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Conference Report – Berkeley, California, June 2018

# The Role of Technology in Addressing the Global Migration Crisis





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Governance Innovation

The logo for the World Refugee Council, featuring a purple square with a white box containing the text "WORLD REFUGEE COUNCIL" and a purple triangle pointing upwards and to the right.

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# The Role of Technology in Addressing the Global Migration Crisis

Rapporteur Jonathan Kent

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Our research initiatives focus on governance of the global economy, global security and politics, and international law in collaboration with a range of strategic partners and have received support from the Government of Canada, the Government of Ontario, as well as founder Jim Balsillie.

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## About the Rapporteur

[Jonathan Kent](#) is a research fellow with the World Refugee Council. His research examines the integration of technology in the lives of refugees and internally displaced persons and the intersections of refugee, asylum and migration governance. Jonathan was a former Cadieux Léger Fellow with Global Affairs Canada and a junior scholar at the Woodrow Wilson International Center for Scholars in Washington, DC. He holds a Ph.D. in political science from the University of Toronto.

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# Introduction

On June 5 and 6, 2018, the World Refugee Council (WRC) and the Aspen Ministers Forum co-hosted a workshop in Berkeley, California, called “The Role of Technology in Addressing the Global Migration Crisis.” The meeting was generously supported by the Carnegie Corporation of New York and co-hosted by former Foreign Minister of Canada and Chair of the WRC Lloyd Axworthy, former US Secretary of State and representative of the Aspen Ministers Forum Madeleine Albright, and former Prime Minister of Greece and WRC Councillor George Papandreou. By hosting the workshop in Northern California, organizers looked to canvass the views of Silicon Valley entrepreneurs, technology experts and civil society.

Over the past decade, there have been major technological innovations affecting our governments, workplaces and daily lives. Technology is also playing and is poised to play an integral role in the governance and lives of refugees and internally displaced persons (IDPs). On the one hand, biometric identifiers, crowdmapping and crowdsourcing, mobile phone fund transfers, translation apps, online education programs, crisis forecasting systems, machine learning, blockchain applications, and trends in data acquisition and management can influence how international organizations and civil society groups respond to refugee and IDP situations. On the other hand, refugees and IDPs can use technology and social media on their own. When refugees and IDPs use technology to access information, finance, social networks, and humanitarian and development networks, they enhance their autonomy and self-reliance.

Technology is a double-edged sword, however. There are clearly benefits for refugees and IDPs. New digital platforms connect displaced populations to information and resources, giving them greater capacity to support themselves. Biometric identifiers, a digital identity and online apps can improve the distribution of humanitarian services such as food rationing and can also help refugees and IDPs find work. But the collection of sensitive data may place individuals at heightened risk, in particular if their personal information is stolen by the intelligence services of ill-intentioned governments. Technology may also lead to more chaotic outcomes by enabling, for instance, people

smugglers to exploit the hopes and aspirations of refugees and IDPs for profit. Irregular migration can destabilize structured international efforts to provide appropriate solutions. Regardless, technology is inexorably transforming the lives of refugees and IDPs and how the world responds to their plight. Better research is needed to achieve a more complete understanding of how technology affects the refugee system and how to enhance the benefits and mitigate the risks.

- The workshop was designed to explore how technology influences the global refugee system and the lives of refugees and IDPs. The WRC’s work has been focused on a number of core themes to transform the global refugee system: governance, responsibility sharing, political will, gender, finance and accountability. In light of these themes, the workshop assessed the following questions:
- How can technology mobilize political will and increase accountability?
- What are the risks technology poses to the global refugee system and how can they be mitigated?
- How can affected populations be included in the development of technologies and solutions that are targeted toward them?
- How will major technological communities and hubs transform themselves to reflect the diversity of the populations they serve? As it stands, there is a need for more inclusion and diversity in the space.
- How can technology be used to facilitate greater responsibility sharing?
- How can technology assist in mobilizing new sources of funds and improving the efficiency of existing funding?

Mobilizing political will and public opinion are crucial to achieving better and more coordinated governance outcomes. While technology such as social media can lead to anxieties and xenophobia toward refugees, it can also mobilize political will if used effectively. For example, youth are more likely to mobilize online through social media than through traditional political channels. Refugees and IDPs share their stories through YouTube and Facebook, creating publicity and awareness. Early-warning systems using big data analytics have the potential to shift political decision making.

Technological innovations can improve transparency and accountability. Innovations in data gathering and aggregation will enhance peer-review evaluations and reporting on the behaviour of actors responsible for displacement and governments that neglect their international legal obligations. But to ensure the principled use of technology, a multi-stakeholder group should be convened to devise and implement a statement of principles on privacy, data management and machine learning algorithms for refugees and IDPs that states, international organizations and the private sector can agree to. Technology can create meaningful interactions between refugees and host communities. If different groups come together around technology, they may overcome institutional barriers and generate social trust. The organization Techfugees brings refugees, app developers, technologists, states and civil society to hackathons to work on common initiatives. The Stanford Immigration Policy Lab uses an algorithm to improve upon the human decision-making process of matching resettled refugees to communities where they would most likely flourish. By diversifying interactions and improving the integration of refugees with host communities, technology may foster the trust needed for further cooperation and responsibility sharing.

Technology can mobilize new sources of funding that allows refugees and IDPs to sustain themselves. Since these populations have trouble accessing microloans from banks because they are deemed credit risks, some technology companies are using crowdfunding to support small refugee and IDP start-ups. Carrying cash or valuable belongings on their journeys places refugees and IDPs at a higher risk of violence from criminals and state authorities. Technology companies are exploring blockchain technology to allow refugees to securely transfer their assets.

New technology applications can assist in providing refugees and IDPs with other services and necessities at different stages of their journeys. Online platforms for education and training help displaced people update or acquire new skills and knowledge helpful for their return home or potential contribution to host societies. Airbnb is also serving as a platform to connect refugees with the temporary accommodations of generous volunteer hosts. To make technology more secure for refugees and IDPs to use, decentralized data storage systems are being proposed as a more

secure alternative to traditional databases and can allow such groups to access a verifiable identity.

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## How to Mobilize Political Will through Technology

Political will is essential to transforming the global refugee system. Without the necessary impetus for change, even the most groundbreaking proposals will have no chance of succeeding. While technology is not a panacea, there are new applications that can help mobilize political will. Workshop participants described steps to be taken toward improving political will through social media and early-warning systems and by connecting refugees with other stakeholders.

Technology apps and social media can be powerful tools in the formation of public opinion and for mobilizing political will. Unfortunately, many of the loudest voices on social media are states promoting their border control and deterrence policies or demagogues transmitting vitriolic stories about refugees to trigger people's fears. To foster political will, these problematic narratives must be curtailed and shifted. Secretary Albright pointed out that many refugees are exceptional people and should be seen as assets, not liabilities. While social media is often a conduit for negativity, workshop participants recalled how it rallied youth against the plight of child soldiers in Africa through the Kony2012 campaign and led to youth mobilization for gun laws following the 2018 shooting at Marjory Stoneman Douglas High School in Parkland, Florida. Attendees also pointed to the tragic image of the drowned Syrian toddler Alan Kurdi that went viral in 2015 and influenced the Canadian federal election. More work is needed to understand how social media can be used to mobilize positive political will and not negative.

To enhance responsibility sharing, governments must come to see that refugees need not be "burdens." When refugees have access to work and can make contributions to their host societies, participants noted, they can be assets. Research and success stories about the positive impact of refugees contributing to host communities should be accessible. Refugees and those who work with them should share their stories on



YouTube, allowing people to connect with their entrepreneurialism, and even their heroism, on a visceral level. One participant reminded the group that social media platforms such as Facebook have as many as two billion users or more and can help communicate this message widely, potentially shifting public opinion.

In a world of fake news and alternative facts, defining a common narrative for refugees and IDPs is a challenge. One participant described their organization's mandate to address dangerous speech online. Dangerous speech stops short of hate speech and involves rumour mongering that can disenfranchise people. The problem is that cracking down on dangerous speech could legally violate freedom of speech rights. It is also important to neither dismiss nor upbraid groups for having fears and anxieties about refugees, because there is a risk that disregarding their concerns may push these communities toward radical populist parties. To deal with rumours and fake news, the United Nations High Commissioner for Refugees (UNHCR) and some civil society groups are beginning to take steps to correct misinformation online; however, more needs to be done.

Certainly, countries ought to be more accommodating to refugees who arrive at their doorstep, but political will also involves the will to intervene before a refugee or IDP crisis occurs. An early-warning system using big data analytics may be a powerful tool for mobilizing political will. Policy makers know that mass displacement and sudden, unexpected surges in the movement of people can have destabilizing effects on institutions and economies, and above all, lead to the suffering of large numbers of people. But field reports of officials and aid workers are often overlooked. Innovations in data acquisition and machine learning have led to the creation of sophisticated early-warning systems in the contexts of mass atrocities, conflicts and economic crises. Several workshop participants stated that such a forecasting system should be developed specifically for refugees and IDPs. Forecasting when and where a crisis will occur, and how severe it will be, can build compelling justifications for political action. One participant mentioned interesting work by a number of departments at the University of Washington using social media data and other open-source content to anticipate how societies react to natural disasters. Similar systems could be used to assess how a community

will react to a few refugee arrivals or thousands. If meteorologists can influence the decisions we make on a daily basis, then a refugee warning index may influence policy makers to take action.

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## Technology and Accountability: A Dual Agenda

The global refugee system suffers from an accountability deficit. The workshop participants turned their attention to how technology relates to the WRC's interest in accountability. First, accountability should encompass governments or non-state actors responsible for displacing people, as well as countries not living up to their obligations to protect those displaced. Technology can provide enhancements toward these goals. The international protection system does not include a body to enforce legal obligations. Although the UNHCR occasionally issues critical statements, its non-political mandate often prevents it from taking forceful positions on controversial questions. Workshop participants pointed out the WRC's interest in creating a new peer-review mechanism to hold state and non-state actors accountable for displacing people and those not living up to their obligations. The UN Human Rights Council's Universal Periodic Review process and the Organisation for Economic Co-operation and Development's Development Assistance Committee's peer-review mechanism are seen as potential models to promote better adherence to international laws around forced displacement.

Technology can assist in the creation and effective functioning of such an independent monitoring system. Setting aside the thorny but necessary questions of designing indicators to measure compliance, participants discussed how technology was enhancing the accuracy and robustness of evaluations and assessments. The work of the University of California at Berkeley Human Rights Investigations Lab was mentioned as a possible model for accountability that could be scaled up. The lab is using new processes involving cutting-edge, open-source research methods to evaluate and compare large amounts of satellite imagery,

videos and photos to verify and assess specific and well-defined human rights problems. One participant suggested striking an agreement with Facebook and Twitter to access mass amounts of social media data for use by both a review mechanism and the forecasting system.

Aside from these traditional questions of compliance, the integration of technology into the refugee space poses a host of new accountability questions. Technology can certainly enhance the lives of refugees and IDPs and improve governance, but it may produce unintended risks, some of which can be perverse and eclipse the expected benefits. Many new technologies involve machine learning, whereby apps sift through large amounts of data to improve on human decision making. But, as we are learning, algorithms often contain implicit biases that reinforce or exacerbate gender and racial inequalities. These are pressing issues for vulnerable groups such as refugees and IDPs. For instance, there are technologies that match refugees with suitable host communities. One participant described how these algorithms can be biased toward the head of the household who is male. By ignoring the female members of the family as potential workers, these technologies can reinforce gender inequalities and miss opportunities for female employment.

Technology poses basic privacy issues around data acquisition and management. These questions gain heightened salience when applied to at-risk groups such as refugees and IDPs. One workshop participant described the UNHCR's implementation of a biometric database that makes the doling out of aid relief more consistent. But, if these centralized databases are hacked by the regimes refugees have fled from, these displaced people may be doubly at risk. As well, beyond problems linked to UN agencies, private sector actors, driven by the pressures of the free market, may pose even greater risks. The Cambridge Analytica scandal involving Facebook is just one high-profile example. A participant noted that their company often came under pressure from authoritarian governments to hand over access to real-time data or else risk being banned from operating there. This participant said that part of the problem was that there is yet to be any international consensus about what privacy standards should be adhered to. If these ethical concerns are not appropriately dealt with, the risks of using technology may exceed the benefits. To be sure, Oxfam recently

imposed a moratorium on the use of biometrics for refugees and IDPs precisely for this reason.

Workshop participants discussed a number of options to deal with the risks of using technology for refugees and IDPs. They emphasized the desirability of creating a multi-stakeholder group to hammer out data management, privacy and non-discrimination standards in a statement of principles. The recently agreed Toronto Declaration<sup>1</sup> could be a template to follow. Technology companies, international organizations, and hosting and donor states would meet and agree to the document. Others said that a university research ethics board could be a model to assist with implementing the agreement. A diverse group of actors (including refugees) would sit on the board and require technology companies to apply by disclosing their practices and track records. The applicant would undergo an assessment and approval process. Depending on the review board's determination, the technology company could be permitted or prevented from accessing app stores for distribution. However, there would be a reciprocal benefit for technology companies, in that they could present a united front to governments that demanded their data, thus preventing a prisoner's dilemma type of situation.

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## Facilitating Meaningful Interactions and Partnerships

In the next session, participants addressed how technology could be used to enhance meaningful relationships among diverse groups and to improve responsibility sharing. There is already a need for more inclusion and diversity in the development of technologies. The WRC is interested in how affected populations can be included in the development of technologies and solutions that are designed for them. If technological communities and hubs can transform themselves to reflect the

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<sup>1</sup> In full, Toronto Declaration: Protecting the rights to equality and non-discrimination in machine learning systems. See [www.accessnow.org/the-toronto-declaration-protecting-the-rights-to-equality-and-nondiscrimination-in-machine-learning-system](http://www.accessnow.org/the-toronto-declaration-protecting-the-rights-to-equality-and-nondiscrimination-in-machine-learning-system).

diversity of the populations they serve, outcomes will not only be fairer but more effective.

One important example is provided by Techfugees. Participants heard how Techfugees works toward the inclusion of refugees in the development of technological solutions for them by organizing hackathons. Hackathons are an increasingly common practice in technology communities and bring software developers, graphic designers, project managers and others together to intensively work on practical projects. Techfugees adopts this approach but includes refugees in the process, many of whom have little to no experience coding and designing apps. For example, at a recent Techfugees hackathon, refugees and technology experts developed a directory of services for refugees and migrants in the United Kingdom.<sup>2</sup> The initiative will help connect refugees with jobs, but it also teaches them some basic coding skills that make them more eligible for employment. Hackathons help educate refugees about app development while simultaneously guiding app developers to create more targeted apps and platforms for the needs of refugees. Techfugees also speaks to the theme of accountability, because it allows refugees to be active participants in designing solutions for themselves.

A number of participants spoke to their organizations' potential to contribute to responsibility sharing. For example, Amazon Web Services Institute has introduced a program that brings together civil service leaders — such as mayors, senators, congresspersons and federal officials — to coordinate addressing common problems, such as disaster management, using Amazon's logistical network. The Amazon Web Services Institute also hosts incubation centres designed specifically for refugees and to educate start-up companies.<sup>3</sup> Participants also learned how Uber employs refugees who may be locked out of jobs because of credential recognition problems. Uber is also being used in developing countries to transport vaccines to refugee communities.

A presentation from the Stanford Immigration Policy Lab described the development and application of a machine-learning algorithm that optimizes resettlement outcomes in the

United States.<sup>4</sup> The algorithm replaced the more random human process of matching refugees to specific communities. The group currently works with the US government and is planning to roll out a similar arrangement with Switzerland. If refugees are more successful in integrating with their host communities and this is widely known, the potential for greater responsibility sharing can be strengthened. Some participants thanked the lab for posting its algorithm online for all observers to see, an ethical practice missing among many machine-learning technologies. Although the initiative is still in its early stages and only involves within-country matching, one participant inquired about the potential for scaling the technology across countries. If the lab's approach could make a determination about which country had the best capacity to resettle specific populations of refugees, the technique could improve international responsibility sharing. The lab's representative described the major barrier to implementing such a comprehensive program as being the availability of data on other countries.

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## Investing in Innovative Fintech Solutions

Current financial support for refugees and IDPs is insufficient. While humanitarian financing increased from \$11.3 billion in 2010 to \$25.4 billion in 2018, needs are rising faster than contributions.<sup>5</sup> Responses to calls for pledging commitments remain in the range of 60 to 65 percent. Moreover, the funding needed for refugees and IDPs is being increasingly linked with an overall development agenda, separate from the traditional humanitarian paradigm. Because of these changes, new approaches to financing are needed. The next session of the workshop looked at how fintech can better facilitate, generate and distribute finance for the global refugee system.

Microfinance is an important dimension of the global development agenda, but it falls outside the scope of large projects initiated by the World

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2 See <https://techfugees.com/projects/building-a-directory-of-services-for-code-savvy-refugees-in-the-uk/>.

3 See <https://aws.amazon.com/institute/>.

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4 See <https://immigrationlab.org/project/harnessing-big-data-to-improve-refugee-resettlement/>.

5 All dollar figures are in US currency.

Bank. So far, refugees and IDPs have not been able to benefit from microfinance in any systematic way. Traditional financial institutions see refugees and IDPs as flight risks with little to no credit history. However, if refugees and IDPs could access microfinance, they would improve their chances of self-sufficiency. Kiva is an organization that focuses on reconciling this conundrum.<sup>6</sup> A representative from Kiva described how the organization uses crowdfunding to assist displaced people looking to set up their own enterprises. Kiva's funding for refugees increased from \$1 million in 2016, to \$3.5 million in 2017, to \$7 million in mid-2018. The fund's goal, in addition to bringing capital to refugees, is to help host communities.

One of the major obstacles facing organizations that use crowdfunding is the question of scale. Recognizing the growth of Kiva's work with refugees since its inception, a participant asked how the group could reach an annual distribution of \$2 billion. Kiva's representative stated that progress toward this ambitious objective will be made in convincing other financial institutions that refugees and IDPs are a safe investment so they will unlock capital. Since it began using crowdfunding as a source of microloans in 2016, Kiva has found that refugees repay at 96.6 percent, which is actually a slightly higher rate compared to the regular population. Another participant inquired about how Kiva or similar organizations could support the proposal to establish refugee bonds, so that the average person could invest money in refugees at a decent level of return. The Kiva representative presented a catalogue Kiva had compiled for different investment opportunities related to refugees and host communities and offered to circulate it. By highlighting these positive outcomes, Kiva was trying to build the case that refugees and IDPs are not a burden and can be an asset.

Beyond microfinance loans, the ability of refugees and IDPs to access their own financial assets was discussed. Since refugees live in a cash economy, some groups, for example, Leaf Global FinTech,<sup>7</sup> were taking steps to create virtual banks using blockchain technology to transfer funds via text messages. In their research, this group found that there was some \$1.9 billion of financing untapped because refugees and migrants could

not transfer their assets. Virtual banks and crowdfunding applications can improve refugees' self-reliance and safety during transit, but they also hold potential to facilitate remittance transfers and circumvent costly transfer fees.

Refugees and migrants also have trouble finding jobs, and when they do find work, it is often what people call dirty, dangerous and demeaning. The representative from Kinstep, an online tech platform to connect refugees and migrants to jobs with dignity,<sup>8</sup> found that pledges from Airbnb, Facebook and Google to hire refugees usually did not result in hirings, because there was no pipeline to connect the companies with refugee and immigrant populations. To complement these efforts, governments also need to create incentives for business to hire refugees.

To maximize the potential of these technologies for the global refugee system, a number of the group's participants pointed to emerging technologies that represented game changers. The workshop participants discussed two of the more important ones in blockchain and e-government. They noted that blockchain was being increasingly used in the financial sector and reflected on the challenges in bringing that into the refugee and IDP space. A number of participants pointed out the lack of understanding about blockchain among government officials. One technology expert described how most of the US federal funding for blockchain development was going toward financial institutions' central ledger account systems. Cyber security is a major concern for these institutions because of the large amounts of personal data they hold. More work was needed for the humanitarian and development sector.

Some referred to the e-Estonia model, in which government services were placed online.<sup>9</sup> One participant described how bringing e-government to the developing world would not occur through a top-down approach as in Estonia because developing countries do not have the existing institutional capacity and functionality. Attempts to pursue such models in Jordan, for instance, would have to take a bottom-up approach. The long-term development of blockchain and e-government for humanitarian and development programs

<sup>6</sup> See [www.kiva.org/](http://www.kiva.org/).

<sup>7</sup> See [www.leafglobalfintech.com/](http://www.leafglobalfintech.com/).

<sup>8</sup> See [www.kinstep.com/](http://www.kinstep.com/).

<sup>9</sup> See <https://e-estonia.com/>.

has potential to positively transform the lives of refugees and IDPs but more thought is required.

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## Accessibility, Inclusion and Empowerment

Since fewer than one percent of refugees and IDPs are resettled and some 70 percent are in protracted situations, the current model of crisis management and humanitarianism is not enough. More attention is needed toward helping refugees and IDPs thrive at different stages of their journeys by focusing on the themes of accessibility, inclusion and empowerment. This segment of the workshop began with three presentations describing what work could be done to use technology to scale education and skills-training, accessibility of digital identity and the availability of housing and accommodation.

Refugees and IDPs are often displaced for many years and a significant proportion of these people are of school age. Yet only a tiny percentage of humanitarian aid goes toward education, some two to four percent by most counts. The Middle East and North Africa is a region that is particularly problematic. It has the largest generation of young people in the world, some 162 million between the ages of 10 and 24 who have endured major conflicts. A representative from Nethope described its initiatives to enhance education and job training.<sup>10</sup> Nethope collaborates with diverse stakeholders in academia, civil society and international organizations through remote mentoring. They use Skype and chatbots with youth in Jordan and Iraq to help people learn conversational English and inform young people of the skills needed to access jobs. The goal is to ensure that young people acquire the training and education needed to improve their employment options. One participant urged that refugees and IDPs should also be educated in data security and patent protection, so they are aware of the risks associated with online work. The group learned that Nethope's initiatives are still in their infancy and scale is once again the challenge.

Refugees may transit through different countries and cities on their way to being resettled, temporarily hosted, or returned. Accommodating refugees and IDPs can challenge governments and international organizations. In this space, Airbnb developed its Open Homes initiative to connect refugees with accommodations from compassionate volunteers in host societies.<sup>11</sup> Its representative described how the program operates in Canada, Germany, the United States, Greece and, with a small pilot in Amman, Jordan, where Airbnb works with civil society and the International Red Cross. It is not a requirement of the program, but some hosts assist refugees in finding jobs and language training. The program helps with responsibility sharing as Airbnb is now being integrated into some resettlement models. WRC Chair Axworthy described how Canada's recent support for the Syrian refugees, in large part, stemmed from the community's positive experiences with privately sponsored refugees, dating back to the Indochinese boatpeople of the early 1980s. The group discussed how by bringing hosts and refugees together, Airbnb is building on this concept to foster meaningful interactions and positive attitudes.

Another topic of discussion was the potential of digital identity. Many refugees and IDPs are undocumented because of the circumstances of their flight. If refugees and IDPs have access to a verifiable digital identity, they would be better able to access basic services and even work rights. However, there are major ethical questions around the collection of refugee and IDP data. One participant said that refugees and IDPs often resist providing personal data to governments or large organizations for fear of privacy breaches and increased risk of danger. Participants asked what principles could be politically promoted to mitigate against such risks.

One of the clearer responses came from the representative from ID2020, a public-private partnership dedicated to resolving the situation of the 1.1 billion people who cannot officially verify their identity.<sup>12</sup> According to the representative, ID2020's position is that decentralization of data storage for identity purposes should be the way forward, and that blockchain and similar technologies offer promise because they rely on the

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<sup>10</sup> See <https://nethope.org/>.

<sup>11</sup> See [www.airbnb.ca/openhomes](http://www.airbnb.ca/openhomes).

<sup>12</sup> See <https://id2020.org/>.

principle of zero-knowledge proof. Zero-knowledge proof is a cryptographic method whereby one party provides only the data necessary for a specific purpose in an interaction and extraneous or irrelevant information about that person's profile is protected from being revealed. The representative pointed out that large centralized data storage systems have been the only model presented to the United Nations so far and said that more energy should be channelled into a decentralized system because of its principled approach. Decentralized data systems distribute small clumps of information that prevent any one organization or actor from accessing all of the data simultaneously. Applying this approach to the humanitarian and refugee sector could build trust among non-trusting groups.

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## Conclusion

As the two-day workshop came to a close, co-hosts Axworthy, Albright and Papandreou recognized the generous support of the Carnegie Corporation of New York. They noted the success of the workshop in initiating a multi-stakeholder conversation on the integration of technology in the refugee and IDP space and that it was one of the first of its kind. More research is needed on the subject, but participants gleaned many valuable insights from their discussions. For example, forecasting systems predicting when and where a refugee or IDP crisis might occur and its severity hold potential for shifting political decision making. A new peer-review system could harness technological advances in evaluation techniques, methodologies and indicators to hold deviant actors to account. The design and use of technology should also be carefully regulated in the best interests of refugees and IDPs. A multi-stakeholder group is needed to devise and implement a statement of principles on privacy, data management and machine learning algorithms, and a multi-stakeholder ethics board should be created to implement these principles.

There are many technological innovations that can be applied to assist refugees and IDPs at all stages of their journey. Crowdfunding can overcome the obstacles refugees face in accessing microfinance, while organizations developing blockchain applications allow migrants to transfer

funds securely. More work is needed to understand blockchain technology, but such decentralized systems may be a viable and more secure alternative to traditional databases. There are online platforms to counsel, educate and train refugees and IDPs, equipping them with the knowledge and skills needed to find work and sustain themselves. Home-sharing apps also assist refugees in finding temporary housing, in particular during periods of transit. Machine-learning algorithms are beginning to transform the resettlement programs of national governments and may one day be used for a more comprehensive responsibility-sharing system of cross-country matching.

The meeting's participants intended to continue engagement and noted the need for a multi-stakeholder group. One participant said there should be greater coordination, in particular around common standards, identifying the need for a working group such as there is for cyber security, and called for the inclusion of organizations such as Europol from the European Union and the Article 29 Working Group.<sup>13</sup>

Workshop participants came from the private sector, civil society and academia. Despite their differing backgrounds, there was a convergence of views that the integration of technology involved both opportunities to be pursued and risks to be confronted. Creating a foundation of shared understandings about how technology fits into the refugee and IDP field is the first step toward designing a more strategic and long-term vision.

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<sup>13</sup> The Article 29 Working Group was created to deal with the protection of privacy and personal data in light of the General Data Protection Regulation but completed its work in May 2018.

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## List of Participants

The co-hosts thank all of the following individuals for their participation and the perspectives shared during the workshop.

### From the World Refugee Council

([www.worldrefugeecouncil.org](http://www.worldrefugeecouncil.org))

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**Paul Heinbecker**, Deputy Chair  
**Fen Osler Hampson**, Executive Director

#### Councillors

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### External Participants

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## About the World Refugee Council

There are more than 21 million refugees worldwide. Over half are under the age of 18. As a growing number of these individuals are forced to flee their homelands in search of safety, they are faced with severe limitations on the availability and quality of asylum, leading them to spend longer in exile today than ever before.

The current refugee system is not equipped to respond to the refugee crisis in a predictable or comprehensive manner. When a crisis erupts, home countries, countries of first asylum, transit countries and destination countries unexpectedly find themselves coping with large numbers of refugees flowing within or over their borders. Support from the international community is typically ad hoc, sporadic and woefully inadequate.

### Bold Thinking for a New Refugee System

The United Nations High Commissioner for Refugees (UNHCR) is leading a consensus-driven effort to produce a new Global Compact on Refugees in 2018. The World Refugee Council (WRC), established in May 2017 by the Centre for International Governance Innovation, is intended to complement its efforts.

The WRC seeks to offer bold strategic thinking about how the international community can comprehensively respond to refugees based on the principles of international cooperation and responsibility sharing. The Council is comprised of thought leaders, practitioners and innovators drawn from regions around the world and is supported by a research advisory network.

The WRC will explore advances in technology, innovative financing opportunities and prospects for strengthening existing international law to craft and advance a strategic vision for refugees and the associated countries.

The Council will produce a final report grounded by empirical research and informed by an extensive program of outreach to governments, intergovernmental organizations and civil society.

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## À propos du Conseil mondial pour les réfugiés

Il y a en ce moment dans le monde plus de 21 millions de réfugiés, et plus de la moitié d'entre eux ont moins de 18 ans. En outre, de plus en plus de personnes sont forcées de quitter leur pays natal et partent à la recherche d'une sécurité, et elles sont alors confrontées aux limites importantes qui existent quant aux possibilités d'accueil et à la qualité de ce dernier. À cause de cette situation, les réfugiés passent maintenant plus de temps que jamais auparavant en exil.

En ce moment, le système de protection des réfugiés ne permet pas de réagir adéquatement à la crise des réfugiés d'une façon planifiée et globale. Quand une crise éclate, les pays de premier asile, les pays de transit et les pays de destination finale se retrouvent sans l'avoir prévu à devoir composer avec un grand nombre de réfugiés qui arrivent sur leur territoire, le traversent ou en partent. Et le soutien fourni dans ce contexte par la communauté internationale est en règle générale ponctuel, irrégulier et nettement inadéquat.

### Des idées audacieuses pour un nouveau système de protection des réfugiés

Le Haut Commissariat des Nations Unies pour les réfugiés (HCR) dirige des efforts découlant d'un consensus et visant à instaurer un nouveau « pacte mondial pour les réfugiés » en 2018. Mis sur pied en mai 2017 par le Centre pour l'innovation dans la gouvernance internationale (CIGI), le Conseil mondial pour les réfugiés (CMR) veut compléter ces efforts.

Le CMR vise à proposer une réflexion stratégique audacieuse sur la manière dont la communauté internationale peut réagir de façon globale aux déplacements de réfugiés, et ce, en se fondant sur les principes de la coopération internationale et du partage des responsabilités. Formé de leaders, de praticiens et d'innovateurs éclairés provenant de toutes les régions du globe, le CMR bénéficie du soutien d'un réseau consultatif de recherche.

Le CMR examinera les progrès techniques, les occasions de financement novatrices ainsi que les possibilités pour ce qui est de renforcer le droit international et d'y intégrer une vision stratégique pour les réfugiées et les pays concernés.

Par ailleurs, le CMR produira un rapport final fondé sur des recherches empiriques et sur les résultats d'un vaste programme de sensibilisation ciblant les gouvernements, les organisations intergouvernementales et la société civile.





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