfill these goals. However, as argued above, systems designs should manage exceptions, particularly refugees who choose to remain unconnected. In the context of digital services, one may look to physical services for comparisons. For instance, when food was physically distributed via recipients lining up to receive their ration, those physically unable to stand in line for hours and transport their goods typically enlisted the help of others. Are digital cash systems relying on mutual assistance between refugees different? If so, how?

As noted above, ethical approaches should consider those frequently excluded from online life. Gender analyses of the unconnected can help identify subpopulations among the unconnected. Differentiating those who choose to remain unconnected due to preferences or values is key to maintaining dignity and respecting individual choices. However, where the unconnected wish to become connected 'exception handling' may not go far enough. Again, boundaries must be drawn. Do systems handling the unconnected in respectful and equitable ways go far enough? Is there a responsibility to understand the basis for the lack of connection? And if so, which organizations or communities bear the responsibility?

In closing, this research brief identifies a number of challenges connectivity and the digital environment creates for protection of refugees. While currently, much of the attention on digital protection focuses on organizational data management challenges, going forward the boundaries of protection in a digital environment require consideration. The content of this brief began with the highly digitized contexts found primarily in higher income countries, and then pivoted to the challenges of access, affordability and agency in remaining unconnected. The latter primarily apply to low and middle income country contexts, but also apply to high income countries as well. Across them all, the issues of establishing the boundaries of protection and parties responsible for fulfilling those needs are critical items of an ongoing humanitarian research agenda.

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