TECHNOLOGY and LABOR TRAFFICKING in a NETWORK SOCIETY

General Overview, Emerging Innovations, and Philippines Case Study

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ABOUT

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MEREDITH DANK is a senior researcher at the Urban Institute. Her areas of focus include human trafficking, teen dating violence, LGBTQ issues, and victimization. She serves as principal investigator on several research studies examining labor and sex trafficking both domestically and internationally. An expert in human trafficking, Dr. Dank has conducted research in eight countries and took part in a White House stakeholder meeting on victim services for survivors. She is the author of The Commercial Sexual Exploitation of Children (LFB Publishing, 2011) and coauthor of Hidden in Plain Sight (2014) an Urban Institute-Northeastern University study of labor trafficking in the US. She holds a Ph.D. in criminal justice from John Jay College.

Sasha Poucki (PhD) was an independent contractor on this project and assisted in writing sections six and eight.

EXECUTIVE SUMMARY

While interviewing survivors of labor trafficking for this report, researchers heard from a young woman in the Philippines who applied for domestic work in the Middle East.

She recounted the way her friend, already working abroad, had called and sent texts of encouragement and eventually put her in touch with a recruiter. She was promised that her documents would be arranged with an employer before her flight to begin work. Upon her departure, the recruiter said that plans had changed. She was told her work papers and airline ticket would be issued in Malaysia. The woman was put on a boat and spent over a week crossing the Sulu Sea from one island to another. She was isolated. Her only means of communication was her mobile phone. Not wanting to worry her family (they had high hopes for her employment), she communicated only with her friend, asking for advice and reassurance. Even if she had been able to access the Internet, it is unclear whether she possessed the skills or knowledge to search for the appropriate online resources. Once in Malaysia, she was put into a van with others. While traveling to an unknown destination they were apprehended by police. Interrogated and imprisoned, the young woman managed to sneak her phone into jail and made one last call. Finally, the friend passed along word of her plight and the Philippine government intervened. After a month in prison she was repatriated and is currently in a rehabilitation shelter in Manila.

This report finds that isolation from the technologies and social networks that connect individuals to support and services is an indicator and risk factor for labor trafficking. Stories of isolation are unfortunately common in cases of labor trafficking. What is striking in the case above is the central role played by technology. The woman's mobile device both connects and disconnects her from illegal recruiters, employers, family, friends, social services, and assistance.

This speaks to the larger premise of this report – new information and communication technologies (ICTs) have become an integral part of the networks that underpin labor trafficking in the 21st Century. Yet little research exists on the impact of technology in exacerbating or address-ing the isolation, fraud, force, and/or coercion so often at the heart of trafficking cases. There is a lack of evidence-based research on any relationship between technology and labor trafficking either within or across national borders. To effectively intervene in labor trafficking, the impact of technology needs to be addressed by policy makers, governments, NGOs, researchers, and the private sector.

Throughout the world, the rapid diffusion of technologies, such as social media, mobile devices, and the Internet, is impacting social, economic, and political life at an unprecedented scale. We live in a "network society" where technology and the flow of information are crucial forces of global social change. The network perspective helps us examine labor trafficking in a new way – not only as an economic, regulatory, or legal problem but as an issue driven by the technologies connecting networks of actors.

This research report is the first to investigate the relationship between technology and labor trafficking. This project began in early 2014 and was made possible by a grant from

Humanity United. The research builds upon the Technology and Human Trafficking Initiative, launched in 2010 at the Annenberg Center on Communication Leadership & Policy at the University of Southern California.

The evidence gathered and analyzed in this report is based on public documents, websites, interviews with key stakeholders in the US and internationally, and fieldwork in the Philippines. With little previous research on the topic, this study is inherently exploratory. Thus this report's primary goal is to frame technology's impact on labor trafficking and to establish a set of definitions, theories, terms, themes, recommendations, and principles that can guide future research and policy.

Research began by examining the intersection between technology, networks, and labor trafficking according to three primary themes: (1) the role of technology in facilitating trafficking; (2) the potential for technological tools to prevent, expose, and monitor trafficking; and (3) the capacity for trafficking victims, survivors, and at-risk groups to use network technology for assistance and information.

This project found that technology provides a crucial infrastructure for an array of both positive and negative social interactions surrounding labor trafficking. The Philippine case study demonstrates how individuals are incorporating technology into systems of trust, for example, going online to search for information about jobs, employers, and recruiters. Yet the adoption of new technologies can produce unexpected points of vulnerability and new gaps in information. In unscrupulous online recruitment, traffickers are able to exploit the vulnerabilities of job seekers through greater access to or control over information. Social isolation is exacerbated when mobile phones are confiscated or online access is restricted by employers.

Though small in number, technological and data-driven approaches to address labor trafficking have already begun to emerge. These interventions focus on a range of actors, from multi-national corporations to individual migrant workers, and employ different technologies, from cloud-based web interfaces to mobile phone apps.

The private sector is developing technologies to gather business intelligence on the web of contractors and suppliers that make up modern supply chains. NGOs are examining how global supply chains can also be the source of data that reveals labor trafficking risks to corporations and governments.

NGOs and Internet companies have begun coordinating to train migrant workers in the use of social media to connect with family, friends, and support networks. Those individuals at the highest risk of being trafficked could be substantially aided by such technology-minded interventions. This report finds that communication along horizontal peer networks is an important contribution to decision making and the adoption of risk-mitigating behavior. However, access to new technologies is not sufficient in many cases. Effective technology-focused training programs that actively give at-risk populations the skills necessary to connect with networks of trust are crucially important.

The growing role of technology in global disaster response hints at a new avenue for intervention in trafficking situations. The rapid deployment of technology that follows such disasters might provide the information or infrastructure needed for data-driven anti-trafficking projects. Whether addressing supply chain monitoring, online recruitment, social media, or humanitarian relief, special care must be given to human rights, exposure, and privacy concerns for those populations most vulnerable to labor trafficking.

A focus on technology and networks also broadens the conversation beyond the niche group of anti-trafficking actors to a wider group of potentially interested stakeholders, including: global health, finance, economic empowerment, women's rights, child protection, as well as climate and disaster responders.

While such actors may seem peripheral to labor trafficking, they are part of the interconnected network that underpins the issue.

Examples of key recommendations in the report include:

Private sector should develop, measure, and evaluate technologies for monitoring global supply chains for labor trafficking indicators and risks; research and develop network technologies and social media platforms designed to increase connection and reduce isolation for migrant laborers and vulnerable users.

NGOs and donors should conduct rigorous measurement and evaluation of existing technologies that seek to intervene in labor trafficking; work with technologists to develop new tools that can disrupt the information asymmetries between recruiters and job seekers; explore how technology can be used to facilitate online mentorships among migrants and build trusted social networks.

Government can reduce isolation among migrant labor by including legal and regulatory provisions that ensure workers have free access to communication technologies and social networks; develop technologies to implement government regulations such as the California Supply Chain Transparency Act or the "Strengthening Protections Against Trafficking in Persons in Federal Contracts" Executive Order.

Researchers can investigate a number of emerging questions such as how technologies can be developed in ways that account for gender differences in labor; how the monetary flow of international remittances could potentially identify risk and exploitation; how humanitarian technologies used in crisis and disaster can be leveraged for human trafficking issues; what are useful technologies for migrants in conflict areas; and what are the ethical issues around data collection on migrants and vulnerable populations.

Through this research, the issues surrounding technology and human trafficking can inform how technology and data-driven approaches will impact other human rights issues in the years to come. Any future technological intervention in labor trafficking should consider the following guiding principles:

- The ultimate beneficiaries of any technological intervention should be the victims and survivors of human trafficking.

- Multisector cooperation is required to disrupt the networks of global and local actors involved in labor trafficking.

- Private sector firms and governments should examine how technologies can be deployed to monitor supply chains for labor trafficking and exploitation. Communication, data, and technology firms should recognize their services are an essential means by which vulnerable groups communicate with their respective support networks.

- Technologists designing interventions should be aware that continuous involvement and research is necessary to ensure that tools are user-centric and effectively respond to labor trafficking. It is important that subject matter experts as well as individuals from communities at risk are included in the development of technological systems.

- The range of human rights, including privacy, potentially impacted by the use of data and technology in labor trafficking interventions should be actively addressed.

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I. INTRODUCTION

Labor trafficking is a global human rights issue that occurs both within and across national borders. It involves criminal networks, businesses, employers, governments, consumers, civil society organizations, and at-risk populations. A 2014 Urban Institute and Northeastern (Owens, Dank & Farrell, 2014) study found evidence of labor trafficking in the United States in the construction, agricultural, hospitality, domestic, and service industries.[1] According to the study, fraud and coercion were often used by overseas recruitment agencies to facilitate the trafficking of individuals. Once in the US, victims' ability to communicate with friends and family was restricted. Monitoring, surveillance, debt bondage, and physical, psychological, and sexual abuse were also reported by trafficked individuals.

Another report by US Non-Governmental Organization (NGO) Verité (2014) conservatively estimates that nearly one in every three foreign workers employed in the Malaysian electronics industry is subjected to forced labor, and that many of these victims are misled by deceptive recruitment practices. These studies provide glimpses into a violation of human rights that can impact men, women, and children in Asia, the Middle East, Africa, Europe, and Latin and Northern America (UNODC, 2014).

Throughout the world, the rapid diffusion of information and communication technologies, such as social media, mobile devices, and the Internet, is impacting social, economic, and political life at an unprecedented scale. These new technologies are making significant changes to the frequency, capacity, distance, and speed of the "information flows" that shape the relationships between individuals, communities, and organizations. Technologies are changing how people communicate, and therefore how they organize, coordinate, connect, move, and accomplish their goals. In addition, developments such as "big data" collection and analytic tools are creating new means of observing, monitoring, and structuring human activity of all types.

How are existing and emerging technologies impacting labor trafficking? The central goals of this project are to enhance understanding of how technology works to enable labor trafficking, and to explore how technology can be leveraged to counter exploitation and assist at-risk populations. This report argues that technology provides a crucial infrastructure for an array of both positive and negative social interactions relevant to labor trafficking. Individuals are quickly incorporating these infrastructures into systems of trust, for example, going online to search for information in order to assess authenticity of jobs and make decisions. The adoption of new technologies by individuals, organizations, and governments can also produce

unexpected points of vulnerability for workers in the social and regulatory lag between old processes and new. Furthermore, this report's findings indicate that technologies that facilitate horizontal or peer-to-peer connection between at-risk individuals are of particular importance in mitigating the effects of labor trafficking. The vulnerability of an individual through the *isolation* from network technologies is of undeniable importance when considering labor trafficking. Specific research into supply chains, online recruitment, and disaster relief all reveal a deeply complicated web of relationships between technology and labor trafficking. This report makes the strong case that this intersection requires greater and immediate attention across public, non-governmental, academic, and private sectors.

Though small in number, technological and data-driven approaches that seek to address labor trafficking have already begun to emerge. These interventions focus on a range of actors – from multi-national corporations to individual migrant workers – who employ different technologies – from cloud-based web interfaces to mobile phone apps. While limited in their implementation and adoption, these examples illustrate the range of applications that are possible:

1.) In 2014 the US-based NGO Made in a Free World launched a software package called FRDM that assists companies in analyzing their supply chains for evidence of labor trafficking. FRDM has only recently been released in a testing phase for a small number of partners. The screenshot at right illustrates how this analytic tool could be used to highlight and quantify the risk of trafficking in suppliers and materials within a company's supply chain.
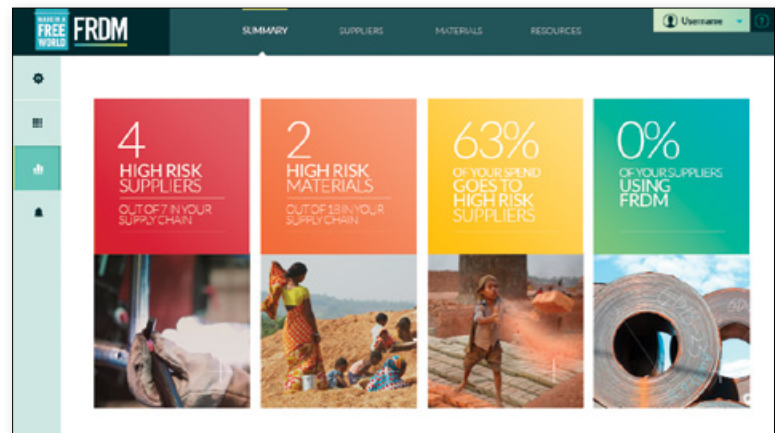
2.) Polaris, a US-based organization that runs the National Human Trafficking Resource Center, are applying analytics to the database of calls received to their national hotline. With the assistance of Palantir, a private sector software and data analysis company, Polaris is able to use mapping techniques to project the potential geographic locations of calls to the National hotline referencing labor trafficking.
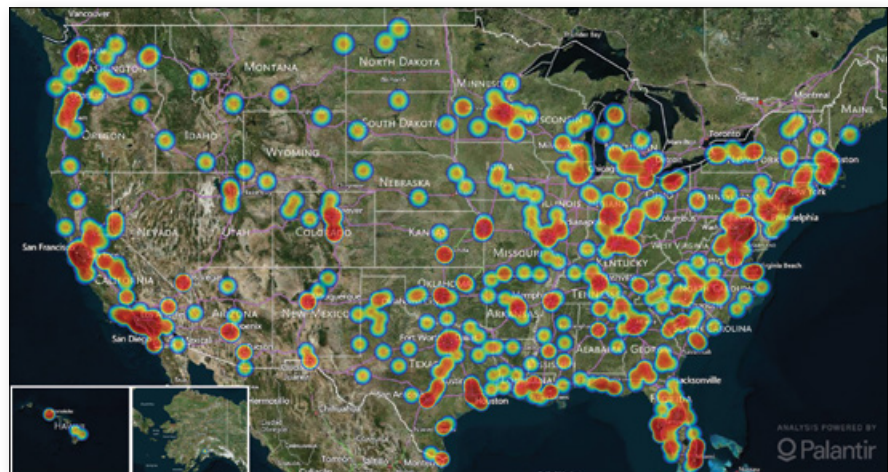
*These maps only reflect cases in which the location of the potential trafficking was known. Some cases may involve more than one location.

3.) In Thailand, Project Issara runs a national and multilingual migrant worker hotline to address forced labor in export industries and global supply chains. The callers make up a virtual informant network, giving a collective voice to migrant workers who are often isolated from support. Project Issara develops intervention strategies from these workers' perspectives to engage both local business and global brands to change their practices.[2]
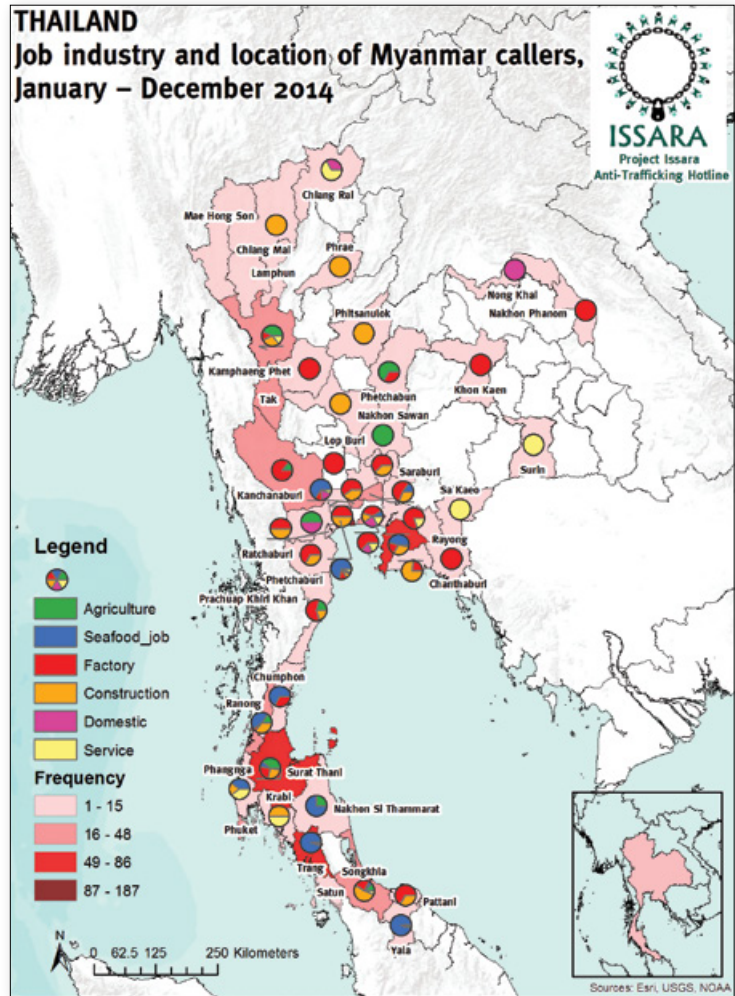
4.) In March of 2014 the Philippine Overseas Employment Administration launched a mobile app to provide job seekers with information on the status of recruiters (Takumi, 2014). The advertisement at right explains how this app provides information on the legal status of recruiters to potential overseas workers.

"The goal of this research is to provide a strong base to examine technology's impact on **labor trafficking** and to establish a set of theories, terms, and themes that can guide future research and policy in this area."

Despite the promise of these examples, the purpose of this report is not to compile a complete list of such technologies, promote one over another, or conduct measurement and evaluation of these technologies in practice. To make appropriate assessments of these early interventions would require a rigorous evaluation beyond the scope (and method) of this research. This project does not focus exclusively on the newest technologies, nor does it assume technology itself as the primary solution to any complex social problem. Indeed, labor trafficking has a history long predating such technology, and must not be re-conceived as a wholly new problem.

Instead, this research examines the underlying logic of new communication technologies and its influence on labor trafficking. Technology can create or dissolve gaps in information that leave individuals vulnerable. Traffickers can exploit such vulnerabilities when one party has more knowledge or access to information than another. In this respect, network technology is an integral component of a socio-technical system that shapes such issues as exploitation, recruitment, employment, supply chains, and migration. Analyzing the issue as the intersection of social and technological networks provides a compelling framework for understanding labor trafficking in today's world.

The evidence for this research and analysis is taken from literature reviews of public documents, interviews with key stakeholders in the US and internationally, and fieldwork in the Philippines. Since the application of technology-driven perspectives to labor trafficking is so new, with little or no previous research on the topic, this study is inherently exploratory. The goal of this research is to provide a strong base to examine technology's impact on labor trafficking and to establish a set of theories, terms, and themes that can guide future research and policy in this area. The analyses, conclusions, and recommendations contained herein draw upon the most current empirical findings to date and seek to provide businesses, governments, NGOs, technologists, and the research community with critical information about risks, current practices, and guiding principles for the development of technology and data-driven strategies to address labor trafficking.

This project was made possible by a grant from Humanity United, a US-based foundation dedicated to building peace and advancing human freedom. This report builds upon work done at the Annenberg Technology and Labor Trafficking Initiative at the University of Southern California's Center on Communication Leadership & Policy. The Initiative seeks to guide current and future interventions in the field of technology and human trafficking through research and development.

2. RESEARCH APPROACH and METHODOLOGY

This project reviewed relevant literature on technology, human trafficking, and human rights; investigated labor trafficking in the context of corporate supply chains; conducted a case study (based on field research) examining migrant recruitment practices in the Philippines; studied risks in online recruitment; and finally, explored the special role played by disaster and/or crisis in the intersection between network technologies and labor trafficking.

The research was shaped by a common theoretical approach - the "network society". This view considers networks, technology, and the flow of information as a critical force of global social change taking place today. This approach helped the researchers to address the issue of labor trafficking in a new way – not only as an economic, regulatory, or legal problem, but as an issue entangled with technology, communication, and information.

The first research phase started in early 2014 and included the preliminary review of the research and policy landscape and the drafting of a framing document (Latonero, Wex & Ahyaudin, 2014). Drawing on previous studies that have examined the role of technology in either supporting human rights (Guberek & Silva, 2014; Levin, 2014; Mansell, 1999) or enabling criminal activity (Urbas & Choo, 2008), this phase concentrated on developing a framework incorporating networks, connections, and information flows.[3] The resultant framing document examined the intersection between network technology and labor trafficking

according to three primary themes: (1) the role of technology in enabling trafficking; (2) the potential for technological tools to prevent, expose, and monitor trafficking; and (3) the capacity for trafficking victims, survivors, and at-risk groups to use network technology for assistance and information.

The second phase involved expert interviews and focus groups conducted with organizations in the US as well as internationally, including government officials, NGOs, service providers, private businesses, and survivors of trafficking[4] (see Chart 1 for a breakdown of interviews conducted). These interviews provided insight into technology's role in enabling, mitigating, and responding to labor trafficking. Interviews were conducted over the phone, Skype, or in person, and were each approximately one hour or more. The interviews were semi-structured to encourage open-ended responses.

The third phase focused on the Philippines as a case study. A team of three researchers traveled in the Philippines in December 2014 for approximately

2.5 weeks of field research. Similar to the research conducted in the US, a range of sources and perspectives were investigated. Stakeholders from a variety of agencies and organizations, including survivors of trafficking (see Chart 1), were interviewed. Individuals and organizations in the Philippines were identified through contacts and conversations with US and international stakeholders, as well as through interviews with Filipino stakeholders once on-site. Additional research included an analysis of technology in supply chains, public labor recruitment websites, and disaster vulnerability in the Philippine context. The final and fourth phase included analysis, synthesis, and peer review of the draft report.

Chart 1: Stakeholder Meetings, Interviews, and Focus Groups

	Government	Inter-Governmental	NGO	Business	Survivors
US Based Research	7	3	8	3	1
Philippines Based	7	5	5	5	2
Total	**14**	**8**	**13**	**8**	**3**

*The numbers represent the number of meetings conducted. Two of the meetings with survivors followed a focus group methodology.

3. DEFINITIONAL CONSIDERATIONS

While definitions of human trafficking are often contested, this project draws upon the definitions of labor trafficking, forced labor, and exploitation laid out in key International Labour Organization (ILO) Conventions, United Nations (UN) instruments, and United States federal law.

The ILO's Forced Labour Convention, 1930 (No. 29) defines forced labor as "all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily" (ILO, 1930, Article 1). Forced labor can be enacted by states or imposed by private agents for the purposes of sexual and/or labor exploitation.

The UN Palermo Protocol on Trafficking (2000) includes the role of movement in the overall act of exploitation. Aspects of movement include the recruitment, transportation, harboring, or receipt of a trafficked person. The Palermo Protocol also focuses on the means of exploitation, including the coercion, abduction, deception, and abuse of power or vulnerability of a trafficked person.

U.S. Federal law defines "severe forms of trafficking in persons" in the Trafficking Victims Protection Act (TVPA) as "the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery" (United States Congress, 2013). It is important to note that under this definition the movement of an individual is not a required condition.

Working within the definitions provided by these three documents, this research project focuses on both labor trafficking and *forced labor imposed by private agents* for the purposes of *labor exploitation*, and will include practices such as forced domestic labor and forced labor of migrants. While the ILO Convention No. 29, Palermo Protocol, and U.S. Trafficking Victims Protection Act are each useful in defining the scope and parameters of research into technology and labor trafficking, it is important to remain cognizant of the assumptions and debates around these official definitions. For example, for the purposes of this report, labor trafficking will not include sex trafficking and forms of sexualized labor. Research already exists on technology and sex trafficking/sexualized labor (Latonero, 2011; Latonero, 2012; Musto & boyd, 2014). Thus, it was important to address the knowledge gap on technology and labor trafficking outside the category of sex trafficking.

By "technology" this report refers specifically to information and communication technology (ICT), including digital and electronic devices and infrastructures. This report is particularly interested in a wide range of "network technologies," such as the Internet (and the World Wide Web), online social networks (such as Facebook), and mobile phones and similar devices.

4. THEORETICAL ORIENTATION - THE NETWORK SOCIETY

Current labor trafficking practices are enabled and propelled by technology in unique ways that have yet to be fully explored empirically, much less theoretically. This report argues that labor trafficking is connected to an infrastructure of technologies, information, and networks.

The unique characteristics of this infrastructure must be fully understood if effective counter-trafficking strategies are to be advanced. Because networks connect various individuals, groups, and organizations, this framework broadens the conversation beyond the niche group of anti-trafficking actors to a wider number of potentially interested stakeholders, including business, technology, global health, gender equality, child protection, and humanitarian actors. While such actors may seem peripheral to labor trafficking, they are still part of an interconnected network that underpins the issue.

The intersection between technology and labor trafficking is but one example of information and technology's role in a much broader social transformation that can be explained by theories of the network society. Sociologist Manuel Castells' (1996; 1997; 1998) concept of the *network society* focuses on the role of networks and the flow of information across networks as the constitutive force of society. As Castells points out, the network is "an old form of social organization" (2005, p. 4) that has existed in many historical contexts. What is changing now is that new technologies are providing similarly new capabilities to these networks, enabling them to "overcome their historical limits" (p. 4).

Electronic and digital ICTs play a central role in the network society by altering individual users' sense of time and space. Communication can be instantaneous over telecommunication systems, and information can be easily shared across vast distances. Thus a migrant from Southeast Asia might take up employment in North America by coordinating in real-time with a network of recruiters, agents, government officials, and employers both locally and internationally using email, mobile phones, and/or social media. These same technologies can be used to maintain the migrant's social network back home with regular messages and conversations that maintain a sense of familial place across great distances (Madianou & Miller, 2012).

Once only used by elites, network technologies now span socio-economic distinctions and are increasingly ubiquitous across many stratifications of global society (particularly among youth) (Qiu, 2009). Mobile technologies in particular play an important role in contemporary mobility and migration (Qiu, 2009). Yet network technologies can include some and exclude others in certain ways. For example, technology might be experienced or accessed differently according to one's gender, nationality, educational attainment, or skill-level. For example, migrant domestic workers, most of whom are women,[5] can experience isolation from their social support network and communication channels.

The impact of the network society is most evident in globalization[6] (Castells, 2009). In this global era, traditional institutions such as governments and nation states can come into tension with the power of global networks, which share information, data, and ideas across borders and boundaries at increasing volume and speed. One adverse consequence, according to Castells (1996), is that international criminal activity is "increasingly conducted by interrelated business networks, constituting a global/local criminal network enterprise that finds economies of scale and economies of synergy in their intertwining." While labor trafficking is a criminal activity, it is one that is tightly intertwined with the globalized dynamics of supply and demand.

Traditional government structures encounter significant challenges when policing crimes that are transnational, technologically mediated, and an effect of macroeconomic forces. For example, government controls such as issuing visas and immigration quotas are designed to regulate national labor markets and international migration. However, a number of factors could "push" an individual to circumvent these regulations and seek informal networks and irregular routes to employment. Such circumventions could isolate individuals from families, government, services, and human rights advocates, potentially exacerbating their vulnerability to exploitation. Researchers have also pointed out that the lack of rights for migrants in destination countries might also compel migrants to work under exploitative conditions (Lewis & Waite, 2013).
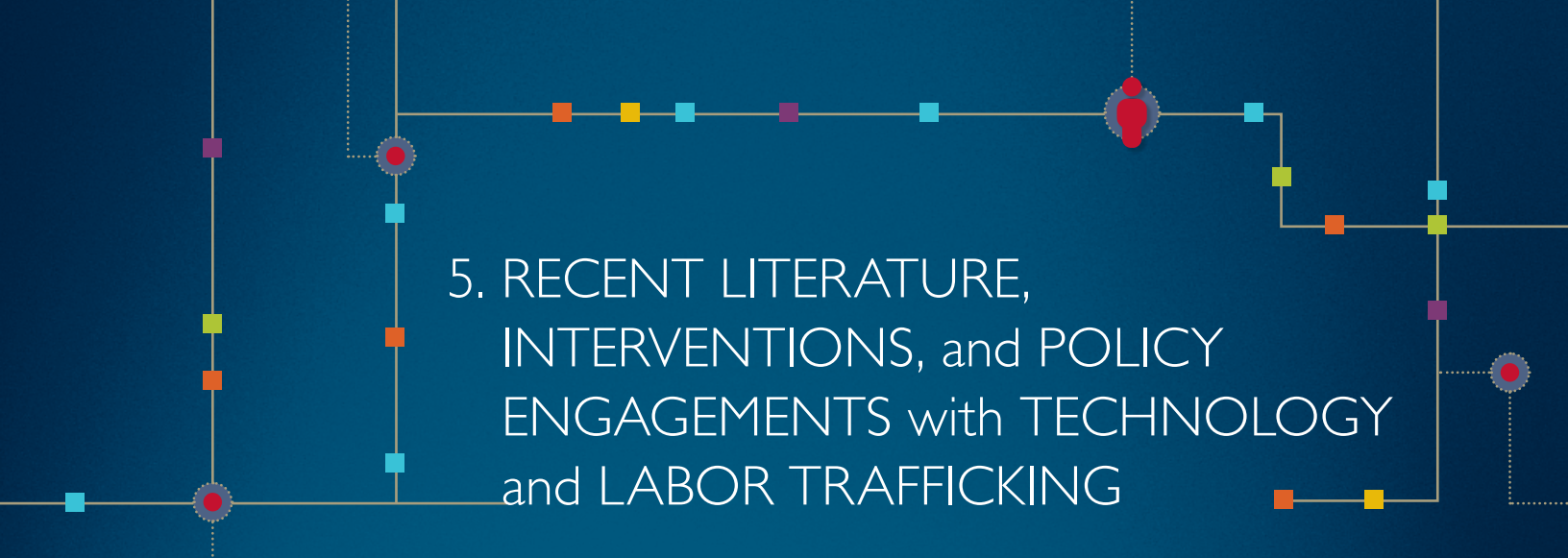
A 2014 report by the United Nations Office on Drugs and Crime (UNODC) concluded that incidents of trafficking are on the rise worldwide and that between 2010 and 2012, "victims holding citizenship from 152 different countries were found in 124 countries" (UNODC, 2014). Empirical data like UNODC's make it possible to see how trafficking in general[7] has become a networked phenomenon, which can elude traditional regulation and enforcement by national and international institutions. The map below shows how the victims of labor trafficking originating in East Asia are found (in different proportions) in many locations around the world – 25% of the trafficking victims detected in North America come from the East Asia and the Pacific, while 33% of victims found in North Africa and the Middle East are from East Asia and the Pacific.

One might think that increased access to ICTs like low cost mobile phones may be the obvious solution to address vulnerability and risk for laborers. Yet Qui (2009) finds that migrant workers who may have a mobile phone can find the cost of making a call too prohibitive and workers with access to an Internet café still might not know how to use a search engine (Qui, 2009). In addition, the same technologies that can be used to overcome social isolation can also be used to monitor and control behavior in the workplace (Rainie & Wellman, 2012). Research in this field needs to account for both the positive and negative aspects of such technologies, as well as the dynamic nature of networks.

Eastern Europe and Central Asia

6%
Western and Central Europe

33%
North Africa and the Middle East

South Asia

3%
Sub-Saharan Africa

97%
East Asia and the Pacific

25%
North America, Central America and the Caribbean

1%
South America

Sciences Po - Atelier de cartographie, 2014

- - - - ▶ Flows of less than 1% of detected victims at destination

Destinations of trafficking victims originating in East Asia and the Pacific, proportion of the total number of detected victims at destinations, 2010-2012 (or more recent)

Source: UNODC elaboration on national data.

5. RECENT LITERATURE, INTERVENTIONS, and POLICY ENGAGEMENTS with TECHNOLOGY and LABOR TRAFFICKING

A wide and varied body of literature exists on labor trafficking generally, including publications from academia, government, multilateral and intergovernmental entities, NGOs, non-profits, and private sector organizations. In recent years, research on labor trafficking has sought to elucidate the complex economic, social, political, migratory, and geographic conditions under which it occurs (Cho, 2015; ILO, 2014). There also exists research positing effective strategies to counter labor trafficking (ILO, 2014; IOM, 2011; European Commission on Justice, Freedom, and Security, 2007), including assessments of national and global labor trafficking prevention policies (US State Department, 2011; Anti-trafficking Review, 2014). Recent research has also shed light on the gendered dimensions of labor trafficking (GAATW, 2010). Child-focused studies have elaborated on specific experiences of children trafficked for cheap labor (ILO, 2013).[8]

Some of this research has attempted to chronicle the scale of the current problem (Owens et al, 2014), while others have sought to frame labor trafficking as a human rights issue (ILO, 2010). While such studies are informative and important, this report focuses on literature and investigations that directly explore the specific linkages between human trafficking and technology using the three categories developed through this project's framing document. In addition this report examines existing national and international policy on labor trafficking for considerations of technology.

TECHNOLOGY AND LABOR TRAFFICKING

Due to the lack of literature directly addressing technology and labor trafficking, researchers relied on studies addressing the relationships between technology, sex trafficking, and the commercial sexual exploitation of children. Studies by Latonero et al (2012) and boyd et al (2011) have highlighted the potential benefits (for example, traffickers leaving behind digital traces of their activities) and the pitfalls (such as traffickers use of online recruitment tactics).[9] A recent study posits that US efforts to counter sex trafficking are increasingly characterized by an emerging technology-trafficking nexus which embodies heightened awareness, an increase in law enforcement data, augmented surveillance, and the use of data analytics through combined public-private efforts (Musto and boyd, 2014). Concerns and anxieties around the use of technology in sex trafficking in the United States also include a greater capacity to surveil groups already disproportionately monitored by the state.

EXPOSING AND MONITORING TRAFFICKING IN THE PRIVATE SECTOR

As noted, a recent report by the US-based anti-trafficking advocacy organization Verité (2014) found a significant prevalence of forced labor in the Malaysian electronics industry. Private and public organizations are just beginning to explore the possible uses of data sources to better understand the kinds of labor trafficking practices present in supply chains and business operations (Blattberg, 2014; Diamond, 2014).

The United Nations Special Rapporteur on Trafficking (2014) has urged businesses to refrain from using forced labor, and to prevent and monitor the use of such labor by its suppliers. Although not drawing explicit attention to technology, the Special Rapporteur noted that "the connection between trafficking in the supply chains and business is still not well understood… and that the solution to the problem of human trafficking in supply chains lies beyond the reach of any single stakeholder." In addition, former US Ambassador to Combat Trafficking in Persons Luis CdeBaca (2013) has called for "a hard look at the supply chains and labor sources behind the products we use every day," and has highlighted the role of technology and innovation in addressing labor exploitation supply chains.

ASSISTING TRAFFICKING VICTIMS AND AT-RISK GROUPS

Technology has the potential to become a vital tool in the promotion of security, protection, support networks, and information flows among vulnerable populations. Trafficking hotlines and SMS or text-based services are examples of how technology works to provide direct information and support to individuals who have been trafficked. However, many of these direct services have not been comprehensively evaluated. It is important to note that individuals and groups access technology differently. Thus developers of these tools need to anticipate and accommodate differences among at-risk users. Traffickers may seek to limit or manage a victims' access to a mobile phone or the Internet, for example. Intimidation and control tactics may also result in reluctance among trafficking victims to use tools like mobile phones, even when available.[10]

Awareness campaigns such as the former MTV EXIT (now a new project by IOM Bangkok) have sought to utilize digital and social media platforms to advertise trafficking hotlines and to spread safe migration counter-trafficking awareness messages to young people in Asia.

USC researchers (Riley, Murphy, Latonero, and Thainiyom) analyzed Indonesian Twitter data to explore the narratives of human trafficking discussion and information dissemination patterns. The results found that Indonesians used Twitter to raise awareness about human trafficking, share news stories, and send supporting messages for the survivors. Labor trafficking and domestic worker abuse cases were the most discussed type of human trafficking (49%), followed by sex trafficking (45%), indicating the public interest on human trafficking in Indonesia largely focuses on domestic worker issues. The research also exposed social media discussions alleging possible examples of labor exploitation in the tobacco, shipping, agriculture, and manufacturing industries.

The Domestic Workers Convention
(ILO, 2011) sets the
first global standards
for the estimated 50 to 100 million domestic workers worldwide, the vast majority of whom are women and girls.

DOMESTIC, REGIONAL, AND INTERNATIONAL POLICY

As discussed in greater detail in this project's framing document (Latonero, Wex & Ahyaudin 2014), technology is infrequently mentioned in current international protocols, conventions, and frameworks on labor trafficking and forced labor. For example, in June 2014, ILO adopted a new protocol to complement the ILO Convention 29 on Forced Labour. The Convention requires governments to take measures to better

protect workers, particularly migrant laborers, and to ensure that victims have greater access to justice and compensation. The Convention does not mention technology as having a role in any of these efforts. The Domestic Workers Convention (ILO, 2011) sets the first global standards for the estimated 50 to 100 million domestic workers worldwide, the vast majority of whom are women and girls. The treaty states that domestic workers are entitled to the same protections available to other workers, including days off, limits to hours of work, a minimum wage, and social security. The Convention obligates governments to protect domestic workers from violence and abuse, and to prevent child labor and encourage education. Again, technology and communications are not mentioned.

Technology is recognized in some regional frameworks and policies as a means to enhance operational capacity to counter both sex and labor trafficking. ASEAN's 2007 *Declaration on Migrant Workers* requires ASEAN Member States to "facilitate data-sharing… for the purpose of enhancing policies and programmes concerning migrant workers in both sending and receiving states." ASEAN is currently working on new Conventions to strengthen counter-trafficking and safe migration strategies. It remains to be seen

whether technology will be given any focus under these proposed Conventions.

The Organization for Security and Co-operation in Europe (OSCE) *Action Plan to Combat Trafficking in Human Beings* (2005) requires member states to enhance data collection and information exchange on trafficking cases. In addition, the *Action Plan* seeks to ensure "data protection and the victim's right to privacy." According to the *Action Plan*, member states should work to raise awareness on human trafficking by using media and setting up hotlines to assist victims of trafficking.

The European Commission's 2012 *EU Strategy towards the Eradication of Trafficking in Human Beings (2012-2016)* states that it will use Internet and social networks to target awareness raising for key groups of concern, such as women and children at risk, domestic workers, Roma communities, and undocumented workers. This strategy also asserts that a better understanding of online recruitment is needed, stating that it will "support projects that aim to increase knowledge of recruitment over the Internet and via social networks – including recruitment done with the help of intermediaries." The strategy goes on to say that:

The Internet reaches a broad audience, offering numerous possibilities to recruit victims. It offers employment opportunities (most often promoting attractive jobs abroad, for models, dancers, cabaret performers, etc.) which are accessible via simple search engines or pop-ups, chat rooms and spam mail. Social networking tools are becoming increasingly popular as recruitment tools.

The UK's Department for International Development's (DFID) updated *Strategic Vision for Women and Girls, to 2020 and Beyond* (2014) seeks to "unlock women's and girl's potential" by making new technologies accessible. DFID's "Work in Freedom" program, for example, engages mobile technology to address the labor trafficking of women migrant workers.[11] The program, which is jointly implemented by the ILO and London School of Hygiene and Tropical Medicine, focuses specifically on domestic work and the garment industry in South Asia.

The International Organization for Migration (IOM) coordinates a collaborative approach model called the Abu Dhabi Dialogue to deal with issues of "temporary labour mobility" in 2008.[12] The Dialogue gives attention to the prevention of illegal recruitment but makes no explicit mention of technologies. However, such forums could serve as an effective place for future discussion of technology related issues.

There is a growing movement to develop policies to mitigate labor trafficking in the United States, as with the recent September 25, 2012, enactment of Executive Order 13627: *Strengthening Protections Against Trafficking in Persons in Federal Contracts*. The order significantly expands the responsibility of federal contractors and subcontractors in the effort to prevent human trafficking and forced labor (U.S. State Department, 2012). The role of technology was not specified in the Executive Order.

In its 2012 *Counter-Trafficking in Persons Policy*, USAID identifies five factors that facilitate human trafficking: porous borders; absent rule of law; failure to prosecute traffickers; complicity of corrupt officials; and modern communication technology. USAID is investing in a number of activities that promote technological

solutions to combat trafficking. In addition, the U.S. State Department and The White House Office of Science and Technology Policy have organized international technology-focused capacity-building activities. The State Department has organized "TechCamps" which seek to develop innovative counter-trafficking solutions for governments, civil society, and advocacy organizations.

At the state level, the Californian Supply Chain Transparency Act (2010) is an innovative legal instrument that highlights the responsibilities of the private sector in providing information about trafficking in their supply chains. There is a growing movement to enact legislation on labor trafficking and supply chains at both the state and national level.

"There is a

growing movement

to develop policies to mitigate labor trafficking in the United States, as with the recent September 25, 2012 enactment of Executive Order 13627: Strengthening Protections Against Trafficking in Persons in Federal Contracts."

The few examples the researchers found of active policy engagement with technology and human trafficking suggests the potential of incorporating technological approaches.[13] Technology can be used to support data collection and investigation, international cooperation, victim assistance, and awareness raising. However, technology rarely plays a central function in coordinated strategy and policy in international, regional, and national contexts. In addition, future research would benefit from a thorough analysis of any mention of technology in bilateral agreements or memorandums that address labor regulations and protections between source and destination countries.

6. TECHNOLOGY and RISK IN SUPPLY CHAINS

The complexity found in today's global supply chains is a prime example of the network society at work. According to Mentzer et al (2001), "a supply chain is defined as a set of three or more entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer" (Mentzer et. al, 2001, p. 4).

A comprehensive analysis of global supply chain practices, risks, and exposures across industries and actors is not the purpose of this report.[14] While later sections of this report focus on individuals at risk of labor trafficking this section approaches the same problem from a business perspective. Given the great distances and opaque connections in the network society that often make up globalized supply chains, corporations committed to eliminating labor trafficking practices must look to new and novel techniques. The following section takes up the challenges and opportunities presented by global supply chains.

For corporations and their supply chains, the use of network technologies creates significant opportunities, including access to global markets. In order to maintain competitive advantage and profit growth, firms engage in a variety of practices that involve communication and information sharing. These practices include international outsourcing, offshoring, contracting suppliers of raw materials, product assemblers, and producers. Coordinating this network of business relationships in real-time ultimately leads to highly complex supply chains. Furthermore, a focal company (the initiator of an international business transaction) directs contracts with business partners (known as Tier 1 suppliers), who may then engage in further subcontracting with Tier 2 or Tier 3 suppliers. Communicating across such a network of contractors and subcontractors further complicates supply chains (Lambert & Cooper, 2000; Choi & Krause, 2006; Kull & Closs, 2008). As a result, overall cost, timeframe, labor conditions, business management, and product quality control need to be tightly coordinated (Tang & Zimmerman, 2009).

"[S]upply chains are not just product lines. They represent lines of responsibility. And we each have a responsibility to make sure that the goods we buy, we buy free of forced labor."

John Kerry, US Secretary of State, 2014.

The supply chain initiation process may start with the identification of a perceived market need for a product or service, leading to research and development, and ending with a product delivered through to a final point of sale. Risk of human trafficking may emerge within processes such as manufacturing or product assembly, or within corporate governance policies regarding transparency and compliance practices (Bogataj D. & Bogataj M., 2007; Wei, et al, 2010).

Businesses today are also exposed to a variety of risks related to supply chains and global interdependencies. These include economic downturn and consumer spending shifts, changes in supply and demand, and reductions or increases in orders for manufacturing. Such risks correspond to fluctuations in equity markets and currency exchange rates, changes in commodities and raw material prices (for example, oil and gas), availability of raw materials, and natural or manmade disasters. The more diverse and extended the business supply chain, the more potential there is for business disruption, and less visibility and transparency (Sodhi & Tang, 2012).

However, less complex supply chains do not necessarily indicate less exposure to the risk of human trafficking and forced labor. This is particularly the case if a company remains unaware of labor conditions, or how workers are being hired and treated downstream in the supply chain among the different tiers of suppliers. Pressures to cut labor costs can be one factor that increases the potential exposure to this risk.[15] This is particularly the case in contexts in which firms engage recruiting agencies to hire foreign workers. Such laborers are often recruited per project or on a temporary basis, paid less than what they would be paid at the firm's home base, and in some cases are contractually limited in their ability to leave the employer.

The consequences of human trafficking being identified in a firm's supply chain might include legal action, loss of operating permits, contract terminations, tarnished brand and reputation damage, loss of sales and stock value. Public shaming is one way to call public and business attention to exploitation. The case of COSAN, the world's largest sugar-alcohol producing company, illustrates this (IHS Jane's Intelligence Review, 2014). The case of COSAN, the world's largest sugar-alcohol producing company illustrates this. In 2010, after being accused of labor violations involving workers kept in slavery-like practices, the firm was placed on Brazil's Labor Ministry bi-annual list, called the "Lista Suja" ("Dirty List"). This list includes employers that have violated labor standards and are accused of exploiting workers. COSAN subsequently suffered from a drop in stock, having its line of credit cut by the state, and order cancellations by Wal-Mart (Centro de Monitoramento de Agrocombustíveis - Repórter Brasil, 2010). Following the COSAN case, "80% of the industry" in Brazil's sugarcane production signed the National Commitment to Improve Labor Conditions in the Sugarcane Industry (Centro de Monitoramento de Agrocombustíveis - Repórter Brasil, 2010).

SUPPLY CHAINS, ICTS, AND TRANSPARENCY

The adoption of information and communication technologies (ICTs) in supply chain management is widely practiced and has become an important element of standard business operational procedures. ICTs are used for procurement, purchasing, order processing, and supply chain management systems (SCMS). Product packaging, shipping, and distribution logistics also involve ICT use, such as bar coded product systems, scanning technology, and radio frequency-identification systems (RFID) (Zhou, Wei, Piramuthu, & Selwyn, 2013). RFID is a technology that uses small microchips to tag objects (or people) with code that can be transmitted via radio waves wirelessly to a device that can read the information. Businesses use RFID to create visibility in managing supply chains, managing labor costs, tracking objects, etc (Attaran, 2012). How such technologies might be used to track products that may have been made by trafficked and exploited labor remains to be seen.

Given the complexity of supply chains, some public and private stakeholders have recognized the need for proactive efforts to change business practices and minimize exposure to human trafficking and forced labor. Technology platforms may be used for purposes of reducing or monitoring human trafficking and forced labor as well as for increasing public awareness about this issue. The not-for-profit organization Made in a Free World developed the Slavery Footprint website that (in their own words) "allows consumers to visualize how their consumption habits are connected to modern-day slavery" (Slavery Footprint).[16]

Patagonia is an example of a company that has been outspoken about placing high standards on corporate social responsibility, the environment, business transparency, and knowledge of its supply chain. As a designer, manufacturer, and retailer of outdoor clothing goods and gear, Patagonia's online platform, Footprint Chronicles, is a tool that offers consumers insight into

the firm's full supply chain, with transparency details and interactive mapping within the organization.

Whereas Patagonia's web platform offers insights into their internal supply chain to those outside of the company, IKEA's online Sub-Supplier Tracking System (SSTS) and its supplier's code of conduct (also known as the IWAY- IKEA Way on Purchasing Products, Materials and Services) is a tool for strengthening internal communication among IKEA's suppliers/sub-suppliers and corporate management. The IWAY standards provide guidelines to suppliers/sub-suppliers regarding "minimum requirements relating to the environment and social and working conditions (including child labor)" (IKEA, 2008). Lastly, in 2010 Disney's operations in southern China introduced the workers' helpline system known as ICTI-CARE where workers can report freely and anonymously any abuse, misconduct, or related labor infringements.

Recent transparency efforts related to supply chain management are being applied to the electronics industry, including through the industry-wide regulation initiated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act"),

which in part addresses the use of conflict minerals[17] in the electronics industry. As Intel notes in its report, the Dodd-Frank Act calls upon "companies in the electronic industry whose products contain conflict minerals that are necessary to the functionality or production of their products to provide mandatory reporting and disclosure requirements related to 'conflict minerals'" (Intel, 2014). How technologies might be used to monitor and enforce these regulations needs more research.

Data driven approaches to supply chain monitoring could apply to both business and government supply chains. LexisNexis, an information company that provides access to vast amounts of legal, business, government, and media sources, has developed a supply chain monitoring product called Smartwatch. For a sense of scale, according to LexisNexis, the software scans data from approximately 26,000 current and archived news sources, 600 local and global business sources, and adds approximately 375,000 news articles daily. The software scans these information sources for risks, including human rights violations and labor trafficking.

Lastly, the software company Palantir and NGO Verité have recently formed a partnership to identify labor trafficking risks in supply chains. According to the partnership, newly created software will allow corporate users access to a data platform that integrates business supply chain data, public information, and analysis on labor trafficking risks. The software will be designed to flag potential indicators of trafficking and provide actionable intelligence to business decision makers. While still in its early phases, such partnerships between the private technology sector, NGOs and global corporations is a promising development.[18]

Navigating the challenges presented by technology, supply chains, and human trafficking and forced labor is very complex. Global supply chains facilitated by new network technologies are some of the most difficult to penetrate modes of organization. While there are a range of examples of technologists, corporations, NGOs, and governments all beginning to address the challenges of supply chains, the complexity of the issue (along with the high stakes of labor trafficking) demand a greater level of coordination. Public and private sector, regulators, NGOs, academics and consumers could all benefit from future research and collaboration in this area. Developing tools and best practices for dealing with supply chains, as well as connecting supply chain structures to the lived experiences of vulnerable populations are some of the most compelling and important areas for future research and development.
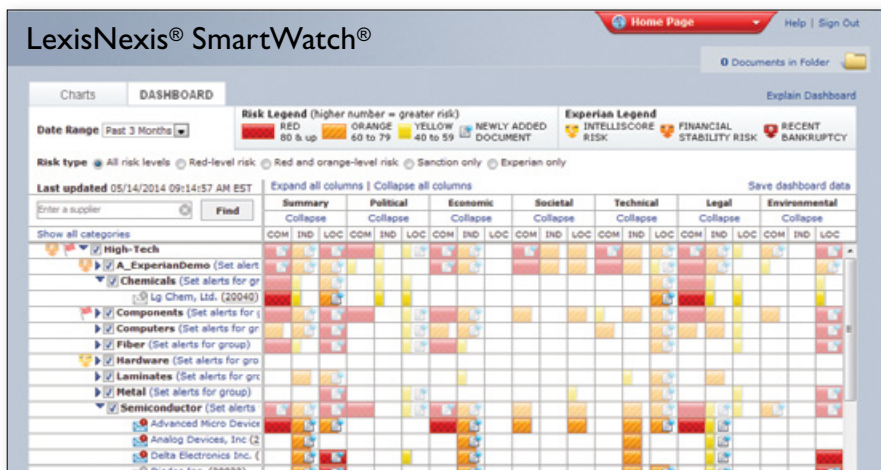
7. PHILIPPINES CASE STUDY:
Network Connection and Isolation in Overseas Migration Networks

The researchers chose the Philippines as an illustrative case study. Overseas migration and communication technology play an important role in Philippine society, and labor exploitation issues have visibility in government and public discourse.

While more definitive and comprehensive reports on Philippine migration and labor trafficking exist (IOM, 2013), this section focuses directly on the role of network technology in overseas migration and labor trafficking. Three researchers traveled to the Philippines from the US in December of 2014 and conducted meetings and interviews in Manila, Cebu City, Davao City (Mindanao), Ormoc City (Leyte), and Tacloban (Leyte).

In keeping with the theory of the network society, the researchers prioritized how information moved between different nodes or points in the larger network – whether those points represented governments, NGOs, job seekers, recruitment offices, or pieces of technology. This focus on communication revealed that among Filipino migrant workers, isolation from network connectivity (via email, phone, or social network) was a key indicator for labor trafficking. The act of confiscating a worker's mobile phone may contribute to conditions of vulnerability. This finding departs from and enhances other work on labor trafficking, which has traditionally focused on other (non-communication based) indicators of trafficking. The following description and analysis of the ways information flows between the actors involved in Filipino migrant labor is intended to provide insight for any future intervention.

Research Sites Visited for the Philippines Case Study
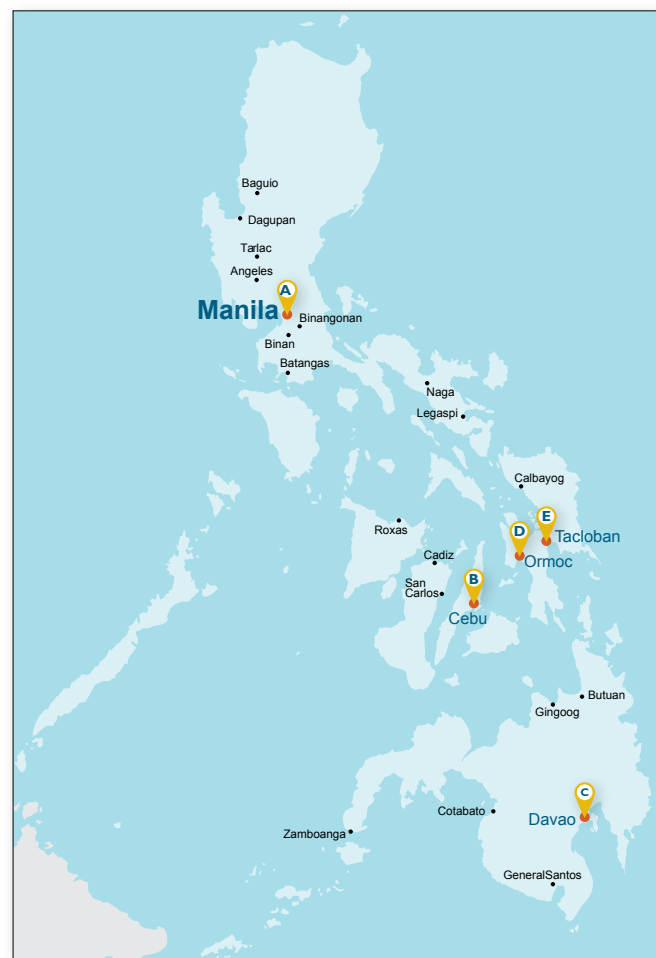
A	Manila	**C**	Davao City	**E**	Tacloban
B	Cebu City	**D**	Ormoc City		

PHILIPPINE MIGRATION IN A NETWORK SOCIETY

The Philippines is an archipelago nation home to 92.34 million people (UNDP, 2013). Its island geography and complex history involving Asian, Spanish, and American influences has resulted in a culturally diverse country (UNDP, 2013). An estimated 10-12% of the country's population migrates overseas for employment purposes. The Philippines is considered to have a "gold standard" on migration laws and processes: "ensuring the welfare of the Overseas Filipino Workers (OFWs)" is part of the Philippine government's "social contract" with its citizens (Aquino, 2011). The Philippines have ratified the ILO Forced Labour Convention, the International Convention on the Promotion of the Rights of All Migrant Workers and Members of their Families, and the UN's Palermo Protocol on combating trafficking, and was the second country in the world to ratify the recent ILO Domestic Workers Convention (2011). The Philippines also has a Migrant Workers and Overseas Filipinos Act (1995), and outlaws sex and labor trafficking through its 2003 Anti-Trafficking in Persons Act and the Expanded Anti-Trafficking in Persons Act of 2012. Several countries, particularly in the ASEAN region, have started to adopt similar laws and procedures in an effort to model Philippines labor migration policies.

Regional Distribution of Overseas Filipinos, 2011

Region	Permanent	Temporary	Irregular	TOTAL
Africa	4,933	51,987	6,588	63,508
Asia, East & South	284,646	621,400	543,327	1,449,373
Asia, West	7,713	2,872,440	107,770	2,897,923
Europe	405,747	263,605	139,427	808,779
Americas/Trust Terr.	3,811,111	244,798	270,150	4,326,059
Oceania	353,495	89,837	7,710	451,042

Countries with at Least 100,000 Filipinos, 2011

Rank	Country/Region	Number	Rank	Country/Region	Number	Rank	Country/Region	Number
1.	USA	3,430,864	6.	Australia	384,637	11.	Italy	184,638
2.	Saudi Arabia	1,550,572	7.	Qatar	342,442	12.	Singapore	180,000
3.	Canada	842,651	8.	Japan	220,882	13.	Hong Kong, China	174,851
4.	UAE	679,819	9.	UK	220,000		TOTAL	8,967,187
5.	Malaysia	569,081	10.	Kuwait	186,750			(85.8%)

Source: CFO, Stock Estimate of Overseas Filipinos.
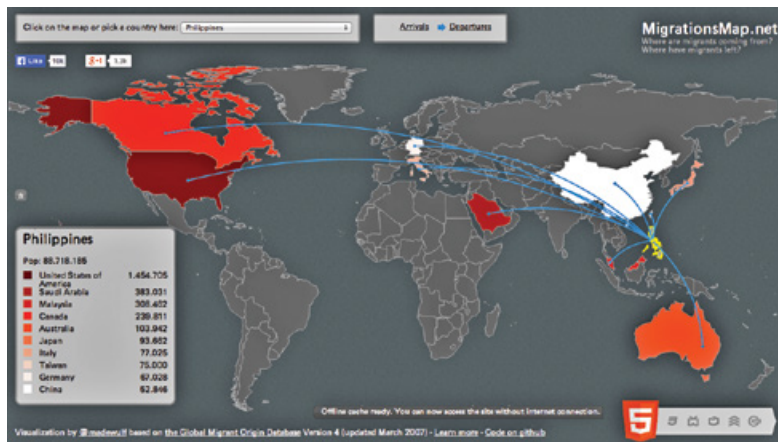
Flow of migrants from the Philippines to destination countries.

Workers who migrate overseas have become an important component of the Philippines economy. According to the World Bank, remittances from migrant workers contribute approximately US $26 billion, or 10% of the country's GDP. Studies suggest that migration and remittances were a key factor in the country's resilience to the recent global financial crisis when foreign direct investment decreased (The World Bank, 2012). According to the Philippine Government, remittances and the export of labor can also serve as a potential resource for economic growth. Filipino migrants not only transfer money while overseas, but also potentially bring back information, technical assistance, and connections to other markets (UNDP, 2013). Despite these myriad benefits, the prevalence of migrant work opportunities for Filipinos also creates an array of gaps and vulnerabilities for potential job seekers such as the circulation of fraudulent recruitment information.

Since 2010, the Migrant Workers and Overseas Filipinos Act has required the existence of certain protection measures in receiving countries (ILO, 2013c).[19] They include any of the following: having in place labor and social laws which protect the rights of migrant workers; being a signatory to and/or having ratified multilateral conventions, declarations, or resolutions pertaining to the protection of

workers, including migrant workers; or having bilateral agreements or arrangements with the Government of the Philippines on the protection of the rights of overseas Filipino workers. The receiving country must also show it is making active efforts to protect the rights of migrant workers. If a receiving country cannot demonstrate that it has fulfilled these criteria, the Philippines government will not issue it a deployment permit.

Though it is encouraging that the Philippines government has made attempts to assure the safety of its migrant workers, it is possible that some such efforts indirectly contribute to risky behaviors. Some interviewees have suggested that government bans on certain countries have pushed migrants into taking unsafe routes and working without legal status (AFPPD). Philippine migrant workers already in the banned country may also encounter more difficulties as a result of the ban, including problems accessing justice (AFPPD). In a similar vein, the Philippines government's recent decision to forbid migration of domestic workers younger than 23 may influence the use of informal migration channels by those under 23.

Technology Use and Literacy

With approximately 39% (39.5 million) (Number of Internet Users, 2014) of the population connected to the Internet, the Philippines has the fastest growing Internet population in the last five years (GlobalWebIndex, 2013). In 2012, an estimated 30 million Filipinos (28% of the population) have a Facebook account, which is among the highest in the world (Internet World Stats, 2014). There are over 106 million mobile subscriptions (101% of the entire population), with many Filipinos paying for more than one (ITU, 2013). Two main telecom companies operate in the Philippines, providing local service as well as international connection to the 10-12 million migrants working abroad. According to estimates (Visual.ly, 2013), 81% of OFWs use computers and 77% use mobile phones to communicate with their family and friends back home.

Over 75% of Internet users in the Philippines are under the age of 34, while 98% of Internet users have a social media account – 97% have a Facebook

account; 81% have a Twitter account. Filipinos spend, on average, 4 hours a day on social media sites – the highest usage in Asia – followed closely by Thailand with 3.7 hours a day. Approximately 62% of mobile users access social media apps on their phone (Digital Strategy Consulting, 2014). SMS is still the dominant form of communication via mobile phones. Internet cafes are common, including in rural areas. As one stakeholder stated, "Being connected is important. Filipinos would give up paying for Coca-Cola [and use that money] to be connected online."

These networked technologies work to provide individuals with connectivity to family, friends, employers, associates, government officials, etc. Mobile phones in particular have been shown to influence the social life of migrants globally, particularly as mobile phones become increasingly ubiquitous (Qui, 2012). Madianou and Miller (2011) found that Filipinos in the UK use various technologies to maintain family relationships across great distances over time. "Children of OFWs have also been among those most technologically up-to-date for the purposes of communication with their migrant parents" (IOM, 2013). These mediated relationships offer different opportunities for connection and immediacy, e.g. via Skype or Facebook (Madianou & Miller, 2011).

Drivers for Migration Overseas for Employment

In a focus group the project team conducted with five labor trafficking survivors, a number of reasons surfaced as to why the participants felt compelled to go overseas to work. These reasons included:

- "Because no one [else] can take care of my children."

- "I decided to go abroad to help my family […] to earn money and to help my brothers and sisters to go to school."

- "I was dreaming only to have our own house with my family and a very good education for the children because I was being a breadwinner of the family."

According to a stakeholder interview, there is some evidence that trafficking victims often come from poorer provinces, or have a lack of education, financial literacy, and/or minimal understanding of and access to technology.[20] Reasons for migration include visions of a better life, few employment opportunities at home, new opportunities, disaster vulnerability, and conflict[21] (NEDA, 2013; IOM, 2013; Tacoli, 1999). Additionally, prevailing gender norms (Chant & McIlwaine, 1995) and household or family dynamics are seen to shape migration patterns for both men and women (Boyle, Halfacree & Robinson, 2013). In recent years, more women have migrated for overseas employment than men.[22] Between 2000-2012, household service workers, most of whom are women, were ranked first amongst newly-hired OFWs, outnumbering OFWs employed in skilled professional categories, or other low-skilled categories such as manufacturing workers (IOM, 2013).

In addition to local conditions, external labor markets, particularly in the Asia and the Middle East, create a strong 'pull' factor for migrant workers. According to 2011 data, the Middle East, East and South East Asia contain 80% of all OFWs (IOM, 2013). After the United States, Saudi Arabia is the second most common migration corridor from the Philippines (The World Bank, 2011). Wealthier neighboring countries like Malaysia employ Filipinos to fill gaps in their internal labor markets. ASEAN's Economic Community (AEC), which intends to create a common ASEAN market through trade liberalization, cross-border infrastructures, and the exchange of skills, knowledge, and workers across borders, may contribute to even higher levels of intra-regional migration in South East Asia (ILO, "Philippines Stands to Gain", 2014).

During the course of the research, it became apparent that more understanding is needed of how the structural drivers of migration relate to the Philippines' high rates of technology saturation and Internet penetration. In particular, the research team noticed different migratory experiences and outcomes between skilled and low-skilled workers,[23] which led to a set of new proposed research questions: Are skilled and low-skilled migrant workers accessing and using

information about overseas job opportunities? Are there differences in how a skilled worker uses information compared to a low-skilled worker? How does the availability and utilization of information and network technology shape the decisions and behaviors of skilled and low-skilled migrant workers respectively?[24]

Similar questions should be asked to help understand the differences (if any) in how male and female migrant workers access and use network technology, as well as migrants from rural and urban areas. Having *access* to information and network technology is not the single determinant in decision-making and behavior. In many cases, for those job seekers who are most vulnerable, the more crucial matter is being equipped with the *education, knowledge, and skills* to effectively leverage the available information and network technologies. One NGO official explained that for vulnerable job seekers "it's not just access" to the means of communicating abuses "but the will to report them."

A NETWORK APPROACH TO UNDERSTANDING RECRUITMENT AND MIGRATION RISKS

During field work in the Philippines, researchers prioritized recruitment agencies as key sites in connection with trafficking risks. A number of studies have already investigated recruitment agencies in Asia (ILO, 2013a; ILO, 2013b; UNIAP, 2011), and the Philippines (Aguinas, 2010). In essence, the recruitment process embodies the complex network of actors, points of connectivity, information, and communication flows which this project catalogues and analyzes.[25]

It stands as an initial entrée into understanding how technological platforms, such as recruitment websites and Facebook, mediate these connections, information, and communication flows before, during, and after the search for overseas work. As one government labor official explained to the research team, "at every stage of the migration process there is risk."

Formal channels for migration provide more monitoring and regulatory structures than informal recruitment channels. It is important to note that utilizing a formal route does not necessarily assure safe and positive migration experiences and can also result in cases of labor trafficking.[26] A working hypothesis began to emerge from the Philippines field research – official channels may be able to provide avenues and opportunities for communication between migrants and the web of actors (recruiters, government officials, NGOs, employers) involved in the overseas migration process, and therefore, have the potential to mitigate risk for the migrant worker. Informal migrant recruiting tends to evade state monitoring and regulation, thus creating a situation where job seekers encounter limited information. The lack of information may increase the risk of labor trafficking.

The working hypothesis also posits that in both formal and informal recruitment, there may be an imbalance in information between the migrant job seeker and other relevant actors. For instance, a labor trafficking victim may know very little about the realities of the work and its conditions ahead of time, whereas various other actors within the trafficking network (recruiters or an exploitative employee) might possess and/or conceal this knowledge.[27] These imbalances, or information asymmetries, exacerbate the unequal power relations between actors. Finding ways to increase information flows, verify information, and decrease information asymmetries, may help limit vulnerabilities and mitigate risk. Communication and information-based interventions might disrupt deceptive or exploitative actors who seek to take advantage of an individual's social isolation or other vulnerabilities.

RECRUITMENT AGENCIES AS KEY POINTS OF CONNECTION

Networks are made up of interconnected nodes, which operate as sites where information can be potentially distributed (Castells, 2005, p. 7). As networks are flexible and adaptable, any "fixed" node or point of connection can change, shift, or disappear. Based on findings from field research, recruitment agencies were found to be examples of such nodes. Formal and informal recruitment agencies, with shifting ownership, changing employees, and evolving advertising methods all contribute to the complexity surrounding migrant labor. Furthermore, the shifting character of recruitment agencies comes in part from the large number of different actors with which they interact. From skilled and low-skilled job seekers, to other competing recruiters, to client employers and sub-contractors, to government agencies and NGOs, recruitment agencies are central components in these networks and are often the means by which important information does (or crucially does not) reach vulnerable job seekers. To understand how knowledge and information about migration practices and trafficking risks accumulates and moves among the Filipino population, this section documents the myriad ways recruitment agencies come into contact with these other actors.

It is important to keep in mind as we discuss formal and informal recruitment agencies, that the process of migrant job recruitment is not synonymous with labor trafficking. Recruitment agencies are not always facilitators of trafficking activities. Furthermore, though the research indicated that formal and informal recruitment agencies are central to shaping how information flowed to and from job seekers, they do not neatly correlate with trafficking risks. That is, it is possible for formal channels to end in labor trafficking, just as it is possible for informal channels to result in legitimate employment. This condition makes other indications of trafficking risks all the more important to identify.

Recruitment agencies can play a positive role for potential migrant workers, such as matching skills with labor market needs,[28] providing information and training, and protecting them from bureaucratic problems such as visa overstays (Agunias, 2010). In

the Philippines, recruitment agencies must first be licensed through the Philippines Overseas Employment Administration (POEA), a government agency responsible for regulating, overseeing, and monitoring licensed recruitment agencies, of which there are thousands currently in operation. Recruitment agencies in destination countries are also required to register with the Philippines Government to obtain licensing. Job seekers can come in contact with recruitment agencies through online job searches (for more discussion see Section 8) or through more traditional media outlets, such as newspapers and magazines. Job fairs also offer a means to connect job seekers with agencies (Agunias, 2010), and are particularly popular in provincial areas. A number of job seekers interviewed by the research team heard about potential jobs through word of mouth, family and friends, or flyers distributed in their community.

Crucially, many means of recruitment are utilized by formal and informal recruitment agencies. One female survivor of domestic servitude in Qatar explained how she found out about the job through flyers:

Interviewee: [I found out] Through flyers, flyers.

Researcher: So you saw flyers where?

Interviewee: In [my community] before, all of the agencies are going to the municipality then they are just giving the flyers in the barangays like that.

Researcher: So there are paper flyers that you are getting?

Interviewee: Yes, flyers only ma'am, then they will conduct an interview in the municipal hall.

Thus the low-tech paper flyer serves as a way to disseminate information, gain attention, and coordinate recruitment activities.

Individuals who seek jobs through informal channels may experience expedited migration, but are potentially disconnected from the verified information and support networks offered under an accredited recruitment process. An informal migrant worker might

instead connect with a recruitment agency that could be unlicensed or have been suspended or delisted by the POEA. Job seekers might even sign a contract under an informal process, and attend some sort of pre-departure orientation seminar. However, these steps are used as a guise to appear legitimate, despite not being licensed by the POEA.

Potentially complicating the flow of information to job seekers is the prohibited practice of employing "4th party recruiters." Official POEA-certified recruiters will occasionally employ independent contractors to facilitate the recruitment process, specifically in rural or impoverished areas. This 4th party recruiter will usually be a trusted community member or neighbor. In some cases, 4th party recruiters will offer, in exchange for a fee, to expedite and prioritize the processing of the job seeker's paperwork. They offer to help the job seeker navigate the complex POEA process, or in some cases jump what appears to be a long and slow line at the recruitment agency. They refer to these fees as security, broker, and/or processing fees, and they can amount to a substantial sum of money. Because this practice is prohibited by the POEA, recruiting agencies avoid any formal links with such 4th party recruiters.[29] Therefore, 4th party recruiters can create yet another point of vulnerability for job seekers. Further, informal or non-accredited agencies may also employ 4th party individuals to facilitate irregular or unscrupulous recruitment.

Management of recruitment and other services for OFWs - Philippine Government Actors
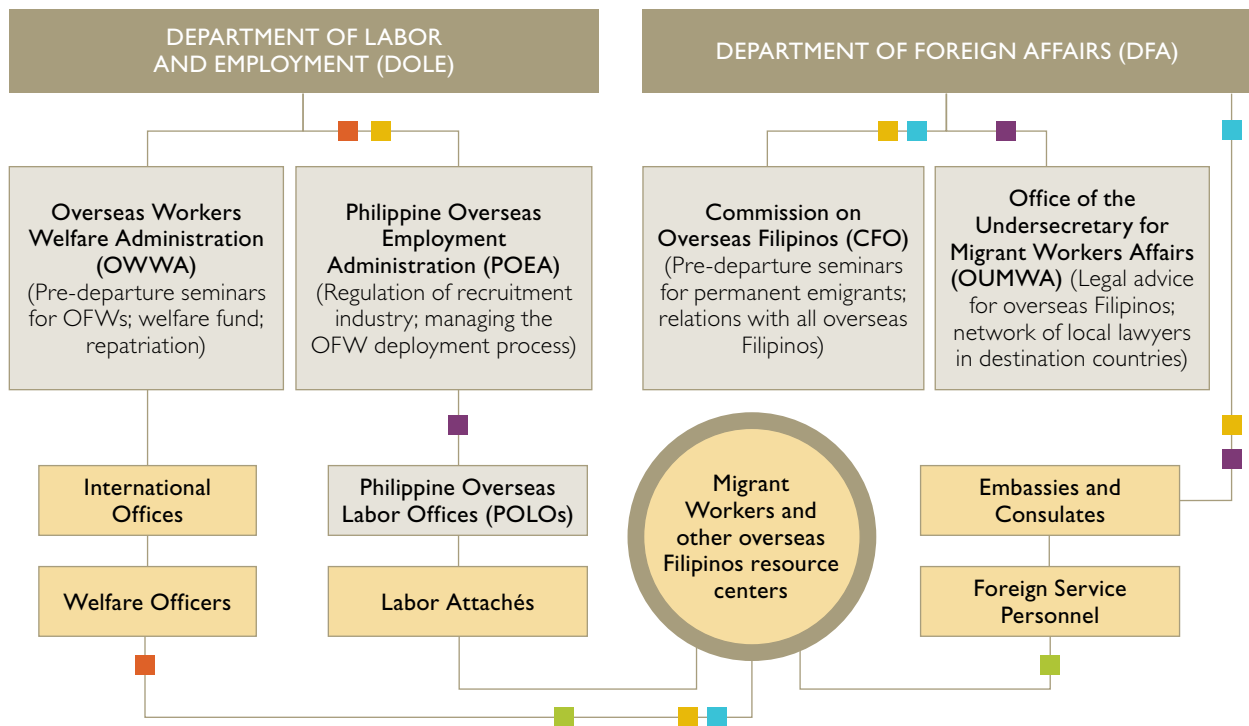
A number of government institutions have a role in overseeing the recruitment of OFWs and ensuring their protection overseas. The POEA and the Overseas Workers Welfare Administration (OWWA) monitor and coordinate the recruitment, deployment, and training of OFWs prior to departure. The Commission on Overseas Filipinos (CFO), the Office of the Undersecretary for Migrant Workers Affairs (OUMWA), and the Philippine Overseas Labor Offices (POLOs) provide and coordinate official assistance, including legal help, for OFWs in distress in many destination countries.

Sources: Department of Labor and Employment, Department of Foreign Affairs, Philippine Overseas Employment Administration, and Overseas Workers Welfare Administration. Note: Bangko Sentral ng Pilipinas (Central Bank) that regulates the remittances industry and the Overseas Absentee Voting Secretariat connected to the Commission on Elections (COMELEC) which monitors Philippine elections are not shown here.

## COMMUNICATION AND INFORMATION FLOWS IN THE RECRUITMENT NETWORK

Researchers identified several sources of potentially helpful information and communication between different actors in the recruitment network. Information portals for migrant workers are predominantly managed by government agencies, NGOs, or for-profit organizations, suggesting multi-sectorial engagement and coordination on migrant worker issues. Internet and communication technologies have a central role in facilitating these flows alongside more traditional means.

The researchers posit that there is a potential to strengthen and enhance these existing information and communications flows in order to help rebalance information asymmetries (and therefore power relations) between different actors in the recruitment network. However, the researchers caution that independent evaluations of existing information and communication

efforts should occur before steps are taken to address perceived weaknesses. This is discussed more fully in the section *Overcoming Barriers to Information and Communication Flows*, below.

Before and During Recruitment - Disseminating Information and Training

The Philippines Overseas Employment Administration (POEA) is required to provide transparent information about recruitment agencies to the public. It monitors recruitment agencies and rates them on their website according to eight distinct categories: good standing, delisted, cancelled, forever banned, inactive, revoked, suspended, or denied renewal. The POEA also lists any foreign recruitment agencies that have been blacklisted due to illegal or abusive practices. The images below are screenshots from the POEA website's (www.poea.gov.ph) search results for the status of recruitment agencies.
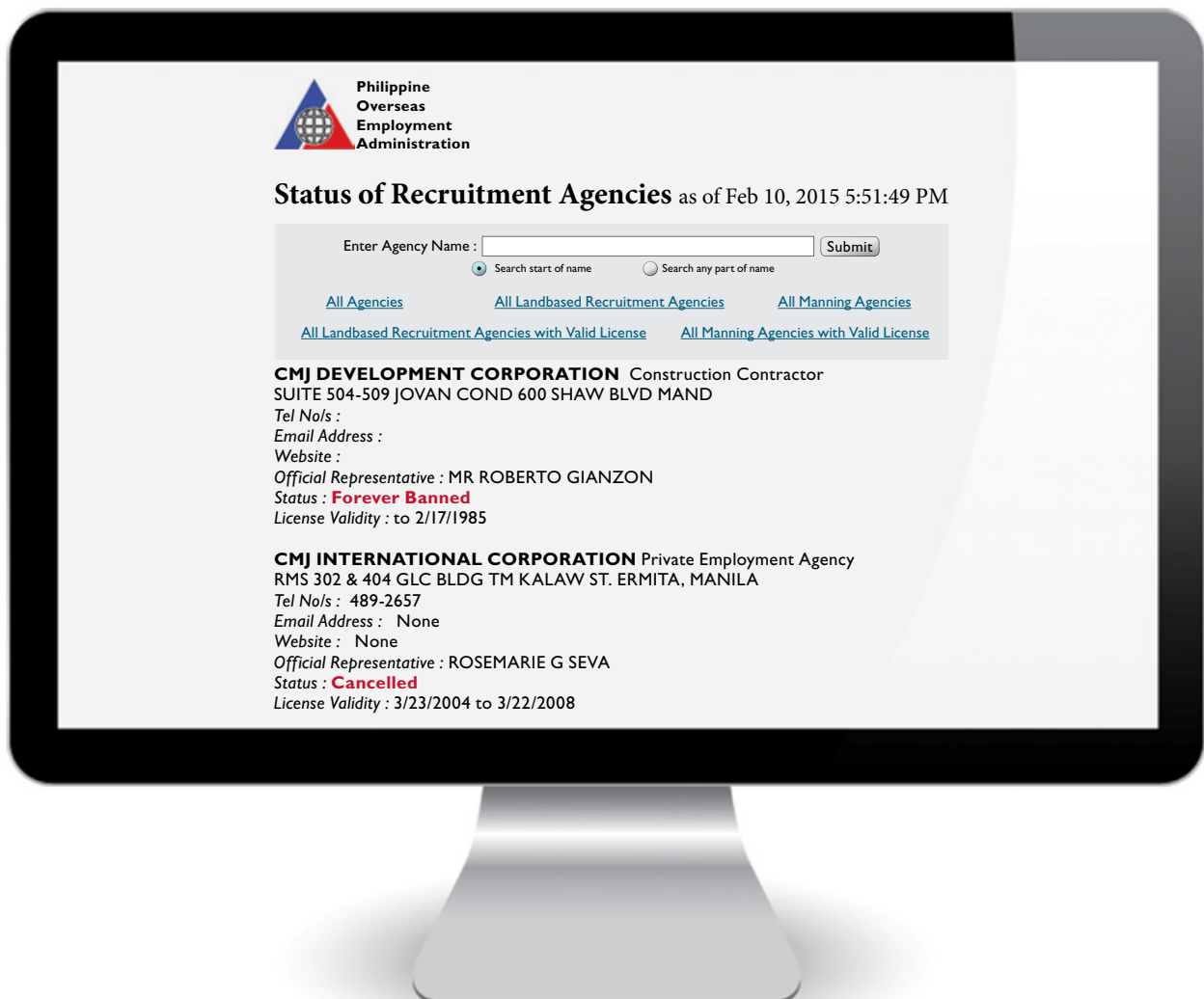
In March 2014, the POEA created a free mobile app that allows individuals with a smartphone to access information on the status of a recruitment agency, active job orders, as well as information about illegal recruitment and how to identify an illegal recruiter. The app is overseen by workabroad.ph, one of the largest online recruitment sites (discussed in Section 8 of this report) in the Philippines. The app does not have any feature for the reporting of abuse, but does provide information on the POEA hotline (722-11-44; 722-11-55). Another government agency, The Commission on Filipinos Overseas (CFO), is responsible for developing and disseminating national awareness raising campaign materials and trainings.[30]

"According to some of the NGOs and trafficking survivors interviewed for this project, job seekers and OFWs are more **inclined to trust** the opinions of those posting on these job forums and Facebook than the official policies of the POEA."

The Pre-Departure Education Programme (PDEP) provides another main touchpoint for migrant workers, and is mandatory training for all departing Filipino migrant workers. The programme offers two types of training. The first is a Comprehensive Pre-Departure Education Programme (PDEP) for Household Service Workers (HSWs), which includes classes on language, culture familiarization, and stress management. The second is country-specific Pre-Departure Orientation Seminar (PDOS) for Filipino workers departing to Hong Kong (China) and the Middle East. At PDOS participants receive information about contracts, the destination country, and "stages of the OFW's life, health and safety, airport procedures and government programmes" (ILO, 2013c). PDOS in the Philippines are managed by the Overseas Workers Welfare Administration, (OWWA) which accredits PDOS providers like recruitment agencies and NGOs.

OWWA also oversees the standard training modules for organizations to use. Information on PDOS advisories, providers, and materials can also be accessed from OWWA online (ILO, 2013c). Some seminar organizers will help migrant workers open bank accounts so that they can easily send money back home. Post-arrival orientation seminars (PAOS) at the consulate in the destination country are also sometimes offered, and can cover topics such as financial management, saving schemes, and remittances. The Embassy or Consulate may work with migrant associations, church groups, and the private sector in the destination country to organize the orientations (ILO, 2013c).

The Migrant-Worker Overseas Workers Welfare Administration (OWWA), in partnership with Microsoft, created the Tulay or Bridge Education Program in 2004. This program provides overseas Filipino workers and their families with basic IT training and access to technology so that they can communicate with one another using the Internet and find employment once they return to the Philippines. Trainings are available in 37 training centers and a handful of overseas offices, including Taiwan, Hong Kong, and Saudi Arabia.

Researchers for this project observed that job seekers in the Philippines use Facebook and Yahoo! to search for employment overseas. However, the POEA is unable to monitor all postings on job forum websites, thus leaving much of the responsibility for verifying the legitimacy of various recruitment agencies to the job seeker. **According to some of the NGOs and trafficking survivors interviewed for this project, job seekers and OFWs are more inclined to trust the opinions of those posting on these job forums and Facebook than the official policies of the POEA.** As one interviewee explained: "There is a sense of legitimacy if it comes through Facebook – it is all about presentation. [Filipinos] won't contact the POEA to see if the company is legitimate." It is worth noting that the POEA also has its own Facebook page, which concentrates on posting overseas job opportunities along with occasional information about destination countries.[31]

It is interesting to observe from this set of examples that migrant workers, government agencies, and NGOs share much of the responsibilities for communicating safe migration and counter-trafficking messages. Apart from official policy statements from the Philippine Government (see ILO, 2013c), there was little mention from interview subjects of the role of recruitment agencies and/or employers in providing comprehensive, transparent, and accountable information for migrant workers, despite being central points of connection for job seekers.

After Recruitment -
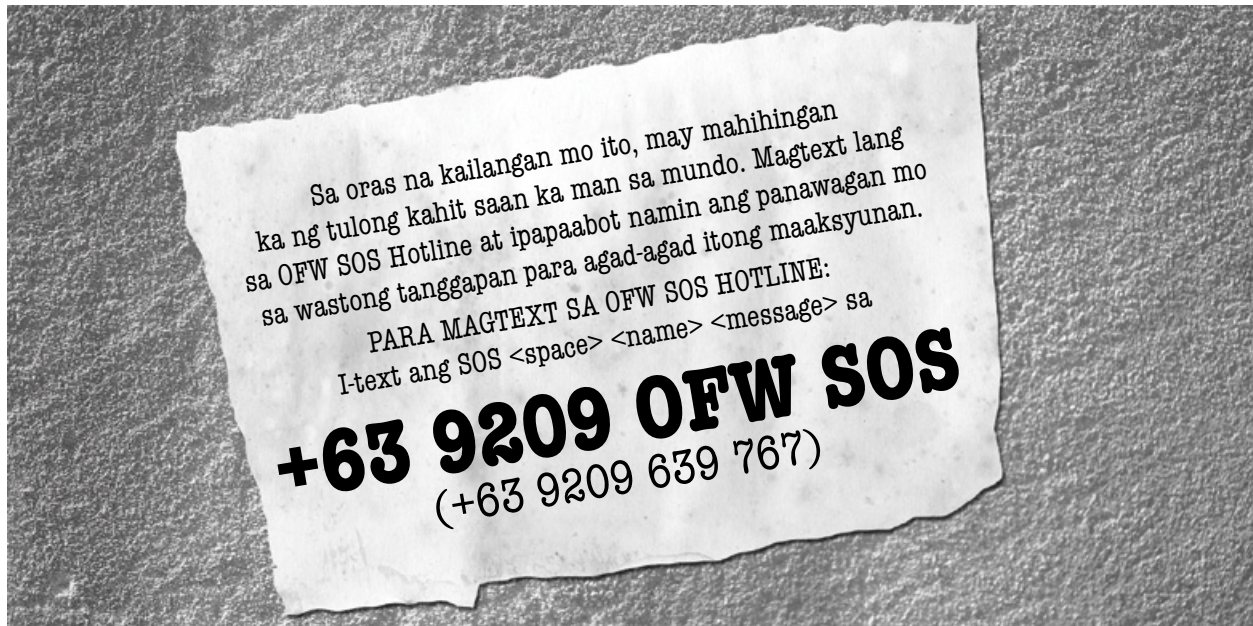### Accessing Information and Assistance

The Commission on Filipinos Overseas (CFO) operates the main human trafficking hotline (1343). Since 2011, they have received over 25,000 calls to the hotline, which has led to approximately 300 actual cases from which 250 individuals were assisted. In 2014, CFO created a mobile app (in addition to the phone and text hotline). Since the mobile app was released, CFO have identified three additional human trafficking cases. One of these cases involved a domestic worker in Jordan who had her SIM card confiscated upon arrival by her employer. She was able to access the family's wifi account and found the 1343 actionline mobile app and reached out for help. She did not know the address of her employer, but after sending pictures of her surroundings, the local embassy was able to locate and rescue her.

Interviewees reported that Facebook and social media have also been used to assist migrant workers in distress. Facebook has been used to alert family, friends, government agencies, and service providers, about experiences of abuse and exploitation. This includes sharing evidence online – videos and photos – in order to document the abuse. According to stakeholders, as a result of increased social media usage, referrals for assistance to both government agencies and NGOs have gone up from both victims and victim's families. However, online evidence first needs to be verified by authorities, including consulate officials and the POEA.

The Blas F. Ople Policy Center and Training Institute works with the POEA, the Department of Foreign Affairs, and Department of Justice Inter-Agency Council Against Trafficking to try and reduce illegal recruitment and combat labor trafficking, and provides assistance to migrant workers by accompanying them to court hearings and facilitating the flow of legal, financial, and health services.

Created in 2012, OFW Watch, which is operated by a for-profit company, is a free, open-source mobile platform that allows overseas workers to download a contact list of other overseas workers located near them. The app also maps where the individuals are located in real time so they can be more easily found. A participating OFW's phone and Facebook account are registered, and, if there is no activity on their Facebook account for a pre-set length of time, OFW Watch staff are notified. In addition to reporting abuse through the mobile app, workers can also report abuse via OFW Watch's Facebook page or through their website. The information is then verified and sent to the local embassy. As the founder of OFW Watch, Myrna Padilla stated, **"If you know you are alone, and get into trouble, you become weak. But, if you know you have a support network, then you become strong because you know you have someone around you [to help you]."** Although this site has never been formally

Sa oras na kailangan mo ito, may mahihingan ka ng tulong kahit saan ka man sa mundo. Magtext lang sa OFW SOS Hotline at ipapaabot namin ang panawagan mo sa wastong tanggapan para agad-agad itong maaksyunan.

PARA MAGTEXT SA OFW SOS HOTLINE:
I-text ang SOS <space> <name> <message> sa

+63 9209 OFW SOS
(+63 9209 639 767)

evaluated for its effectiveness, several domestic workers have received help through the mobile app and/or website, http://www.ofwwatch.com.

Launched in February 2006, SOS SMS, a non-profit tech solution, was the brainchild of two overseas Filipino workers based in Saudi Arabia who were working for a telecom company. This hotline is overseen and maintained by the Center for Migrant Advocacy (CMA). In their first year, they received over 1,000 texts; however, due to the high cost of sending an overseas text, and the apparent turn to the Internet and various social media, the number of texts has dwindled over the years. CMA currently receives 2-5 texts a day, and a number more through their Facebook page. Once a text is received, CMA will verify that it is a valid case and will then forward the information to the local embassy.

While this is by no means an exhaustive account of all information and communication flows operating within the recruitment network, the adoption of Internet and communication technologies by government, NGOs, migrant workers, and the private sector is apparent. What is not yet clear is exactly how migrant workers are choosing to use (or not use) these information and communication flows to inform their decisions and

behaviors. Further research is needed to understand to what degree migrant workers, particularly the most vulnerable, are accessing these information platforms, and in doing so, are adopting behaviors conducive to safe migration and risk-mitigation.

Trust and Connectivity

During research, a common theme emerged indicating that peer-to-peer communication between migrant workers – at home and overseas – is a type of information flow that does indeed strongly influence behavior, such as whether to choose a "trusted" recruitment agency or migrate to a particular country. A site visit and interview with a leading local NGO highlighted the theme of trust in communication networks. An attorney and two social workers explained that Facebook in particular provides a powerful means for their beneficiaries to expand their social network and has become an important mechanism for reporting abuses. OFWs reportedly access Facebook, particularly via their mobile devices, to contact this NGO directly. Thus one official said, **"the Internet provides a new way of assessing vulnerability."**

Despite its apparent benefits, Facebook was said to also play a role in enabling informal recruitment. The NGO officials interviewed said that some of

their beneficiaries were contacted by unaccredited recruiters via Facebook. Facebook was primarily used by the recruiter to make first contact. This was often a first step to gain other points of communication with the job seeker. According to the social workers interviewed, it is common for Facebook contacts to solicit phone numbers. Afterwards, the recruiter can use a series of conversations to establish trust and push a decision to migrate.[32]

ISOLATION, INFORMATION ASYMMETRIES, AND COMMUNICATION GAPS

Information asymmetries and communication gaps lead to an imbalance in power relations between those with information and knowledge and those without. As the following examples demonstrate, migrant workers who do not have access to the same set of information as recruiters and employers can go on to experience a number of negative experiences, including potential indicators of trafficking such as the imposition of high recruitment fees (and debt bondage), loan-sharking, contract swaps, and social isolation. These conditions warrant closer investigation because, while on their own they are not necessarily confirmation of a labor trafficking case, they may contribute to conditions of labor trafficking.

Recruitment and Placement Fees

Recruitment agencies are prohibited by law from charging recruitment fees to those seeking jobs in domestic work. However, all of the domestic workers interviewed for this study were charged placement fees, ranging from one month's pay to a year's pay. In one case, a domestic worker in Singapore never received any money despite working for over a year. Domestic workers interviewed also stated that they were not informed of the law prohibiting the charging of a recruitment fee before or during their job seeking process. Some recruitment agencies, according to interviewees, will even "help" individuals set up bank accounts to wire fee money back to the recruitment agency. One service provider stated that, "recruitment agencies hold the worker's passport during the course

of applying for the job and appropriate visa, and do not give it back to the worker until the recruitment fee is paid." While this practice is not tied specifically to communication technologies, it is dependent on the maintenance of a specific information asymmetry between job seeker and recruiter.

Loan Service Providers and Contracts

The practice of setting up loans for job seekers can also be the source of imperfect and misleading information. One individual interviewed by researchers described how complications arose around the payment of a legally-obliged one month placement fee:

Interviewee: I paid for the placement fee. I just borrowed it from the lending [bank].

Researcher: And the lending bank that you got the money from, was it connected to the recruitment agency that you went through?

Interviewee: Maybe…that's why when I go to the office of the lending it's ready, it's ready.

Researcher: So your name and information it's all ready? Even before you gave them your information?

Interviewee: Yeah, it's all ready.

Researcher: So, before you said yes to the loan it was magically ready?

Interviewee: That's why…when they call me… you need to go lending because you'll go out on Sunday.

Researcher: … [W]hat…[were] you think[ing] when you had-- they had this loan ready for you already?

Interviewee: I don't think I'm excited there, a little bit nervous because…that's for the future of my family there …

Researcher: Okay, so, you signed it, the loan, was there any interest on the loan…?

Interviewee: They told me when they go there it's five percent but when we came back [it went] from 63,000 it become 83,000… in just six months.

Both recruitment fees and loan sharking practices might not constitute labor trafficking. However, in cases where job seekers have already traveled, or transmitted personal documents, a mis-represented fee or loan can be used as leverage against a worker, and potentially increase their risk of labor trafficking.

Contracts issued to a migrant worker in the Philippines may be swapped for a different contract once the migrant arrives in their country of destination. Employers may also verbally express conditions different from those in the initial contract. For example, one migrant worker interviewed was handed a different contract than previously negotiated when he arrived in Saudi Arabia. The new contract reduced his salary and required him to pay for housing, food, and transportation – all costs that were to be subsumed by the employer in his original contract. In this particular case, the job seeker refused to sign the new contract and was sent back home.

Only two domestic workers interviewed by researchers for this report signed any contract prior to departure. They reported that they were not given sufficient time to read the contract before signing it.

One individual who worked as a domestic worker for a family in Qatar explained what happened when she arrived at her employer's home and was faced with a very different situation than she expected:

Interviewee: [When I signed the] contract [and it was just] two babies but when I get there they have a six children, six, five, and the-- then 20 days is the younger…six children, then her-- their mother, their father then their brother. The brother that already have family also.

Researcher: So how many people in the home?

Interviewee: Maybe one, two, three, four, but they got just only one children, their brother. But my employer has six children. 13 people in the house.

Researcher: Were you the only domestic worker in the home?

Interviewee: Yes ma'am, I'm the only one.

Researcher: So how did you feel when you got there…?

Interviewee: After that I told my employer, can I call my agency? Then my employer asks me why. Because sir, I got a contract in the Philippines … but then he did not give me the number of the agency.

Communication access and network isolation
Social isolation and restricted access to communication technologies is a documented reality for many migrant workers. Recent case studies of the Filipino migrant workers in Kuwait (International Human Rights Clinic, 2013) found "accounts of agencies advising sponsors against providing domestic workers with mobile phones, warning sponsors that such a luxury would spoil the worker" (International Human Rights Clinic, 2013, p. 42). **As one stakeholder stated during this project's field research, "one of the first signs of exploitation and abuse is when the person has been completely cut off from the rest of the world."** According to Philippines law, it is illegal to restrict communication of overseas workers, which

includes the confiscation of cellphones. The individuals interviewed below, however, were told prior to departure that they would not be able to use their cellphone and that their communication would be limited. Based on this knowledge, they provided instructions to their family about what to do if they did not communicate with them over a period of time.

Interviewee 1: Because before ma'am the agencies are very strict on mobile phones... [W]hen you reach the agencies in the country, in the country destination overseas, they will get your phone.

Researcher: They take your phone from you?

Interviewee 1: Yes ma'am. But before when you are here in Manila the agencies are telling you...its strictly...no phones allowed.

Researcher: So [the recruitment agencies] said no phones are allowed when you go overseas... did that make you nervous?

Interviewee 1: I am almost scared....I told my parents that if they will not hear a news from me or I cannot call you for a month then you have to go...to my recruiter or to the agency.

Interviewee 2: For me I am only lucky with my employer because...when I arrive in the house she let me call to my family...I was not able to use cell phone for one year only my, only employer's phone.

Interviewee 3: In my first employer ma'am I never called my family...for two months.

Trust was a major theme in an interview with a female individual conducted at a shelter and rehabilitation center run by an NGO just outside Metro Manila. Living in the provinces with a incomplete high school education, she communicated via mobile phone to a friend who had already migrated to a country in the Middle East. The friend suggested she could also find work as a domestic worker and connected her via mobile phone with a broker/recruiter who would coordinate her journey on behalf of the employer. At various points in the migration process, she became

alarmed and texted her friend in the Middle East, who told her that the situation was normal and everything would be alright. For example, her handler said she would be given the proper work visas and travel to the destination country by plane. Instead, on the day of her departure, she was told she would be traveling first to Malaysia by boat where she would then receive the travel documents. She was transported from island to island across the Sulu Sea over the course of about a week. She texted her friend when possible who consistently reassured her. She did not contact her family back in the Philippines during this time, saying she "did not want them to worry." Thus she isolated herself from her broader social network, even though she was potentially connected via her mobile phone.

Once in Malaysia she was put up in a hotel room for a number of days. Again she frequently texted her friend (and only her friend) for reassurance. Eventually she was placed in a van by another set of handlers, but this vehicle was then stopped by Malaysian police. The group was arrested, interrogated, and put in a Malaysian jail for three weeks. She was able to hide her cell phone when entering the jail. With barely any charge left on the phone or phone credits she texted her friend who found a way to contact Philippine officials in Malaysia who eventually managed her release and repatriation. Upon arrival in Manila, she was interviewed by Philippines officials and was taken to an NGO which has an office stationed at the international airport. She is now at a shelter participating in a rehabilitation program.

In this example, the importance of the mobile phone is striking. The phone served as a virtual lifeline for this individual. However, the over reliance and trust of one channel of communication, one source of information, and only one point on the network, seems to have increased this individual's vulnerability to the tactics of trafficking. One cannot know for certain if more access to communication channels or platforms, or more sources of information would have made a difference in this case due to the reported education and skills level of the individual.

A survivor of domestic servitude (previously mentioned) who worked for a family in Qatar explained how opportunities for communication became restricted:

Interviewer: And he [the employer] took your phone away, right?

Interviewee: Yes ma'am...After that I worked for four months to them.

Interviewer: Four months and you weren't able to call home?

Interviewee: No, I never...

Interviewer: ...what [of] your family, like you said, one month if you don't hear from me call the recruitment agency.

Interviewee: Yes ma'am. But my family also is not aware of what's happening.

Interviewer: ...Did you get paid at all during those four months?

Interviewee: They did not pay me for two months, only the two months.

Interviewer: Like as you said the two months will be going to the recruitment agency?

Interviewee: Yes ma'am.

Interviewer: And how did they treat you overall?

Interviewee: They abuse me because the wife is very jealous...Every morning she scolded me because why the baby is crying...and there are lots of laundry, washing it then their house is dirty...I'm just one person I don't know what to do first.

Interviewer: So were you scared during this time?

Interviewee: I became so scared because the wife always slaps me like that if the baby is crying.

Interviewer: And did you try to find help, did you try to...

Interviewee: I tried ma'am but then I tried but they are not letting me go outside the-- their house, I'm just only in the house.

Interviewer: You never left the house at all?

Interviewee: Yes ma'am, never once.

OVERCOMING BARRIERS TO COMMUNICATION AND INFORMATION FLOWS

At time of writing, the POEA recruitment agency database contained 3,540 records – a sizeable amount in need of monitoring and regulation. During interviews with some stakeholders, government efforts to provide information about recruitment agencies were criticized for being inaccurate, confusing, and contradictory. Individuals interviewed pointed to underlying governance and management issues as reasons for the provision of potentially misleading information. Similarly, government-run hotlines have been criticized by service providers for being under-resourced and ill-equipped to deal with the volume of calls and requests for assistance. While the Philippines Government has a dedicated budget for migrant worker assistance programs, it may be that NGOs and the private sector, with support from the donor community, will need to continue to compliment government programs until such a time when the government has adequate resources and capacity to sustainably fulfill its mandate.

Peer-to-peer networks have also been identified as important sources of information and communication for migrant workers. Consideration should be given to strengthening the online presence of such peer networks. The collaborations between Google and the NGO the Blas F. Ople Center, and Microsoft and the Migrant Worker Overseas Workers Welfare Administration offer encouraging signs. At a site visit in Manila, a researcher attended the Ople Center holiday event for OFWs, which drew hundreds of OFWs and their families, plus representatives from government, NGOs, and intergovernmental organizations. Microsoft Corporation and Google played a highly visible role at the event, speaking to the audience about the role of their respective technologies in communicating while overseas. Microsoft promoted a service on a mobile phone carrier that allowed for the free use of Skype, their Internet based mobile communication tool. Staff from Microsoft also gave group and individual demonstrations of Skype and other web-based communication tools. Similarly, Google staff gave brief trainings on Google maps and Google Hangout (their video chat tool). Google and the Ople Center are also launching
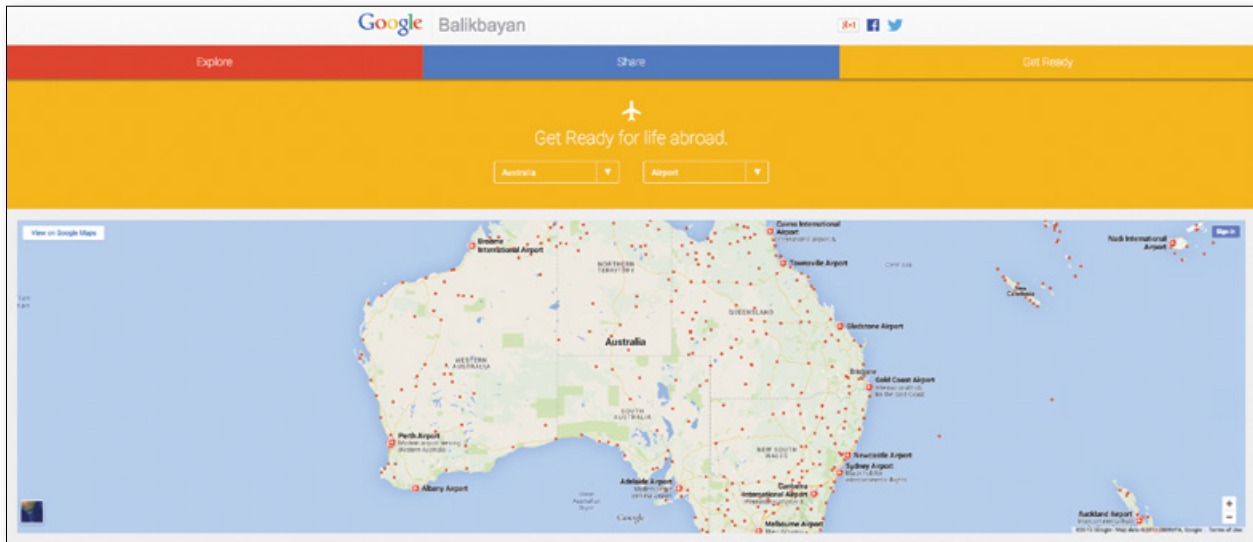
a new mobile app called "Balikbayan" for overseas workers. The app includes a Google maps intended for workers to learn about their destination countries[33].

These collaborations serve to market these products, begin skills development for migrant workers, and open new access points for workers to gather information and build support networks. Such efforts should be researched for their efficacy, and potentially strengthened and expanded.

Building the skills of migrant workers to utilize technology and the Internet to verify information and seek assistance in times of distress can also help counter the misinformation disseminated through social media, Internet, and low-tech tools. Commenting on the previously mentioned TULAY or Bridge Education Program, a public-private partnership that focuses on improving the technological literacy of migrants' families and returning migrants, the ILO states that:

> 👉 Despite advances in communications technology, the problem persists among Overseas Filipino Workers (OFWs) and their families because useful technology remains largely inaccessible and expensive, and/or the family members are not fully knowledgeable of how to make the most of computer and online opportunities. The need for wider knowledge and understanding of information technology is also present for returning migrant workers who could use computers, the Internet, e-mail and relevant software in order to help them with entrepreneurial and employment opportunities back home. (ILO, "TULAY or Bride Education," 2013)

Such communication, social media, and Internet skill building trainings could be integrated, for example, in pre-departure orientation seminars, or at training sites

Ople Center Event Training session

in destination countries. IT skills and tech literacy trainings should be available to the most vulnerable migrant workers, such as domestic and construction workers. Exercising routine quality control over the curricula and implementation of pre-departure seminars by recruiters, NGOs, and government organizations could also help close communication gaps. This would involve comprehensively reviewing existing pre-departure trainings and curricula and issuing up-to-date standardized training programs. According to a report on domestic workers issued by the International Human Rights Clinic:

> ☞ Increased specificity of the training material according to destination country, required skills, and gender of the worker may be necessary. Women will encounter different challenges than men face; domestic workers face difficulties other than those of construction workers. (International Human Rights Clinic, 2013, p. 5)

According to the ILO (2013, p. 21), attempts at assessing and revising the pre-departure program have already been made.

Some stakeholders noted that ethical recruitment agencies are emerging on the recruitment agency landscape. Ethical recruitment agencies do not charge fees to migrant workers, and operate on principles of transparency and accountability. Providing a policy and operational environment conducive to the establishment of more ethical recruitment agencies, and ensuring that they are supported in a timely manner, could be a powerful counter-measure to the unscrupulous recruiters currently in operation both online and off.

Moreover, policy measures could be introduced to ensure all migrant workers, especially domestic workers, have access to communication technologies such as mobile phones, call cards, and the Internet in order to foster free communication and access to social networks. A potential template is a national law the Philippines passed in 2012 that prohibits employers from banning communication for domestic workers. The Republic Act 10361 or "An Act Instituting Policies for the Protection and Welfare of Domestic Workers" (2013) states:

> ☞ Respect for the privacy of the domestic worker shall be guaranteed at all times and shall extend to all forms of communication and personal effects. The act also guarantees "Access to Outside Communication," stating: The employer shall grant the domestic worker access to outside communication during free time: Provided, That in case of emergency, access to communication shall be granted even during work time.

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The policies of many destination countries do not have laws explicitly ensuring communication rights for migrant workers. Ensuring coherence and alignment at bilateral, regional, and international levels on the matter of migrant worker access to communication technologies is a necessary step to enhance protections and rights of migrant workers.

CASE STUDY CONCLUSIONS

The introduction of network technologies is not a panacea for labor trafficking. Groups of actors do not become more ethical simply through a shift to networked communications. As Castells (2005) has argued, organizations like corporations can move from a vertical structure to diffuse, horizontal networks and still maintain the information asymmetries that disenfranchise vulnerable individuals.

In the case of the Philippines, it is clear that negative actors are quite able to make use of network technologies, and that even the use of network technologies by well-meaning actors can unintentionally lead to exploitation. What is more promising for mitigating labor trafficking is the facilitation of new horizontal networks that allow for the emergence of "self-directed mass communication" (Castells 2005) between groups of peers. The capacity for network technologies to enable this peer-to-peer communication to counter labor trafficking is one of the most promising strategies this research has documented.

Finally, it is important to note the connections discovered during on-site field work to the larger globalized frame of supply chains. Specifically, the researchers found little evidence of supply chains having direct or visible impacts in the lives, thoughts, or policies of stakeholder actors in the Philippines. This lack of connection between the lived experience of vulnerable individuals, and the global conditions that drive trafficking, indicates a need for future research that bridges these two different yet related spheres of knowledge.

8. ONLINE RECRUITMENT SITES
for MIGRANT WORKERS

During research into the recruitment process for migrant laborers in the Phillipines, researchers identified online recruiting sites as a primary case of technology's role in enabling labor trafficking. This section offers a preliminary exploration of how employers, job seekers, and recruiting agencies utilize online platforms to find jobs and workers. The purpose of this section is to draw attention to how the Internet is part of the recruitment network constituted by employers, recruiting agencies, and job seekers. Along with legitimate job advertisements, the Internet is also host to intended to deceive and defraud, although indicators of deception in online advertisements are difficult to evaluate.

Researchers conducted a limited qualitative study using direct observations and content analysis of Philippine-related websites. The goal was to catalogue and map the online spaces that make information flows more visible and might indicate risk and vulnerability for labor trafficking. An analysis of Philippine-centered Internet advertising from recruitment agencies, job boards, social media postings, and chat rooms, occurred during the two month period between the 30th of September and the 30th of November, 2014. This analysis is therefore a first step, and provides possible insight and direction for future research.

Online recruiting provides a unique window into the general process of hiring and recruitment. Traditional modes of advertising for migrant job opportunities via local newspapers, billboards, job fairs, and word-of-mouth are still widely used. However, these traditional forms have been joined by advertisements on individual employers' websites, specialized employment websites, recruitment sites, social media, mobile phones, and personal emails. This presents opportunities for faster, more targeted, and further reaching ads that also serve as a less expensive means of finding new employees.

A main source of information related to employment advertising for this investigation was the website workabroad.ph. Workabroad.ph contains a high number of job postings relative to other sites, and is frequently updated with a variety of job listings.

Workabroad.ph serves as a general repository of job advertisements from many agencies, and has attracted almost 680,000 Facebook likes. The website offers a variety of search options, such as by agency, country, and profession. During the two month research period, the greatest number of job listings were in the Middle East, primarily Saudi Arabia, Qatar, United Arab Emirates, and Kuwait. For example, on January 7, 2015, the site displayed 24,284 job postings for Saudi Arabia (displayed across 486 pages, each page also displaying 50 advertisements). In comparison, among all 97 other

countries with at least 1 job advertised, the combined total number of pages was 408, or a total of 20,400 individual job openings across those countries. These posts, however, are not always current and include older posts from approximately three years ago. The posts are also not a representation of all available jobs that one country may have at any given time.

The 5 most represented categories of job openings were: 1. "Others" (8,676), 2. Engineering/Civil/Construction- Building (3,645), 3. Hotel/Restaurant/Food (3,519), 4. Oil and Gas Construction (2,460), and 5. Engineering/Others (2,130). Other professions had significantly fewer job openings: Medical/Nurse (1,675), Service/Domestic (411), Education (306), Administration/Clerical (279), and Medical/Caregiver (49). It is interesting to note that these postings do not match with data that domestic work is a prevalent category for OFWs (see for example IOM, 2013). That online data sources such as this website indicate bias towards certain categories of workers needs further investigation before policy and interventions are developed.

The web site promotes awareness and safety measures in a few different ways and claims no responsibility for the content of job postings as jobs are posted directly by recruiting agencies. Each job advertisement has a link with the banner "how to avoid illegal recruitment" as well as the POEA banner with its two hotline phone numbers. Links are also provided to the POEA's database on the current status of the recruiting agency linked to the job posting.

As previously mentioned, an agency engaged in noncompliant or harmful practices may still continue advertising for job placements. For instance, an agency might have an unresolved or pending court case and thus be allowed to operate until the case comes to conclusion. Alternatively, an infracting agency might settle outside of court, thus avoiding the POEA's derogatory files (e.g., license termination or suspension). Lastly, an infringing agency may simply open a new business under a different owner or purchase an existing, non-sanctioned agency.

The qualitative content analysis for this study did not uncover overt indicators of labor trafficking. The exploratory nature of this research however, revealed significant areas of concern and direction for future research. One issue is the scope and quality of information in job listings. Indicators of possible discrimination and unfair employment may be present, which are naturally dependent on country specific labor/employment laws. The example below provides a snapshot of the content of one job advertisement, description, and requirements:

> Male
> With Or Without Experience
> 21-32 Yrs Old
> At least 169 Cms. /60 To 85 Kg In Weight
> With 20/20 Vision And Not Color Blind /
> Not Left Handed / No Ugly Tattoo
> If Ex-Taiwan No Need To Apply

This physical description was the only information provided in this particular job posting. Yet, even with such limited information, this posting had 84 user comments from interested job seekers eager for an interview. Many left private information, such as

personal telephone numbers, emails, and Facebook links in the open comment box. Such exposure via open online sources is reason for concern. However, since job advertisements like this one do not provide any job description, terms, or conditions of employment, their relationship to human trafficking and exploitation is difficult to gauge.

In another example of job advertisements on workabroad.ph, applicants are directed to apply for positions online and prompted to provide private information and documentation:

> Interested applicants may send their Updated Resume with Picture at @gmail.com. Do not forget to include/attach other important documents such as Certificates, Scanned copy of Passport, NBI/Police Clearance, College Diploma and other supporting documents available.[34]

Again, from a privacy perspective, the request for personal identifying information and formal documents is concerning.

In the authors' interviews with victims of human trafficking and forced labor, several participants indicated the role of recruiting agencies in enabling trafficking. In analyzing social media and chat rooms that attract potential migrant workers or current and former OFW, there was a clear indication of people communicating with each other about their experience with recruitment agencies. Below is a comment posted on one blog:

> ☞ *Please beware of scammers! I have been a victim of one of the post here for urgent hiring. It is so sad to know that there are people who collect money from the applicants and after they get the money agreed, they will ask another fee for the visa processing. They will refer you to an immigration agency which is not real. Please be mindful in applying to job offerings.*

According to some anecdotal evidence gathered during field interviews, recruiting agencies themselves can fall prey to online fraud. In one interview, the owner of a recruiting agency in Manila told researchers about a case where an individual used the agency's online job advertisements and information to re-advertise and impersonate an agency employee. This individual was able to recruit 76 individuals for the advertised position via Facebook and collect 10,000 Philippine Pesos (little over $200) from each. The individuals were then directed to come to the agency for an in-person interview. Upon learning of this, the agency alerted the authorities and posted a public warning to their Facebook page instructing interested job seekers on how to reach them directly. The agency's management was also able to provide small assistance funds to those impacted by the scam.

These examples signal the potential for exposure and risk in online recruitment as well as illustrate the different ways people can be deceived or defrauded. Interviews indicated that these same techniques can be used not simply to defraud, but to lead a job seeker into human trafficking or conditions of forced labor. Putting sensitive information, as well as identifying documents into the hands of traffickers or exploitative employers, may enhance their power and control over the job seekers they target. Such practices may augment a job seeker's vulnerability to exploitative or harmful situations.

In order to better understand and analyze the role of online job advertisements and recruitment, further research is needed using quantitative and computational techniques such as data mining and analytics. For example, researchers could collect large data sets of advertisements and match them against information about known illegal recruiters or unscrupulous brokers. Data could be collected on various online message boards known to identify bad actors or individuals at risk of labor trafficking. Such research would require consideration of privacy concerns and other protections around collecting data on vulnerable populations.

9. EXPLORING DISASTER (and CONFLICT) and VULNERABILITY

This research project also sought to explore the relationship between technology and labor trafficking in the context of disasters and crises. The use of new technologies in the response to disaster and/or crisis situations is a burgeoning research area of growing global importance. Due to the perennial threat of tropical cyclones (typhoons) and other natural disasters, the Philippines is a prime candidate for the study of climate related events and their potential role in labor trafficking.

Researchers for this report intended to investigate the use of technology in response to super typhoon Haiyan, known in the Philippines as Yolanda, which struck the nation in November 2014. Yolanda was reportedly the strongest storm ever recorded and left approximately 6,300 dead as it devastated the eastern region, particularly the cities of Ormoc and Tacloban on the island of Leyte. During the field research for this report, a planned trip to the eastern region was delayed due to Typhoon Hagupit, known in the Philippines as Ruby, which made landfall on December 6, 2014. The storm was first predicted to be massive. Intense preparations occurred, including the reported evacuation of 1 million people from areas prone to storm surges. The actual impact was less severe; the storm was downgraded, and a large-scale disaster was averted. Because the airport in Tacloban was commandeered by the Philippine military during research operations, the principal researcher spent time in Manila interviewing organizations mobilizing a response, then flew to Cebu City to observe the crisis operations, took a ferry to Ormoc City to interview NGOs and INGOs, and finally took a local van to Tacloban.

Jonathan Corpus Ong and colleagues are currently conducting pioneering research on technology responses to typhoon Yolanda. The project uses ethnographic methods for an 18-month assessment of communication technologies in disaster recovery and humanitarian interventions (ESRC, 2014). Ong (2014) has found that residents of the Tacloban area use social media (via mobile phones) to express both gratitude and criticism of the relief and aid organizations and efforts.

Emergency.lu setting up satellite communications after a disaster.

The Communicating with Disaster Affected Communities (CDAC) Network has produced a comprehensive Typhoon Learning Review in November 2014 (CDAC, 2014). Members of the CDAC Network include organizations such as UNOCHA, IOM, and Thomson Reuters among others. The researchers evaluated "Communicating with Communities" (CwC) efforts and initiatives both in the preparation for Yolanda and after. The Learning Review found, for example, that radio remains instrumental in disaster communications. Thus simple communication technologies are important for local communities, just as advanced technologies like satellite phones and internet access are in times of disaster.

Researcher: Post Hiayan, was there an increased need to migrate or seek labor elsewhere?

Interviewee: Even before Haiyan, many people have been leaving this city to find a job. Not only in the city but in the rural areas, because we are one of the impoverished areas of the country. After Haiyan many companies have closed and of course people had no work, 19k workers affected. To help people recover, the gov't has offered a lot of jobs fairs. Thousands of people attended those fairs to look for a job. And the majority of those are overseas. I was busy covering those days because there were job fairs every week.

I reported on it and many recruitment agencies offering overseas work because they want to help jobless victims of Yolanda.

Researcher: Do you know how people heard about the job fairs?

Interviewee: Through the radio. Although many radios were also washed out during Yolanda. Those hearing the radio text their friends then the announcement was spread over the region and people came. The Typhoon helped the government find out about civil registration. They found out many people do not have…marriage certificates.

I also heard reports about illegal recruitment, especially in rural areas. Because people are not educated, and easily believe the enticings of illegal recruiters.

Researcher: Do you feel that illegal recruitment was worse after Haiyan?

Interviewee: It was worse, after Haiyan. Because parents they compelled their children to go with illegal recruiters because they have no money…their dad lost their job and they have no money.

Multiple communication technologies such as radio to text were instrumental in spreading the word about recruitment. Currently the IOM, USAID, and World Vision are engaged in a study which explores the relationship between the disaster zones and labor trafficking. This is urgently needed in a region where the next typhoon or other climate related event is not far behind.

During Typhoon Ruby, the digital response was highly publicized and could serve as a harbinger of future responses worldwide. During the typhoon, the UN activated Micromappers, a project from Qatar Computing Research Institute and the Standby Task force, led activities such as examining the Twitter feed to identify potential needs and crisis situations.[35] They provided an online platform that filtered Twitter posts and allowed volunteers to tag crisis incidents, which

were then visualized on a map. Other examples include Google deploying its people finder and UNOCHA coordinating the use of unmanned aerial vehicles (UAVs) or drones to survey affected areas.

What remains unexplored is how data and technologies used in disaster response can be leveraged for longer term human rights issues like human trafficking. Interviews with relief organizations, such as Catholic Relief Services, suggests these organizations have started using tablet computers (iPads) to collect data on beneficiaries for both Yolanda and Ruby (CRS, 2014). Other relief organizations are utilizing similar technologies to collect data on individuals in disaster zones. These efforts essentially map out vulnerabilities among populations that may never have been accounted for in this fashion. Data collected include digital images, demographic information, cell phone numbers, etc.

New possibilities can be explored for tracking vulnerable populations both at times of disaster and leveraging that data for long term interventions. The local journalist states: "The disaster really opened the government's eyes, because of the deployment of people they were able to see those problems." The influx of relief efforts workers, collecting data on the ground as well as from the air (with drones) can provide unprecedented visibility to disaster

affected populations. This data can be useful for those with human rights interests in the area – from local governments to local NGOs.

But what happens to this data? What is included in the data? How long is the data retained once the relief efforts end? Can the data be utilized or shared with organizations focused on labor trafficking issues? More crucial questions arise regarding who would have access to that data, how it would be secured, and how privacy would be preserved. As with all cases of data and human rights, particularly when vulnerable populations are concerned, great care is needed to examine potential, unintended consequences, privacy, surveillance of already marginalized populations, informed consent, and the handling of personally identifiable information.

http://irevolution.net/tag/micromappers/

CONFLICT and LABOR TRAFFICKING VULNERABILITY

The role of technology in communicating with migrants caught in conflict and war-torn areas is a potential research area of growing concern. In 2011, the start of the Syrian Civil War resulted in a repatriation effort led by the Philippines government and the International Organization for Migration (IOM) of nearly 4,000 Filipino migrant workers from Syria.

The repatriation operation proved to be difficult and slow, impeded by non-cooperative employers and a lack of information on the whereabouts of OFWs, most of whom were women working in private residences. According to the Philippines Inter-Agency Council Against Trafficking (IACAT), 90% of the repatriated OFWs were migrants who arrived in Syria through an informal route. Many originated from the southern provinces in Mindanao, lacked formal education, and showed indications of potential trafficking. These informal migrant workers were more vulnerable and less connected to official assistance than regularized and skilled Filipino migrants experiencing similar conflict circumstances. During the recent Libyan conflict, IOM assessed that regularized migrants were able to access official assistance and coordinated repatriation operations more effectively (IOM, 2013, p 77-79). More research is needed on the use of online technologies, mobile, and social media to help identify, locate, and assist migrants in conflict zones, while ensuring the privacy interests of these most vulnerable individuals.

"**Undocumented** and **unprotected** in times of peace, the 'invisibility' of irregular migrants presents immense difficulties in times of conflict"

IOM, 2013, p. 77

10. CONCLUSIONS and RECOMMENDATIONS

Labor trafficking is a human rights issue, a crime, a byproduct of unsafe migration, and an outcome of supply and demand in a globalized economy. In an increasingly networked society, labor trafficking has also become deeply entangled with new information and communication technology. From its research on supply chains, Philippine migration, online recruitment, and disaster response, this report concludes that appropriate uses of technology can assist governments, businesses, NGOs, and migrant workers in preventing and mitigating the effects of labor trafficking. And yet, the analyses of Philippine migration and online recruitment indicate that traffickers can exploit these same technologies.

For the private sector, supply chains and a complex network of contractors and subcontractors (enabled by new communication technologies) may increase a company's risk of exposure to exploitation and/or trafficking as they lose oversight of processes, labor conditions, and suppliers. There is the potential to leverage the technologies of supply chain management to monitor for exploitation and trafficking, and some technology firms have already begun applying advanced data and analytics to identify trafficking risks in their supply chains. Other technology firms are deploying social media and online communication platforms in order to connect migrant workers abroad. Still, research shows the modern global supply chain to be a complex and opaque challenge to gathering accurate information about labor trafficking. Involving the NGO community and labor trafficking experts are a key component to intervention.

The Philippines government has put in place a number of measures and regulations intended to protect and inform migrant workers. However, the complex network of recruitment agencies and brokers can create barriers to information for job seekers, difficulties in verifying reputable recruitment agencies and employers, deliberate deception, and/or fraud. Reported cases of isolation from social and communication networks indicate an individual's vulnerability to labor trafficking. Additionally, technologies most useful for maintaining communication (e.g. the Internet, mobile, social media platforms) are also used by malevolent actors. Pre-departure training presents an opportunity to mitigate risks for migrant workers, so long as trainings are consistent, current, and tailored to suit specific labor migration contexts. There is an opportunity to create other interventions, such as tech-literacy trainings, or policy measures that ensure communication access for migrant workers.

In online labor recruitment processes, the wide variety and sources of information can make traditional risk assessment more difficult for job seekers. Research reveals troubling norms around the communication of personal and private information to anonymous or inauthentic parties. Further research is needed to evaluate: 1) what level of risk online recruitment practices produce, 2) what steps can be taken by recruitment websites to minimize fraudulent behavior, and 3) how these sites of activity could be leveraged as sources of data for monitoring trafficking activities.

Disaster and crisis situations have unique relationships to both labor trafficking and the rapid deployment of technology. Disaster conditions can drive individuals toward risky employment. These same conditions can catalyze targeted technological efforts, often from outside the local community. This report identifies disaster and humanitarian response as a prime case for future research and interventions into labor trafficking through technology. Though such interventions would need to be evaluated for concerns such as safety and privacy.

This report invites different actors to consider developing strategies and interventions that attend to these (evolving) interactions. Government, non-governmental, academic, and private sectors all have a role to play. A network approach to labor trafficking broadens the conversation out to a wider group of stakeholders, including: global health, finance, economic empowerment, women's rights, child protection, climate, and disaster relief. These groups are part of interconnected networks which all intersect with labor trafficking and other human rights issues. There is ample opportunity (and need) to extend the work begun here with additional policymaking, intervention, research, and development in the areas above and beyond.

RECOMMENDATIONS:

Private Sector

- Develop, measure, and evaluate **technologies for monitoring global supply chains for labor trafficking indicators and risks.**

- **Research and develop network technologies** and social media platforms designed to increase connection and reduce isolation for migrant laborers and vulnerable populations.

- Encourage **partnerships with NGOs and/ or government programs** addressing labor trafficking.

- **Develop training programs on information and communication technology** skills for migrant workers and those vulnerable to labor trafficking.

- Participate in **technology challenges and innovative programs to develop tools** for anti-trafficking advocacy.

- **Support more transparent practices** among recruitment and human resources agencies with an international reach.

NGOs

- **Develop user-friendly mobile apps** that contain information on labor laws, language, and cultural norms in destination countries.

- Seek **partnerships with technology firms** to apply subject matter expertise to emerging technology applications.

- **Conduct rigorous measurement** and evaluation of existing technologies that seek to intervene in labor trafficking.

- Work with technologists to **develop new tools that can disrupt the information asymmetries** between recruiters and job seekers.

- Explore how technology can be used to **facilitate online mentorships and the building of social networks**. This might include training an individual to use social media, how to access important websites, and/or linking an individual (via Skype, for example) with other migrant workers in the destination country.

Government

- Reduce isolation among migrant labor by including legal and regulatory provisions that **ensure workers have free access to communication technologies** and social networks. International cooperative meetings, such as the Abu Dhabi Dialogues,[36] can serve as a venue for such discussions.

- **Develop technologies to implement government regulations** such as the California Supply Chain Transparency Act or the "Strengthening Protections Against Trafficking in Persons in Federal Contracts" Executive Order.[37]

- **Allot greater attention to online job recruitment** as a component in labor trafficking for both regulators and law enforcement.

- Develop data and analytic tools to **identify and monitor illegal or unscrupulous recruiters,** brokers, and agents.

- Evaluate how **technologies can help reduce deceptive job advertisements** in both online and traditional media.

- When serving as either the source or destination country for migrant labor, **provide the technological tools necessary** for workers to connect to services and support.

- Facilitate collaboration between recruiting agencies and anti-trafficking advocacy organizations to **create pre-departure orientation seminars which familiarize migrant workers with the opportunities and risks involved in using the Internet.** Educate migrant workers on the risks of forced labor as well as possible solutions.

- Make programs and information available to employers that **explain the illegality and unethical nature of cell phone confiscation**.

- **Increase penalties for employers** who restrict migrant workers' rights to communication.

This report generated a number of new research questions:

- What are the gender differences with technology uses among migrants and groups vulnerable to labor trafficking? Can gender specific technological interventions be developed to address these differences? Can technologies be developed to address gender specific categories of work such as domestic or maritime workers?

- Can technologies used during crisis response and disaster relief be repurposed and leveraged for longer term social and human rights issues like labor trafficking? What are the ethics around data collection and sharing in these situations?

- What new technologies can be developed to identify the needs of migrants in conflict zones?

- Do skilled and low-skilled workers have different relationships to technology? What techniques for information gathering and risk assessment are unique to these two groups? Does access to and skills with technology make a difference?

- Do the technological tools emerging to combat trafficking have ethical or privacy concerns not yet evaluated? Do these technologies risk becoming a new means of control in the context of forced employment?

- How should laws and regulations be changed to account for new technologies? What are (if any) the models that exist for the proper handling of technologies with government oversight? Can an analysis of the monetary flow of remittances be leveraged to address labor trafficking and exploitation?

- If data collection and analysis becomes more prevalent in the networks surrounding migrant or forced labor, what forms will this take? Which data are most relevant? Which are most sensitive? What other areas of concern might benefit from leveraging the same data, and what already existing sources of data might address labor trafficking issues?

GUIDING PRINCIPLES FOR TECHNOLOGICAL INTERVENTIONS IN LABOR TRAFFICKING

Many of the major social issues of our time are increasingly mediated by technology. Thus, human trafficking is a valuable case study and barometer for future efforts that utilize technological solutions to intervene. As networks connected by technologies continue to spread across the globe, policymakers and stakeholders will need to acknowledge the threats, risks, and opportunities of applying technology to human rights issues. The previous two reports developed guiding principles for future technological interventions in human trafficking, which have been adapted below for labor trafficking:

■ **The ultimate beneficiaries of any technological intervention should be the victims and survivors of human trafficking.**

Interventions should include a nuanced understanding of the role network technologies play in labor trafficking and should be attuned to potential unintended consequences in order to maximize the benefit for and minimize the harm to trafficked persons, victims, and survivors.

■ **Multisector cooperation is required to disrupt the networks of global and local actors involved in labor trafficking.**

A comprehensive strategy among multiple stakeholders is needed to address labor trafficking in a network society. Addressing this issue requires representation and input from multiple sectors and perspectives. The diversification of the actors involved in discussions of technology and trafficking should be a priority. Policymakers need to be attentive to what technology can and cannot accomplish in order to address deeply entrenched problems such as trafficking.

■ **Private sector firms should examine how technologies can be deployed to monitor supply chains for labor trafficking and exploitation. Communication, data, technology firms should recognize their services are an essential means by which vulnerable groups communicate with their respective support networks.**

With the increasing attention of governments and other stakeholders, the private sector may be incentivized to use technology to address labor trafficking and labor exploitation in their supply chains. The technology sector—from social media companies, to financial wire transfer services, to mobile companies—should recognize how their services are used to both exploit victims and connect vulnerable groups to social networks.

■ **Technologists designing interventions should be aware that continuous involvement and research is necessary to ensure that tools are user-centric and effectively respond to labor trafficking. It is important that subject matter experts as well individuals from communities at risk are included in the development of technological systems.**

The growing ubiquity of network technologies demonstrates a fast-moving and ever-changing ecosystem. Mobile technology, for example, is being adopted faster than any technology in human history. Researchers and developers working to create interventions should monitor the landscape, avoid fixation on any one technology, and develop responses that are agile and adaptable to this constant technological change. The participation of subject matter experts, including the voices of workers and trafficking survivors, are crucial for any technological development.

■ **The range of human rights, such as privacy, potentially impacted by the use of data and technology in labor trafficking interventions should be actively addressed.**

As technology is built into counter-trafficking efforts, the inherent risks of using technology to identify and track the behavior and activity of individuals must be considered. Counter-trafficking solutions should be designed with careful oversight to ensure that the design and methods do not overstep privacy rights, nor unduly target or discriminate against marginalized groups. Particular care and attention to civil liberties and human rights should be balanced with the need to respond to victims of trafficking.

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ENDNOTES

CHAPTER 1

1   This study involved in-depth review of 122 reported labor trafficking cases in the United States.

2   Personal communication, Lisa Rende Taylor. See also: http://www.projectissara.org.

CHAPTER 2

3   As with all research, this study was subject to methodological limitations. Given the dearth of information on technology and labor trafficking, researchers relied on existing relationships in their respective fields and subsequent recommendations ("snowball sampling") to identify interview subjects. Additionally, information on current technological interventions in labor trafficking is limited and often unpublished. That said, this exploratory study provides a better understanding of the field as it currently stands, and identifies areas that require further exploration.

4   Per Institutional Review Board stipulations, all survivors were read a detailed consent form prior to the interview or focus group, and no identifying information was documented. Some participants received a monetary incentive such as a gift card to a local grocery store for their participation.

CHAPTER 4

5   According to the ILO (2014), there are at least 53 million domestic workers worldwide, of which 83% are female.

6   Globalization has been defined as "a process (or set of processes) which embodies a transformation in the spatial organization of social relations and transactions – assessed in terms of their extensity, intensity, velocity and impact – generating transcontinental or interregional flows and networks of activity, interaction, and the exercise of power" (Held et al, 1999, p. 16).

7   The UNODC employs the UN Palermo Protocol definition of human trafficking and does not disaggregate sex and labor trafficking.

CHAPTER 5

8   See for example UNICEF's work on child trafficking – http://www.unicef.org/protection/57929_58005.html – and child labour – http://www.unicef.org/protection/57929_child_labour.html

9   See for example, a collaborative project between scholars entitled "How to Responsibly Create Technological Interventions to Address the Domestic Sex Trafficking of Minors." Available at: http://www.danah.org/papers/TechnologistsCSEC.pdf

10 As told to researchers for this report in focus groups with trafficking survivors.

11 See an initial blogpost on the use of mobile phones to aid migrant workers' isolation: http://iloblog.org/2014/03/28/how-cell-phones-can-break-migrant-workers-enforced-isolation/

12 For more information on the dialogues, see: http://www.iom.int/cms/en/sites/iom/home/what-we-do/regional-processes-1/rcps-by-region/abu-dhabi-dialogue.html

13 In addition, Sweden and the UK are among the few countries engaging directly with technology and trafficking. Sweden's (2008) national *Action Plan Against Prostitution and Human Trafficking for Sexual Purposes* proposes to equip law enforcement with "bugging devices" and the capacity to seize and process personal data in order to detect and investigate trafficking. The *Action Plan*, however, does not extend to detecting cases of *labor* trafficking. The UK's *Human Trafficking: the Government's Strategy* (HM Government, 2011) includes the implementation of E-borders, an immigration scheme that collates and screens data on people entering and exiting the country. One of the aims of E-borders is to disrupt crime, including human trafficking, in order to promote stronger national security.

CHAPTER 6

14 For an overview of labor trafficking (and corruption) in global supply chains see a 2013 Verité report; http://www.verite.org/sites/default/files/images/WhitePaperCorruptionLaborTrafficking.pdf

15 According to the United Nations Global Initiative to Fight Human Trafficking, the economic sectors most exposed to human trafficking and forced labor include: agriculture and horticulture, construction, garments and textile, hospitality and catering, mining, logging and forestry, food processing and packaging, transportation, and domestic service or other care and cleaning work (United Nations, 2010). Similarly, the US State Department 2014 TIP report highlighted agriculture, fishing and aquaculture, logging, and mining as those industries where "the use of forced labor has been documented along the supply chains" (US State Department, 2014).

16 Available at: http://slaveryfootprint.org/about/#aboutus [accessed 2 January 2015]

17 Conflict minerals are defined by the SEC as: columbitetantalite (coltan), cassiterite, gold, wolframite, or their derivatives, which are limited to tantalum, tin, and tungsten. They originate in the Democratic Republic of the Congo ("DRC") or an adjoining country, collectively defined as the "Covered Countries."

18 Personal communication, Palantir and Verité.

CHAPTER 7

19 The Philippines has entered into 43 bilateral labor agreements with 21 countries and territories (ILO, 2013c). An example of the overseas employer verification process can be found here: http://polomuscatoman.weebly.com/process-flow---household-service-worker.html

20 For example, according to stakeholder interviews, domestic workers, who are mostly female, are those most vulnerable to trafficking, followed by construction workers, who are mostly male.

21 Much has been written on how poverty, unemployment, underemployment (Philippines Statistical Authority, 2012; IOM, 2013; Pastrana, 2009), and the pull of external labor markets has led to high numbers of both skilled and low-skilled workers migrating from the Philippines

22 Numerous reasons account for the increase in female migration. Some of these include an increase in global demand for female-dominated industries and services, like domestic work, national policies and processes supporting overseas migration, and the availing of established migration corridors by women to support households and children's education. See also: Tacoli 1999; Chant, S. and McIlwaine, 1995; and IOM 2013.

23 Job seekers range from college educated, skilled professionals such as nurses and engineers to low-skilled domestic workers, construction workers, and agricultural workers.

24 According to POEA data reported in IOM's 2013 Country Migration Report (p. 13), 32% of job applicants with a college degree sought positions overseas as a factory worker. This suggests that the categories of skilled worker and low skilled worker do not necessarily correlate to educational attainment or the skill-level of an individual. It also points to a surplus in available skills in the Philippine labor market that is not matched by a demand for skilled workers by employers in the Philippines.

25 Labor trafficking comprises many more networks in addition to recruitment. Depending on the situation, additional networks might include law enforcement and criminal justice networks, illicit and criminal networks, or repatriation and reintegration networks. Each of these networks could be examined in future research with a view to finding points of vulnerability for the migrant worker as well as opportunities for positive interventions.

26 As told to the research team in interviews with two labor trafficking victims who utilized formal channels to migrate from the Philippines.

27 Agunias (2010, p. 14), for example, reports in her study of OFWs in the United Arab Emirates that both skilled and low-skilled workers experienced information gaps during their migration experience. In one example, skilled workers were surprised to find that they were receiving a lower salary than their similarly skilled American and European counterparts because of a lower pay negotiated by the recruitment agency back in the Philippines. Agunias observes that domestic workers did not receive adequate information prior to departure about the challenges and realities of their work in the UAE, including the fact the some sponsors (employers) ban mobile phones and communication with other domestic workers. Researchers interviewed returned domestic workers who conveyed similar stories and experiences.

28 Job-seekers can also be hired through direct hiring, but that is rare and is legally allowed in only a few instances (e.g. diplomats or international labor recruitment agencies do not exist in the receiving country)

29 Some interviewees claimed that the recruitment agencies are careful not to establish a formal link between themselves and the 4th party recruiters so that they can claim plausible deniability should a criminal or civil case is brought forward.

30 This has included: video and radio infomercials, printed materials (stickers and posters), media spots, anti-trafficking advocacy trainings, a social media page and website, and community educational programs with schools, media, and local governments.

31 See the POEA Facebook page at: https://www.facebook.com/mypoea?fref=photo

32 Online recruitment is discussed in further detail in Section 8. Illegal recruiters have reportedly contacted job seekers directly by accessing the job seeker's cell number and personal information through Facebook. In one case, a Filipina recruited her high school classmates through Facebook for jobs that did not exist. She told them she was in Canada working for a hotel that was in dire need of chambermaids. The recruiter asked for 20,000 pesos (about US $445) to process their paperwork. One former classmate, who was working as a teacher, recruited 30 other teachers in her school, and they all sent the recruiter the money. Eventually they learned that it was fraud, and the recruiter was arrested and detained, but then fled the country. While not leading to labor trafficking, this case points to the risks involved in divulging and providing access to personal information via social media profiles.

33 The Balikbayan App website can be found at: https://www.google.com.ph/campaigns/balikbayan/

CHAPTER 8
34 The real email was changed due to privacy reasons.

CHAPTER 9
35 For more information about the Micromappers reponse to Typhoon Ruby see: https://micromappers.wordpress.com/2014/12/06/un-activates-micromappers-for-philippines-typhoon-ruby/ and http://irevolution.net/2014/12/10/digital-jedis-complete-response-to-typhoon-ruby/

CHAPTER 10
36 http://www.iom.int/cms/en/sites/iom/home/what-we-do/regional-processes-1/rcps-by-region/abu-dhabi-dialogue.html

37 https://www.federalregister.gov/articles/2015/01/29/2015-01524/federal-acquisition-regulation-ending-trafficking-in-persons
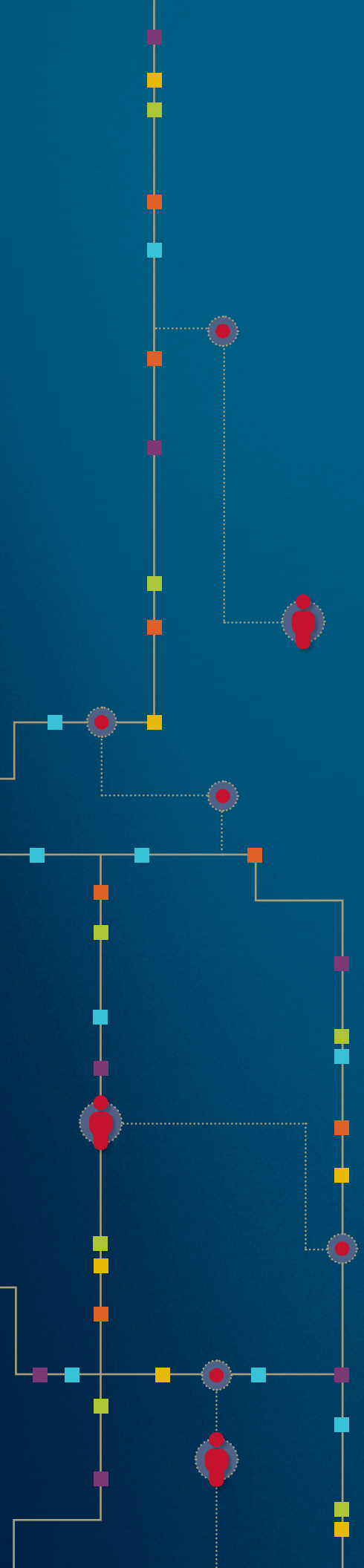
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