International Labour Organization

Use of digital technology in the recruitment of migrant workers

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The elaboration of the report was coordinated by Ms. Gaëla Roudy Fraser (FAIR II, ILO Geneva), and reviewed with Clara Van Panhuys (Fair II, ILO Geneva), Lorenzo Guarcello (FUNDAMENTALS, ILO Geneva), Gurchaten Sandhu (FUNDAMENTALS, ILO Geneva), and Ira Rachmawati (International Trade Union Confederation, Brussels).

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▶ Acronyms

ASEAN	Association of South East Asian Nations
COVID-19	Coronavirus disease
CSO	Civil society organization
FAIR	Integrated programme on Fair Recruitment
FDH	Foreign domestic helper
FEIMS	Foreign Employment Information Management System
FGD	Focus group discussions
GCC	Gulf Cooperation Council
GCM	Global Compact for Safe, Orderly and Regular Migration
GFMD	Global Forum on Migration and Development
GP&OG	ILO General Principles and Operational Guidelines on Fair Recruitment
ICT	Information and communication technology
IGO	Intergovernmental organization
ILO	International Labour Organization
IOM	International Organization for Migration
ITUC	International Trade Union Confederation
KII	Key informant interviews
NGO	Non-governmental organization
OEC	Overseas employment certificate
OFW	Overseas Filipino workers
PAOS	Post-Arrival Orientation Seminar
PDOS	Pre-Departure Orientation Seminar
PEOS	Pre-Employment Orientation Seminar
POEA	Philippine Overseas Employment Agency
POLO	Philippine Overseas Labour Office
SLBFE	Sri Lanka Bureau of Foreign Employment

▶ Executive summary

While labour migration can deliver many positive outcomes, the recruitment, placement and employment of migrant workers in all regions of the world has become notorious for human rights abuses and difficulty in upholding basic labour standards. Given the imbalance between supply and demand for mostly low-paid labour in higher-income countries, the migrant worker recruitment industry has been marred by corruption, exploitative practices, debt bondage and situations that amount to human trafficking. The use of ICTs and other digital technologies can broadly improve core processes associated with migration and bring about transformational changes in areas such as document processing, recruitment and remittances to name a few. Governments will increasingly rely on digitization and technology in the context of migration management to enhance service delivery, manage data, streamline operational processes, regulate border crossings and integrate various stand-alone platforms. Digitalization at every step of the labour migration life cycle, from recruitment to employment to reintegration, has the potential to support easier, more efficient, less costly, and more transparent labour migration.

This report seeks to improve the understanding of how migrant workers utilize digital technologies along their recruitment journey. This mixed-methods study involved potential, current and returned migrant workers from three countries (Nepal, the Philippines, Sri Lanka), who were intending to migrate or had migrated to Hong Kong Special Administrative Region, China[1] or Malaysia. In the case of workers from Nepal and Sri Lanka, the study also included participants who were intending to migrate or had returned from Kuwait. The study combines information derived from survey responses from 321 migrant workers, as well as 15 focus groups, and 49 key informant interviews. Only migrant workers who owned or had access to a mobile phone, feature phone, tablet, laptop or computer were asked to participate, as this was a minimum requirement to provide meaningful input on the use of ICTs to inform their migration journey. The study further investigated the landscape of existing digital technologies to meet the various needs of migrant workers.

Key findings of the survey:

- Participants reported widespread access to mobile phones and used them for a range of purposes, but primarily for facilitating social interactions.
- Approximately half (49 per cent) of survey respondents did not use digital technology to gather information about their labour migration experience.
- Even among migrants who have access to ICTs and high self-reported efficacy on using ICTs, gathering information related to overseas employment remains largely or entirely offline.
- Migrant workers are unaware of sources for seeking information in general, let alone where to find relevant information online even when it is readily available.
- Migrant workers trust family, friends and recruitment agencies much more than online sources, even when there is no way of verifying the information provided.
- When migrant workers use online sources to search for jobs, Facebook is the most used platform, slightly ahead of job portals.
- The top-rated fear of using digital technology among study participants was misinformation.
- Friends and family were the most common source of information used by respondents when selecting a recruitment agency.
- Migrant workers ranked government agencies in origin countries as the least critical source of information provision.

1 Hereafter named as: Hong Kong SAR

Key findings and observations from the online research:

- An ever-increasing amount of "migrant technology" solutions are being developed that address migrant workers' needs in innovative ways; however the true impact of these tools remains largely unclear due to lack of data and evaluations.
- Digital technology has the potential to enable all recruitment-related actors to undertake their core functions at each stage of the recruitment/migration lifecycle in new and improved ways.
- Mobile and digital technologies can supplement, grow, and innovate already existing services, expanding their reach, coordination, and integration in areas such as providing information, sending remittances, and direct hiring.
- The development of apps and technological innovations should involve key beneficiaries (migrant workers themselves) in the design and development phase to ensure uptake and sustainability.
- For projects that focus on app development, a top-down approach must understand the demand and need for such apps, and subsequently management, promotion, and maintenance should continue beyond the initial phases of design and launch in order to ensure sustainability and relevance.

General recommendations:

- To intensify information dissemination and promotion of existing online support tools and digital platforms in both origin and destination countries.
- Complement traditional offline outreach mechanisms among migrant worker communities with the enhanced usage of ICTs to raise awareness of supportive services, particularly through social media and customized content.
- Consider that ICTs, while suitable for certain tasks, cannot resolve many structural challenges related to migration and recruitment, and their effectiveness is shaped by a wide range of factors including existing migration infrastructure, migration corridor, gender, occupation and they risk further marginalizing the most vulnerable.
- Build capacity for migrant workers to utilize ICT-enabled services by developing skills in digital literacy and digital safety prior to migration.
- Build the capacity of migration and recruitment stakeholders through training and sharing of best practices to better analyse qualitative and quantitative data captured through ICT-enabled services in order to understand their impact.
- Avoid unnecessary duplication of digital initiatives to prevent fragmentation and indifference towards ICT solutions. As part of this effort, ensure the interoperability of digital technologies and information systems between various governmental agencies and databases while maintaining data and confidentiality protections.
- Conduct regular monitoring activities of existing ICT tools and platforms to determine their usage and make data publicly available when relevant and possible.
- Ensure the most up-to-date content and information related to recruitment and migration is disseminated in a timely manner across all relevant digital platforms.
- Promote the use of e-wallets and other digital tools (including those utilizing blockchain technology) to facilitate lower-cost remittance transactions.
- Encourage the adoption of all relevant international treaties including ILO conventions, most particularly the Private Employment Agencies Convention (No. 181) due to its provision on prohibiting the charging of recruitment fees.
- Adhere to all of the ILO's Principles and Operational Guidelines for Fair Recruitment, especially Operational Guidelines 7 and 11 which specifically outline the role of technology.
- Adhere to all of the stipulations included in the Global Compact for Safe, Orderly and Regular Migration, particularly Objectives 4, 11, 12, 18, and 20 which contain specific provisions related to digitization and ICTs.

1

▶ Introduction and background: Linkages between migration, ICTs, and labour recruitment

1.1 Migration and ICTs

Information and communication technologies (ICTs) and the digital revolution brought about by the creation and diffusion of the Internet have fundamentally transformed every aspect of our lives. Globally, access to and use of ICTs continues to trend upwards across every indicator, with far-reaching implications for social, economic, and political dimensions in terms of of how societies function, are organized and governed (ITU 2018). Migration is no exception to this phenomenon, and it is deeply intertwined with these new technologies and innovations which have broadly underpinned the changing dynamics of human mobility over the past few decades. These advancements have greatly contributed to people's desire and capacity to migrate in several ways, thereby shaping the size, composition, and rate of migration between and within countries. Not only is migration directly and indirectly influenced by ICTs, but according to the International Organization for Migration (IOM), ICTs have indeed become game-changing enablers and drivers of global migration (IOM 2019). As such, understanding the positive and negative implications of ICTs with regard to all facets of migration has grown in interest to academic researchers and policymakers alike.

The uptake and use of ICTs provides benefits for migrants at every step of their journey. Prior to migrating, ICTs can support access to a greater depth and breadth of information about potential destinations, job opportunities, advice on planning and executing a migration journey, and can enable digital interactions with potential employers and other migrants (Dekker, Engbersen, and Faber 2016). Consumption of digital media including movies, news, and advertisements that portray a better life abroad and the success stories of others, contributes to the aspirations of prospective migrants in achieving material and financial prosperity beyond their current circumstances (Schapendonk and van Moppes 2007). Government websites, social media, and a wide range of digital platforms offer consolidated information on migration laws and policies, as well as on social and cultural aspects of destination societies, and other useful local insights. Migrants can use this collective knowledge to weigh their options and decide between "here" or "there" when faced with multiple migration options. Through the acquisition of new information and concrete strategies to make migration successful, ICTs help prospective migrants overcome one of the more significant barriers to undertaking migration: lack of access to relevant and accurate information to assist decision making.

After the decision to migrate has been made, ICTs can be instrumental in arriving at a more efficient realization of this outcome. Exclusively Internet-based administrative procedures such as obtaining an overseas work permit or making travel arrangements have become increasingly common, as has the expansion in the number of brokers and agents who can facilitate this by using virtual means (IOM 2017). Once arrived in destination countries, ICTs enable migrants to maintain transnational social and familial ties, share their experiences, send remittances, support societal integration, obtain new vocational skills and seek future employment (Kotyrlo 2020). Internet-mediated communication can also expand social networks and potentially open up new migration streams for those who lack social capital or connections to established diaspora communities (Pesando et al. 2020). The study of migration and ICT is rich in both theoretical and empirical foundations and the associated literature base continues to expand, thus making it too extensive to cover

comprehensively. In summary however, ICTs have substantially influenced the character and patterns of international migration through revolutionizing interpersonal communication, information flows and transnational social networks.

1.2 Labour migration and recruitment

Although people migrate to other countries for a range of reasons such as family reunification, pursuing education, retirement, fleeing political persecution, natural disasters, and climate change, the trend that has historically dominated is migration for the purpose of work. Labour migration, when properly regulated, can translate to substantial outcomes for sustainable development and deliver benefits for origin countries, destination countries and individual migrants themselves. According to the International Labour Organization (ILO), as of 2017, there were approximately 164 million international migrant workers[2] in the world, accounting for roughly two thirds (64 per cent) of 258 million which is the total of international migrants (ILO 2018). This is an increase from estimates based on data from 2013, which calculated 150 million migrant workers of the total of 232 million international migrants worldwide (ILO 2015b). Although the proportion of migrant workers as a share of total migrants remained very similar, the change between this time period represents a 9 per cent increase in the total number of migrant workers. Of these 164 million, migrant workers tend to be concentrated in high-income (111.2 million, 67.9 per cent) and upper middle-income countries (30.5 million, 18.6 per cent) respectively (ILO 2018). Furthermore, a large proportion of migrant workers is engaged in lower-skill economic sectors or manual labour positions such as services, hospitality, agriculture, manufacturing, construction, fishing, and domestic work (United Nations, Department of Economic and Social Affairs, Population Division 2019).

While high-paid or high-skilled migrants may be able to find employment overseas by themselves with relatively little difficulty, low-skilled or low-paid workers often depend on third-party intermediaries to navigate the same journey. Complex migration processes and a lack of knowledge surrounding job vacancies means migrants may rely heavily on a web of recruitment agencies, brokers, or smugglers to find employment abroad and facilitate their migration (David, Bryant, and Joudo Larsen 2019). These agencies or loosely organized networks come in all shapes and sizes, ranging from singular individuals, to localized enterprises, all the way up to transnational companies with operations in multiple countries. Due to language barriers, differences in immigration policies, and previously established relationships with communities of prospective migrants, recruitment agencies play an indispensable role in efficient matching of labour supply and demand. However, the multilayered and opaque ecosystems in which these actors operate create the potential for risk of abuse such as exploitation, deception and fraud. These agencies and other middlemen serve a legitimate purpose of integrating workers into legal supply chains of private sector organizations, but sometimes do so through unlawful means.

The practice of job matching across borders inevitably incurs some financial costs, however due to the risk of financial exploitation, national laws in many countries require employers to pay all of the associated recruitment costs for hiring foreign workers. International bodies representing private recruiters and employers, such as the World Employment Confederation, have stated that jobseekers should not be directly or indirectly charged for any services related to placement and employment (WEC n.d.). Article 7 of the ILO Private Employment Agencies Convention, 1997 (No. 181) specifically forbids private recruitment agencies from charging workers (ILO, n.d.). Despite the widespread consensus on this standard, the cost of recruitment frequently gets shifted onto the prospective worker, and most unskilled migrant workers end up paying substantial recruitment

2 "Migrant worker" refers to a person who migrates or has migrated to a country of which he or she is not a national with a view to being employed otherwise than on his or her own account.

fees or related costs[3] to secure employment. These fees and related costs may include payments for services such as the processing of travel and immigration documentation (passport/visa), medical exams, skills training, insurance, temporary accommodation during the recruitment process, and informal payments such as bribes. Although this practice is illegal, the cross-jurisdictional nature of organizations and transactions, along with the use of informally subcontracted local agents, creates tremendous practical challenges for effective enforcement. Shortcomings in overall migration governance to adequately regulate these types of agencies further exacerbates the problem. Worker-paid migration costs can be equivalent to more than a half year's worth of wages that will be earned once abroad and many will borrow money upfront from friends, family, or lenders to cover these expenses (Abella and Martin 2014). Migrants are often not aware of item-by-item cost breakdowns of the lump sum they pay, giving unscrupulous agencies room to overcharge and levy extortionate fees well beyond the true cost of services provided.

The possibility of working overseas, escaping unfavourable local conditions, and earning a comparatively higher wage means that for most migrants, paying a large sum of money upfront can be a rational decision, even if these fees are illegal. However, these unfair recruitment practices expose migrant workers to a variety of adverse consequences such as coercion and abuse of vulnerabilities. Evidence has repeatedly linked recruitment fees and related costs to a substantial increase in the risk of forced labour, debt bondage and human trafficking (GRETA 2019). In wealthy countries, migrant workers are trafficked for forced labour at a greater rate as compared to national citizens (UNODC 2020). Nearly one of every four victims of forced labour is exploited outside of their country of residence, pointing to the risks and vulnerabilities associated with international labour migration (ILO and Walk Free 2017). Debt bondage affects more than half of all victims of forced labour exploitation, primarily due to illicit fees charged by recruiters and employers to enable migration (ILO and Walk Free 2017). One study in South-East Asia reported that 65 per cent of migrant workers who had paid a recruitment fee subsequently had their identify documents withheld while employed (ILO 2020b). An ILO report concentrating on wage underpayment and recruitment costs found that the total costs of coercion amounted to more than US$21 billion, with US$19.6 billion attributed to underpaid wages and the remaining US$1.4 billion to illegal recruitment fees (ILO 2014).

1.3 International Labour Organization efforts supporting fair recruitment

In response to these persistent challenges and the high priority given to developing policy, the ILO has implemented a number of multi-stakeholder projects at the global, regional and national level related to understanding and improving labour recruitment practices. In 2014, the ILO launched a global Fair Recruitment Initiative to "help prevent human trafficking and forced labour, protect the rights of workers, including migrant workers, from abusive and fraudulent practices during recruitment and placement process, to reduce the cost of labour migration and to enhance development outcomes" (ILO 2017). A key outcome of this process was the development of the ILO's *General Principles and Operational Guidelines for Fair Recruitment (GP&OG)* by a Tripartite Meeting of Experts in 2016. This was further supplemented by the *Definition of recruitment fees and related costs* which laid out comprehensive definitions of these terms and was adopted in 2018. Taken together, this guidance forms "a comprehensive approach to realizing fair recruitment through development, implementation and enforcement of laws and policies aiming to regulate the recruitment industry and protect workers' rights" (ILO 2016b). Within these guidelines, recruitment is defined as a process that "includes the advertising, information dissemination, selection, transport, placement into employment – for migrant workers – it includes return to the country of origin where applicable" (ILO 2016b). The recruitment process occurs primarily in one of three ways: the direct

3 "Recruitment fees or related costs" refer to any fees or costs incurred in the recruitment process in order for workers to secure employment or placement, regardless of the manner, timing or location of their imposition or collection.

recruitment of a worker by an employer;[4]; through a labour recruiter;[5] or the assignment of workers through private employment agencies to other enterprises as temporary workers. In 2015, under the umbrella of the Fair Recruitment Initiative, the ILO established the Integrated programme on Fair Recruitment (FAIR) with the long-term goal "to reduce deceptive and coercive practices during the recruitment process and violations of fundamental principles and rights at work, as well as other human and labour rights, through increased safe migration options, effective regulation of public and private employment agencies, and accountability of unscrupulous actors" (ILO 2015a). Phase I of this programme (2015–18) contributed to the promotion of fair recruitment initiatives across migration corridors in North Africa, the Middle East and South Asia. Phase II (2018–21) is a continuation of the same objective to increase access to fair recruitment practices for migrant workers, with an expanded focus on new migration corridors.

1.4 Summary

Although the broader impacts of ICTs on migration have garnered much research attention in recent years, few studies have specifically examined the role of these technologies in the recruitment process. The recruitment phase of labour migration marks a critical point in a prospective worker's journey, where they weigh the benefits and drawbacks of different labour opportunities to decide which option to choose. Proponents of digital technology often cite its ability to increase prospective workers' access to relevant information, overcome information asymmetries, and empower workers to report exploitative working conditions. Digital interventions that are migrant-centred in their approach and development can promote fair recruitment and sustainable development in a variety of ways. However, these same digital technologies create new challenges and can be used to mislead and further exploit prospective migrant workers. Moreover, despite the theoretical possibility that a large proportion of the information that a migrant may need to be informed and prepared is available at their fingertips, many migrants continue to suffer from recruitment information asymmetries, without adequate access to ICT devices, stable Internet connections or training.

Limitations experienced in ongoing efforts to effectively address the exploitation of migrant workers have prompted governments, non-governmental organizations (NGOs), civil society organizations (CSOs), as well as private businesses to try and generate solutions that capitalize on technology's capacity for connectivity, scalability, and speed. The rapidly changing realities surrounding the Coronavirus Disease (COVID-19) pandemic has had dramatic implications for the recruitment of migrant workers and has also accelerated the speed of adoption and innovation of digital technologies across almost all areas of society. As this landscape continues to evolve, policymakers and practitioners working on issues related to the recruitment of migrant workers should understand how new technologies are being used in recruitment while realizing the risks and limiting factors that arise from technology-based solutions.

1.5 Objectives and scope of study

In the context of the FAIR programme, the present study seeks to identify how ICTs can potentially serve as a facilitating factor in the implementation of fair recruitment practices and how such solutions can contribute to addressing the various needs of migrant workers. To identify potential opportunities for harnessing digital interventions that are fit-for-purpose and provide informed recommendations, this study focuses on three thematic areas of enquiry:

1. gaps in access to critical information and services related to the needs of migrant workers at the different stages of the recruitment and placement process;
2. migrant workers' use of digital technology in the context of their labour recruitment experience including limiting factors (namely,. digital illiteracy, network access)

4 "Employer" refers to a person or an entity that engages employees or workers, either directly or indirectly.

5 "Labour recruiter" refers to both public employment services and to private employment agencies and all other intermediaries or subagents that offer labour recruitment and placement services. Labour recruiters can take many forms, whether for profit or not.

and associated risks (legal, technological, and practical) such as security and data privacy;

3. existing and relevant digital technology solutions that could suitably contribute to addressing the needs of migrant workers identified at each of the different stages of the recruitment journey.

Through the combined investigation of these thematic areas, this study aims **to inform and provide recommendations towards the development / support of a specific digital technology solution to address identified gaps in the access and use of critical information and services.**

Primary data collection was designed with consideration given to to cultural and socio-economic characteristics such as gender, age, ethnic origin, nationality, and migration status. Secondary data collection and analysis was carried out taking into account both a broad and narrow geographical scope and was conducted through sources at the global-, regional-, and bilateral corridor-level. To situate the research at the corridor-level, primary data collection was focused on outward and return migration from the origin countries of the Philippines, Nepal, Sri Lanka, to the destination countries of Hong Kong SAR and Malaysia.[6] Based on the migration within these corridors, the regional concentration for secondary data collection was primarily for countries within Southeast and Southern Asia.

1.6 Report structure

With an aim to provide contextualization, outline the methodological approach, and present the research findings in response to the above objective, this document is structured as follows:

Chapter 1 introduces the background, framework, and research objective for the current study.

Chapter 2 provides details on research methodology and discussion of the limitations of the work.

Chapter 3 contextualizes the research through the concept of migration infrastructure and international frameworks related to migrant workers.

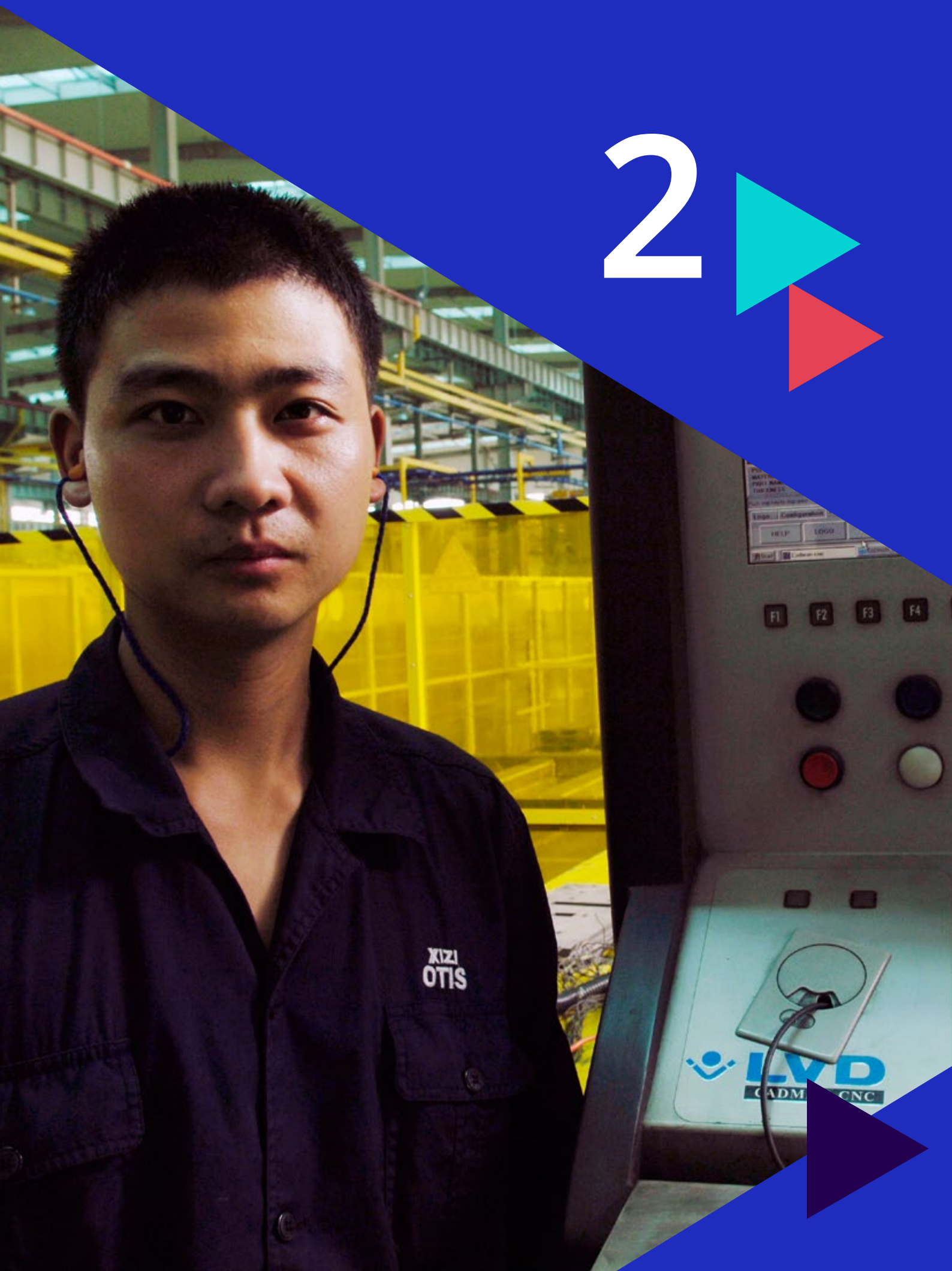
Chapter 4 provides a landscape analysis of existing relevant digital technology solutions that have been used globally, regionally, and within the specific bilateral migration corridors of focus in this study.

Chapter 5 presents the results of primary data collected through key informant interviews (KIIs), focus group discussions (FGDs), and survey responses, in order to understand migrant workers' access to and use of digital technologies and online services in their recruitment and migration journey.

Chapter 6 draws together the findings of Chapters 3-5, discussing key considerations and proposing informed recommendations in line with the study's defined scope and objectives.

6 Due to the relative size of the Sri Lanka – Malaysia and Nepal – Hong Kong SAR corridors, we include prospective migrants from Sri Lanka – Kuwait and Nepal – Kuwait.

2



▶ Research methodology and design

The research activities employed a mixed-method study that incorporated both qualitative and quantitative methods. Primary data was gathered through three main sources of information: individual surveys of potential, current, and returned migrant workers; focus discussion groups with potential migrant workers who were about to engage in the process of going overseas and migrant workers in destination countries; and key informant interviews with stakeholders in government, civil society, the private sector, faith-based organizations and international organizations. Secondary data was gathered through a landscape analysis, as well as a desk review which aimed to uncover current knowledge, use of technology and practices on fair recruitment. This information not only provided background on the state of the field, but also informed the research instruments used in the three sending and two receiving countries.

Quantitative research methods such as surveys enabled researchers to better understand the conditions under which migrant workers can access and make meaningful use of ICTs. Qualitative methods facilitated their understanding of expectations and perceptions about the use of ICTs, and identified factors limiting the labour recruitment experience. These methods also strengthen the validity and reliability of findings, by enabling researchers to dig deeper into some of the patterns identified in the survey data. To ensure the robustness of findings, our analysis triangulates findings from various sources and only reports on findings that are supported by more than one source. This triangulation method minimizes potential bias and errors inherent in the different methodologies chosen and serves to increase the validity of our report.

Ethics approval for this study was sought and obtained from the United Nations University Intra-Institute Ethics Review Board (#202006/01). For each KII, FGD, and survey response, informed consent was sought from respondents. All participants in the study were provided with an informed consent sheet, stating the purpose, intended use, as well as the risks and benefits of involvement in the project. In the case of the survey, electronic consent was obtained before the survey commenced. Once consent had been obtained, the data collection began. The field research for this study was undertaken between June 2020 and January 2021.

2.1 Desk review and landscape analysis

To identify the ways in which technology can meet the needs of migrant workers, we undertook a desk review and landscape analysis of ICT tools that address the needs of labour migrants. The review sought to answer the following question: "what existing and relevant digital technology solutions (including emerging technologies such as blockchain) could contribute to address the needs of migrant workers?" Sources were gathered and analysed from a variety of documents, databases, and websites identified through keyword searches and included descriptive reports, policy briefs, and investigative research from national governments, CSOs, and UN Agencies (such as ILO and IOM). A list of references is available at the References section at the end of the report to direct any interested readers for further exploration of the sources cited throughout. A total of 65 ICT tools were identified and reviewed. The list of tools is provided in Annex II. Qualitative and quantitative information related to mobile applications was also drawn (when available/relevant) from Google Play and the Apple Store.

Individual surveys

The project researchers designed a survey instrument to understand how migrant workers use digital technology throughout their recruitment journey and work experience.

This survey followed an iterative design process, incorporated feedback from relevant stakeholders and was tested in-house prior to being launched for data collection in the field. Once finalized, the survey was then translated into Filipino, Tamil, Sinhala, and Nepalese to ensure that target audiences were able to comfortably answer the questions in a language they could understand. Refer to Annex IV for an English version of the survey. Recruitment of participants was performed through trade unions, NGOs, migrant worker Facebook groups and other partners. Respondents received no monetary compensation for their participation. In addition to the face-to-face administration of the survey, it was also available on Survey Monkey to widen the potential coverage and improve accessibility. Due to prolonged lockdowns in some countries, NGOs, trade unions and faith-based organizations also obtained contact details of migrant workers who were willing to participate in the study and passed them on to researchers. Researchers then undertook a phone-based interview with respondents, completing the Survey Monkey form on their behalf.

For the individual survey, a convenience quota sampling technique was employed, and respondents were selected using referral and snowballing methods, with the target sample size being determined based upon available data on departures and migrant stock. Inclusion and exclusion criteria for the survey were as follow:

For sending countries: Nepal, Sri Lanka, the Philippines

a. Malaysia or Hong Kong SAR bound migrant worker who intends to leave within the next 12 months and has access to at least one of the following ICT devices (personal computer, laptop, tablet, smartphone, basic feature phone) and the Internet.[7]

b. Recently returned migrant worker (within the last 12 months) from Hong Kong, SAR or Malaysia who has access to at least one of the following ICT devices (personal computer, laptop, tablet, smartphone, basic feature phone) and the Internet.

For receiving economies/countries: Hong Kong SAR, Malaysia

a. Migrant worker from Nepal, Sri Lanka, or the Philippines who has access to at least one of the following ICT devices (personal computer, laptop, tablet, smartphone, basic feature phone) and the Internet.

A total of 684 migrant workers took part in the survey across the three sending and two receiving countries. Of these responses, 321 were analysed as part of this study, with respondents meeting the inclusion and exclusion criteria above, as well as answering all questions of the survey. Respondents took an average of 14 minutes and 24 seconds to complete all questions. Where appropriate, survey responses were disaggregated by gender, age, ethnic origin, and migration status to understand the influence that these factors had on perceptions and use of digital technologies. Table 1 displays the number of survey responses by corridor and migration stage.

Figure 1 displays the age distribution of respondents, by age bracket. As this diagram indicates, the age range is similar across each sending country.

Focus group discussions and key informant interviews

To complement the data collected from the individual surveys, FGDs were organized by offsite research assistants in the capital city of each respective country. Individuals were selected to participate in focus groups provided they met the following criteria:

a. potential migrant workers who were about to be deployed overseas; or

b. migrant workers in a destination country.

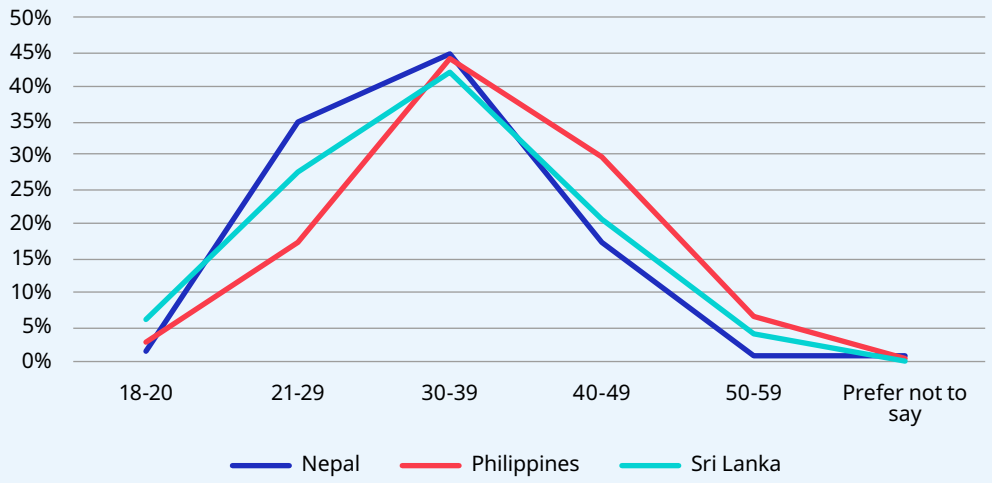
Forty-nine migrant workers participated in 15 FGDs, either online or in person (where COVID-19 restrictions allowed). The research team also interviewed experts directly engaged with migrant labour recruitment in differing capacities in both origin and destination countries. Forty-nine KIIs were undertaken with

7 Due to the relative size of the Sri Lanka – Malaysia and Nepal – Hong Kong SAR corridors, we include prospective migrants from Sri Lanka – Kuwait and Nepal – Kuwait.

▶ Table 1: Number of survey responses collected

		Country of Origin			
		Nepal	Philippines	Sri Lanka	Total
Potential	Hong Kong SAR	1 (20.0%)	21 (48.8%)	19 (48.7%)	41
	Kuwait	0 (0.0%)	-	2 (5.1%)	2
	Malaysia	4 (80.0%)	22 (51.2%)	18 (46.2%)	44
Current	Hong Kong SAR	42 (47.7%)	37 (57.8%)	34 (89.5%)	113
	Kuwait	7 (8.0%)	-	2 (5.3%)	9
	Malaysia	39 (44.3%)	27 (42.2%)	1 (2.7%)	67
Returned	Hong Kong SAR	1 (2.9%)	4 (100%)	0 (0%)	5
	Kuwait	20 (58.8%)	-	2 (28.6%)	22
	Malaysia	13 (38.2%)	-	5 (71.4%)	18
	Total	127	111	83	321

▶ Figure 1: Respondent age range, by origin country



stakeholders representing inter-governmental organizations, trade unions, recruitment agencies, NGOs, faith-based organizations, and government representatives with names of key informants (listed in alphabetical order in Annex I). Throughout the document we refer to direct quotes from FGDs and KIIs in a way that indicates the country where the interview took place but does not disclose the name of the participant. For example, the first KII that we refer to in this document that took place in Hong Kong SAR is referred to as HK-KI1. A similar referencing style is used for each country (SL-KI1, NP-KI1, MY-KI1). To indicate the location where a FGD took place within a corridor, the code that is assigned indicates first the country where the interview took place, and second, the other end of the corridor. As an example, the code HK-PH-FGD1 refers to the first focus group undertaken in Hong Kong SAR with workers from the Philippines. PH-HK-FGD1 refers to the first focus group undertaken in the Philippines with workers intending to migrate to (or returned from) Hong Kong SAR.

2.2 Data management and analysis

In the case of KIIs and FGDs, an audio recording of the session was made to ensure an accurate transcription could be obtained. In cases where the session was undertaken in a language other than English, the session was first transcribed verbatim, and then subsequently translated into English. In order to analyse the FGDs and KIIs, researchers used a combination of top-down and bottom-up coding, through the NVivo qualitative analysis software suite. Some themes were derived based on the research questions that this study aims to address. In coding transcripts of the interview, other themes emerged which are presented in the subsequent sections of this document.

For the quantitative aspect of the report, data collected from the surveys was analysed using simple frequencies and cross-tabulation techniques. Further statistical analysis was not included due to the small sample size and non-probabilistic survey design. More than anything, the data is intended to be used as a starting point for broader conversations about ICT use by migrant workers in specific corridors. Key qualitative findings were included in cases where they were supported by more than one source of information (FGDs, KIIs, and/or desk review). The process of data triangulation allowed us to pull out the most relevant themes and topics for further discussion.

2.3 Limitations

It is important to note three main limitations of this research. First, regarding the surveys: the FGDs and KIIs were begun and subsequently disrupted by the emergence of the COVID-19 pandemic in early 2020. This outbreak has had a significant health, social and economic impact on migrant workers around the world, especially those in precarious, low-paid and informal work situations which represent many of our target demographic groups for this study. As mentioned in the previous section, an obvious impact was on our ability to reach migrant workers. Many were unable to leave their home or workplace, due to state-enforced lockdown. In some cases, essential movement was allowed, but very few stakeholders would consider participation in a focus group to be essential. When initially conceptualized, our plan was to survey workers on their days off, in public spaces where they congregate and meet with friends, or to connect with them through NGOs, faith-based organizations, and trade unions' outreach but these outreach activities were also curtailed due to lockdown. As well as impacting our ability to reach migrant workers, the pandemic and uncertainties that it entailed may have impacted the relative importance that migrant workers ascribed to events related to their recruitment and work. In Malaysia, fears around COVID-19 and a widely viewed exposé about lockdown conditions also stirred up nationalist sentiment, as well as fear of speaking to outsiders about migrant workers.

Second, field researchers only undertook in-person focus group discussions with migrant workers in capital cities in each of the sending and receiving countries. Due to COVID-19 movement restrictions, some FGDs had to be held online, and in these cases, researchers aimed to include workers both from capital cities and from neighbouring provinces. However in some cases, a lack of access to stable Internet connectivity in rural areas meant that workers were not able to

participate. To ensure we included perspectives of workers from outside of capital cities, all KIIs included questions pertaining to this factor. Third, non-probabilistic survey sampling techniques were used, and as a result, strong population level inferences cannot be derived from the results of the sample. Finally, the Nepal – Hong Kong SAR and Sri Lanka – Malaysia migration corridors were selected to be used in this study. However, the small size of the corridors meant that it was difficult to access workers who intended on migrating (in the sending country), or had already migrated (in the receiving country). In sending countries, we included migrant workers in our sample who intended to migrate from Nepal – Kuwait, and Sri Lanka – Kuwait.

3

▶ Technology and migration infrastructure

This chapter begins by introducing the concept of migration infrastructure and applying it to our study of bilateral migration corridors. Delivering improvements for stakeholders involved in recruitment and labour migration requires an understanding of the combination of political, economic, social, technological, legal and environmental factors underlying the implementation and support of such enhancements. By examining **the five dimensions of migration infrastructure (commercial, regulatory, humanitarian, social, technological)** it is possible to unpack the way that corridors are mediated, and the impact this mediation has specifically on recruitment. This chapter provides an introduction to the five dimensions of migration infrastructure, with Chapter 4 focusing on the technological aspect.

3.1 Migration corridors

International migration is not uniform across the many regions of the world, but instead is largely shaped by a combination of economic, geographic and demographic variables. Macro-structural factors such as labour markets, state policies and social group formations (namely, migrant networks) strongly influence individual choice and contribute to the highly patterned trends observed in migration between certain origin and destination countries (De Haas 2011). Migration corridors are a hallmark feature of global labour mobility, with migrants following specific routes in order to benefit from these well-established infrastructures and networks. According to the IOM's World Migration Report, "corridors represent an accumulation of migratory movements over time and provide a snapshot of how migration patterns have evolved into significant foreign-born populations in specific destination countries" (IOM 2019).

Intra-regional migration corridors are a prominent feature in South and South-East Asia and are dominated by the movement of temporary and circular labour migrants from less developed economies, such as Nepal and the Philippines, to more advanced high-income economies such as Hong Kong SAR and Malaysia. Low-skilled workers fill gaps in these labour markets in sectors such as construction, service, and domestic work, alleviating local unemployment pressures and frequently sending a significant portion of their earnings back to their families. These remittances can have a significantlimpact at an individual-level and are also crucial for national and community economic development and poverty reduction. Risks and opportunities for migrant workers vary greatly depending on corridor-specific factors, making it necessary to develop tailored, contextualized policies and responses. For example, migration corridors and sectors of employment tend to be highly gendered in nature. Outward labour migration from Nepal to all receiving countries is a predominantly male phenomenon, with males accounting for over 90 per cent of the total migrant stock in the past decade (Government of Nepal 2020). Conversely, within the Philippines-Hong Kong SAR corridor, females make up more than 95 per cent of the migrant population, predominantly employed as domestic workers. Cost variations are another corridor-specific recruitment consideration, as migrants from different origin countries can end up paying vastly different sums of money to obtain similar employment positions in the same destination country (Segall and Labowitz 2017).

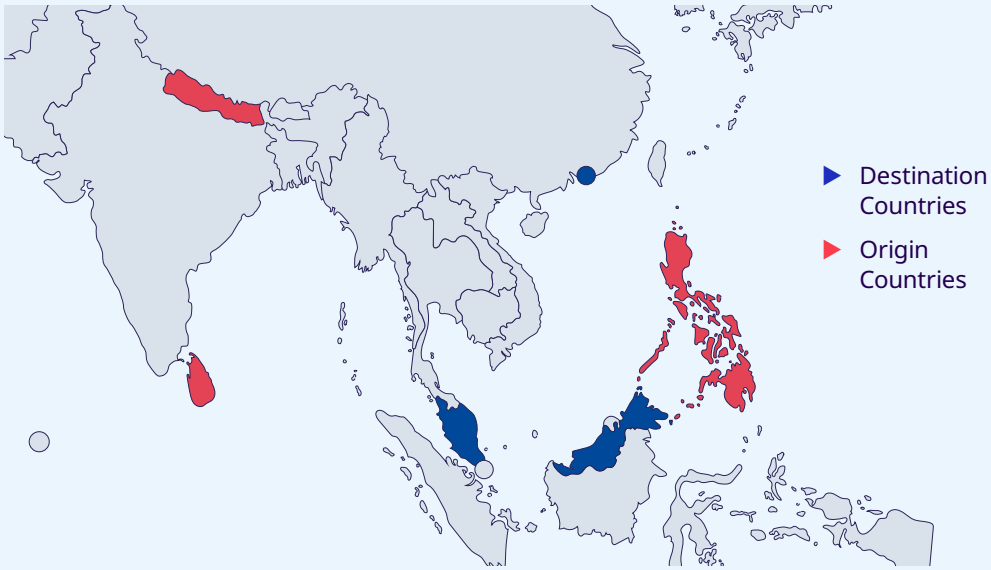
Having taken into account the corridor-specific outcomes anticipated through the

primary research objective[8] of this study, we conceptualized and carried out data collection and analysis through a lens informed by this migration trend. With regard to promoting fair recruitment migration corridors, the ILO notes that "given that recruitment is the first step in establishing an employment relationship, instituting fair recruitment processes within migration corridors is essential for the protection of men and women migrant workers" (International Labour Office 2017). Promoting fair recruitment and ensuring effective governance of labour migration between countries within a corridor requires a high degree of coordination and mutual recognition of standards and operating procedures. Improved cooperation across migration corridors can help to reduce specific recruitment as well as overall labour migration costs, and facilitate the harmonization of regulatory frameworks (International Labour Office 2017). Figure 2 shows the migration corridors of interest in this study.

3.2 Layers of migration infrastructure

In order to facilitate safe, orderly, and regular labour migration, it is necessary for governments to build the relevant institutional capacity and infrastructure to support citizens working abroad. **Migration infrastructure includes the "systematically interlinked technologies, institutions, and actors that condition and facilitate human mobility"** (Xiang and Lindquist 2014). To support the analysis of migration infrastructure, and its specific impact on labour migration, we draw on Xiang and Lindquist's five dimensions: commercial (recruitment intermediaries), regulatory (state apparatus, procedures for documentation, licensing, training), humanitarian (NGOs and international organizations), social (migrant networks), and technological (communication and transport) (Xiang and Lindquist 2014). By focusing on the

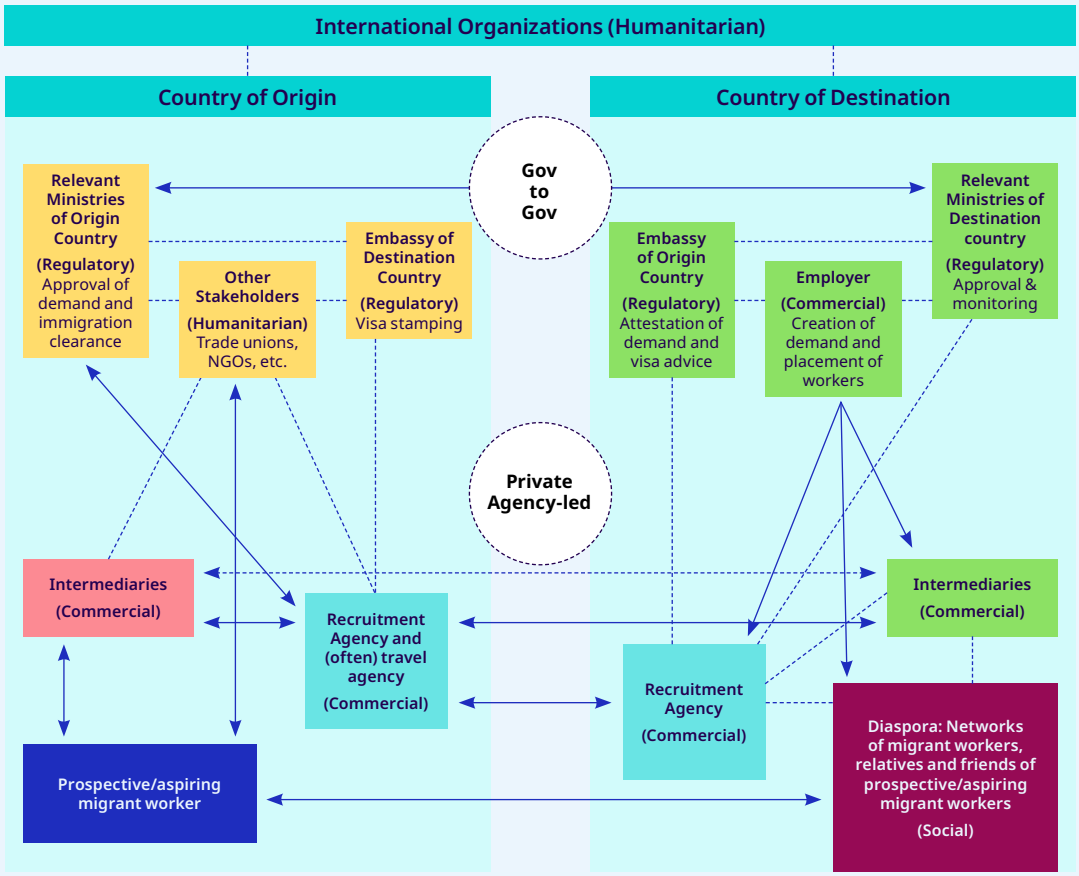
▶ Figure 2: Migration corridors



8 "To inform and provide recommendation towards the development / support of a specific digital technology solution addressing identified gaps in access and use of critical information and services, to be pilot tested in one of the FAIR project's migration corridor".

organizational and socio-technical dimension of migrant mobility and less on the people who move, we gain a broader understanding of the conditions that underpin labour migration. This is not to say that the individual experiences of migrant workers are not important because migration infrastructures, when viewed as a repository of knowledge, can be the starting point for understanding divergent migration experiences (Lindquist, Xiang, and Yeoh 2012). The main policy areas covered within labour-sending countries are the regulation of recruitment and deployment, the social protection and delivery of welfare benefits to migrants abroad and the return and reintegration of overseas workers. States with a more developed migration infrastructure tend to provide greater social protection to migrant workers relative to states with less developed infrastructures. Migration infrastructures also tend to be more highly developed within sending countries, as they may be required by destination countries to facilitate medical tests and provide skills training or certification, in addition to having a more vested interest in protecting the well-being of their own citizens. Figure 3 represents the interconnectedness of different stakeholders and the roles that they play in the recruitment process. Each of these actors employ ICTs in a wide variety of manners with examples provided in Chapter 4.

▶ **Figure 3: Interconnectedness of migration stakeholders and dimensions of migration infrastructure (Adapted from (IOM 2020))**



Technological Infrastructure and the digital divide

Over the years, technology has played a key role in the organization of migration infrastructures. Although not explicitly included in Figure 3, the technological dimension of migration infrastructures is what underpins the other four dimensions and supports this complex web of interactions. As service provision, information gathering and support for migrant workers become increasingly predicated on having digital awareness, digital literacy and access to ICTs, it is necessary to consider these different dimensions and their relationship with the "digital divide". This term refers to the gap between individuals, households, and geographic areas across different socio-economic levels with respect to their opportunities to access ICTs and their use of the Internet for a variety of activities. These gaps in access, usage, and skills related to digital technologies reflect and amplify pre-existing social, economic, and culture inequalities, which in turn ultimately determine the impact and outcomes of any technology intervention. Disparities can exist across a number of characteristics such as gender, age, education, ethnicity, and location, with the intersection of multiple disadvantages contributing to even greater inequalities.

The quality and breadth of available technological infrastructures is a necessary requisite for accessing the Internet through an ICT device. Inadequate or unavailable infrastructures to enable network coverage is a particular concern for many rural and remote areas throughout the world and makes online services and functions difficult or impossible to access. Many people are first-time users of the Internet through closed networks such as Facebook, rather than through the open Internet, making them unaware of other services and functionalities that are available to them (GSMA 2015). This can be exacerbated by a lack of relevant content that is available in local languages which dissuades individuals from seeking novel sources of information or intimidates them. The access routes to digitized systems are also often dependent on having some degree of proficiency in English. Although new digital tools can be empowering to those with the requisite knowledge and skills, they simultaneously run the risk of creating additional barriers to inclusion for those with existing disadvantages. The UN Secretary General's "Roadmap for Digital Cooperation" acknowledges that migrants are particularly vulnerable to being left behind by digitization and face additional challenges in achieving and benefiting from connectivity (United Nations, n.d.).

The type of applications and the scope of deployment of ICTs in facilitating recruitment (and more broadly migration) are informed and mediated by the differential technological and digital infrastructures that exist between and within countries. Governments of higher-income countries are more likely to implement services through electronic governance; they also have more robust capabilities to support the uptake of new technological developments. Digital technology further underpins the theoretical potential for optimization of migration-related data sharing and processing and can in some cases upgrade the functionality and versatility of various information systems. Indeed, international migrants' use of technology is heavily impacted by the diffusion and use of ICTs in their country of origin (Fairlie et al. 2006). When migrating from lower-income origin countries to higher-income receiving countries, workers in many cases experience a significant shift in the levels of overall digital connectivity and telecommunications infrastructure available. However, migrant workers (particularly low-skilled ones) may not possess the same level of digital skills as the rest of the destination country population to take full advantage of this improvement, and even if their skills are on par with others in the destination, they may nonetheless face barriers in terms of language and content.

▶ **Table 2: ICT, network and governance indicators (Source: ITU ICT Index (ITU n.d.))**

Country	ICT Indicator							
	% population using the Internet (2019)	% households with Internet (2018)	% population covered by a mobile-cellular network (2019)	mobile cellular subscriptions per 100 inhabitants (2019)	% households with a computer (2019)	Network Readiness Index (NRI) Rank[9]	Inclusive Internet Index Ranking (2020)[10]	E-Government Development Index (EGDI) Rank[11]
Nepal	34.00	17.93	92.47	139.45	13.97	106th	N/A	132nd
Sri Lanka	34.11	24.36	99.00	115.06	27.21	83rd	56th	85th
Philippines	43.03	17.65	94.00	154.76	23.79	71st	63rd	77th
Hong Kong SAR	91.74	94.13	100.0	288.53	77.60	24th	14th	N/A
Malaysia	84.21	90.10	96.7	139.60	71.33	32nd	35th	47th

In focusing on the five economies in this study, the differential patterns of adoption and use can be attributed at least in part to their ICT adoption, connectivity, and electronic governance (Table 2). As this table shows, sending countries of interest in this study have a significantly lower percentage of the population using Internet, households with Internet, and households with a computer as compared to receiving countries. However, all countries have more than 90 per cent of their population covered by a mobile-cellular network, and more than 100 cellular subscriptions per 100 inhabitants. It is important to note that we do not use these figures to insinuate that mobile phone access has reached saturation point. Instead, in many cases people in large cities have more than one cellular subscription each, and people in rural areas have limited mobile phone access: not 3G or higher.

3.3 International frameworks on migration and technology

Labour migration is a cross-cutting global development issue that is relevant and interconnected to every one of the Sustainable Development Goals (SDGs). The Declaration adopted by the United Nations General Assembly on the 2030 Agenda for Sustainable Development recognized that "international migration is a multidimensional reality of major relevance for the development of countries of origin, transit and destination, which requires coherent and comprehensive responses" (United Nations 2015). It further states that "the spread of information and communications technology and global interconnectedness has great potential to accelerate human progress and to bridge the digital divide" (United Nations 2015). Specific references related to ICTs and migration are included in many SDGs and further enshrined in a number of targets and indicators (Table 3). Target 17.18 also calls for supporting developing

9 The Network Readiness Index measures various technological and human dimensions of network readiness and their impact, including contributions to the SDGs.

10 The Inclusive Internet Index calculates an overall score based on four dimensions: Availability, Affordability, Relevance, & Readiness.

11 The E-Government Development Index is a compositive index with three components measuring online services, telecommunications infrastructure, and human capacity as it relates to the development of electronic governance.

▶ **Table 3: Migration, trafficking, and ICT within the SDGs**

SDGs related to Migration Governance and Recruitment	
Target 8.8	Protect labour rights and promote safe and secure working environments of all workers, including migrant workers, particularly women migrants, and those in precarious employment
Goal 10.7	Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies
Indicator 10.7.1	Recruitment cost borne by employee as a proportion of yearly income earned in country of destination
Indicator 10.7.2	The number of countries with migration policies to facilitate orderly, safe, regular, and responsible migration
Target 10.c	By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent
SDGs Related to Trafficking and Forced Labour	
Target 5.2	Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation
Target 8.7	Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking
SDGs Related to ICTs	
Indicator 4.4.1	The proportion of youth/adults with information and communications technology skills, by type of skill
Target 5.b	Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women
Target 9.c	Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020

countries to increase the availability of "high-quality, timely and reliable data, disaggregated by income, gender, age, race, ethnicity, and migratory status."

ICTs and the Global Compact for Safe, Orderly and Regular Migration

A substantial number of instruments have been adopted by the United Nations (UN) and the ILO over time to outline international human rights and labour standards and ensure the dignity and protection of migrant workers. However, within many of these, specific references to technology and its role in migration governance and recruitment are either limited or non-existent relative to the importance of technology as it affects every aspect of migration. Older conventions do not capture recent trends in technological advancements and references to technology may only be mentioned in relation to technology transfer from developed to developing economies.

The Global Compact for Safe, Orderly and Regular Migration (GCM) of 2016 is a landmark inter-governmental agreement that covers all dimensions of international migration and includes the most comprehensive details of how technology will play a role in improving migration. The GCM includes references to using technology to achieve many of the outlined objectives including those related to borders, remittances, and identification. These provisions (Table 4) reflect the growing recognition of the importance of technology and are directly linked to the tools included in our landscape analysis in Chapter 4.

▶ Table 4: References to technology in the Global Compact on Migration

Objective 4: Ensure that all migrants have proof of legal identity and adequate documentation
"Improve civil registry systems... by providing relevant identity and civil registry documents, strengthening capacities and investing information and communications technology solutions, while upholding the right to privacy and protecting personal data" "Ensure adequate, timely, reliable and accessible consular documentation to our nationals residing in other countries, including identity and travel documents, making use of information and communications technology"
Objective 11: Manage borders in an integrated, secure and coordinated manner
"Establish appropriate structures and mechanisms for effective integrated border management...and use of information technology, while upholding the principle of non-discrimination, respecting the right to privacy and protecting personal data"
Objective 12: Strengthen certainty and predictability in migration procedures for appropriate screening, assessment and referral
"Increase transparency and accessibility of migration procedures by communicating the requirements for entry, admission, stay, work, study or other activities, and introducing technology to simplify application procedures"
Objective 18: Invest in skills development and facilitate mutual recognition of skills, qualifications and competences
"Use technology and digitization to evaluate and mutually recognize skills more comprehensively on the basis of formal credentials as well as non-formally acquired competences and professional experience at all skills levels"
Objective 20: Promote faster, safer and cheaper transfer of remittances and foster financial inclusion of migrants
"Develop innovative technological solutions for remittance transfer, such as mobile payments, digital tools or e-banking to reduce costs, improve speed, enhance security, increase transfer through regular channels and open up gender-responsive distribution channels to underserved populations, including persons in rural areas, persons with low levels of literacy and persons with disabilities"

Relevant conventions and treaty ratifications

All of the ILO's conventions are inclusive of migrant workers including the ILO's eight fundamental conventions pertaining to the fundamental principles and rights at work. In addition, a number of ILO conventions and UN treaties are particularly focused on migrant workers based on their provisions and thematic coverage. Table 5 displays the ratification status of these various international instruments for the main countries of interest in this study.[12]

With the exception of the Philippines, a majority have not ratified the most relevant instruments related to the protection of migrant workers. Perhaps most notable, is that none of the countries in this study have ratified the Private Employment Agencies Convention, which contains the provision that explicitly prohibits the charging of migrant workers for recruitment costs and related fees.

12 This list is not intended to be exhaustive, and note should be made that Hong Kong SAR cannot ratify international treaties and is not a member of the ILO. Hong Kong SAR notifies the ILO on instruments ratified by China that will also legally be applicable in the Special Administrative Region.

▶ Table 5: Ratification of key international treaties and conventions relevant for migrant workers, ratified by origin and destination countries / regions

Convention Name	Ratified Status by Country / Region				
	Nepal	Philippines	Sri Lanka	Malaysia	Hong Kong SAR
International Labour Organization (ILO) Migration for Employment Convention (Revised), 1949 (No. 97)	No	Yes (2009)	No	Yes (1964)*	Yes
ILO Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143)	No	Yes (2006)	No	No	No
United Nations International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families, 1990	No	Yes (1993)	Yes (1996)	No	N/A
ILO Domestic Workers Convention, 2011 (No. 189)	No	Yes (2012)	No	No	No
ILO Private Employment Agencies Convention, 1997 (No. 181)	No	No	No	No	No
United Nations Convention against Transnational Organized Crime 2003	Yes (2011)	Yes (2002)	Yes (2006)	Yes (2004)	N/A
ILO Forced Labour Convention, 1930 (No. 29)	Yes (2002)	Yes (2005)	Yes (1950)	Yes (1957)	Yes (1997)
ILO, Protocol of 2014 to the Forced Labour Convention, 1930	No	No	Yes (2019)	No	No

***Malaysia – Sabah**

3.4 Participation in regional intergovernmental cooperation

All sending and receiving countries in this study are part of the Bali Process on People Smuggling, Trafficking in Persons and Related Transnational Crime, which is a forum for cooperation on ending trafficking, strengthening migration management, and expanding safe, regular migration pathways. Nepal, the Philippines and Sri Lanka are also members of the Colombo Process, which is a Regional Consultative Process on the management of overseas employment and contractual labour for countries of origin in Asia. Nepal, the Philippines, Sri Lanka and Malaysia are also part of the Abu Dhabi Dialogue, which is a voluntary and non-binding intergovernmental consultative process for major Asian origin and destination countries. As member states of the Association of Southeast Asian Nations (ASEAN), the Philippines and Malaysia adopted the 2007 ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers and the 2017 ASEAN Consensus on the Protection and Promotion of the Rights of Migrant Workers.

3.5 Migrant stock

International migrant stocks are estimates of "the total number of international migrants present in a given country at a particular point in time" (Migration Data Portal 2020). National statistical offices and relevant government ministries dealing with migration administration collect data on migrant stocks through censuses, population registries and immigration systems. Table 6 presents the number of migrants in the study countries disaggregated by gender.

▶ **Table 6: Migration stock by migration corridor**[13]

Receiving Country	Sending Country								
	Nepal			Philippines			Sri Lanka		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Hong Kong SAR	7 947	5 890	13 837	7 992	169 992	177 984	76	559	635
Malaysia	306 455	9 647	316 102	15 153	37 257	52 410	4 661	1 828	6 489

3.6 Summary

This section has introduced the five dimensions of migration infrastructure: commercial, regulatory, humanitarian, social and technological . In doing so, it has begun to unpack the ways that migration corridors are mediated, and the impact this mediation has on recruitment. The next section builds on this understanding, providing a landscape analysis of ICT tools that are used by various actors within the migration infrastructure.

13 Data Sources: 2016 Population By-census Office, Census and Statistics Department, The Government of Hong Kong SAR; Annual Statistical Report of Foreign Employment 2017, Research Division, Sri Lanka Bureau of Foreign Employment, Sri Lanka; Immigration Department of Malaysia, Ministry of Home Affairs. Data refers to Total Departures for Foreign Employment through All Sources to Hong Kong SAR in 2017 instead of migrant stock in place.

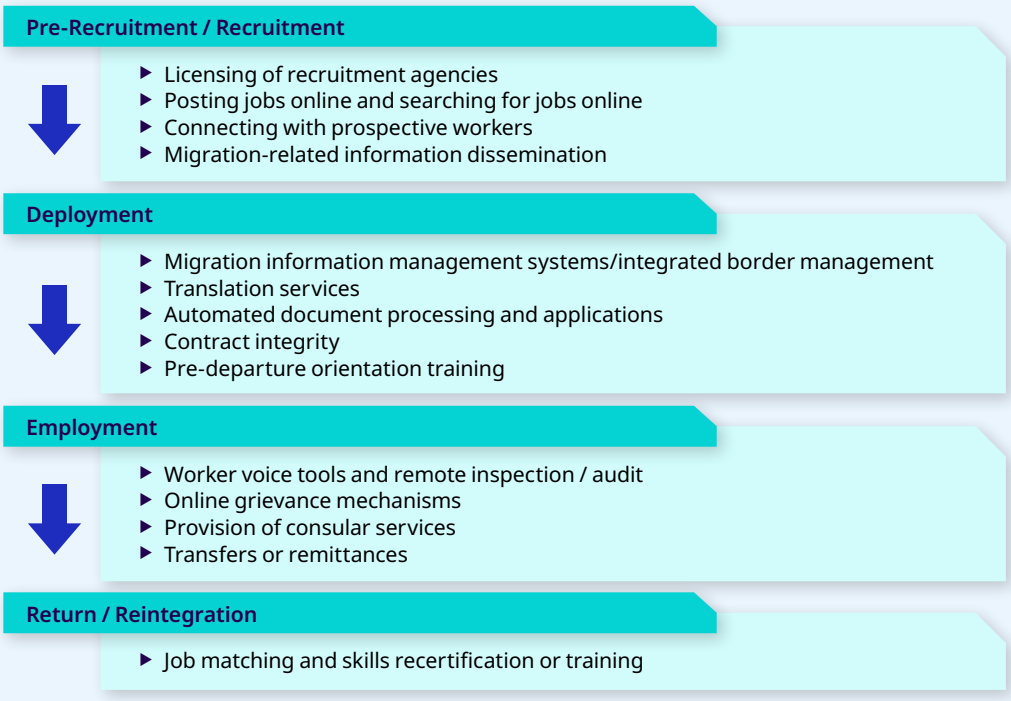
4

▶ Digital technologies for migrant workers: Landscape analysis

This chapter provides a **landscape analysis of digital platforms and ICT tools that address the needs of migrant workers at different stages of their recruitment lifecycle and** which are **used by the various actors within migration infrastructure**s. By drawing on experience from existing technologies and insights from different partnerships between stakeholders, the **services, functionalities, and technologies** that are highlighted in this study can potentially be created, replicated, and upgraded in other corridors or countries of interest.

The labour migration process can be divided into the following stages: pre-departure (including recruitment); deployment; employment; and return/onward migration. At each of these stages, individuals and institutional actors that make up the overall migration infrastructure utilize technology for a wide range of commercial, regulatory, social and humanitarian purposes (refer to Figure 4). Technology has the potential to enable all of the actors to undertake their core functions at each of these stages in new and improved ways. Mobile and digital technologies can supplement, grow, and innovate already existing services, expanding their reach, coordination, and integration.

▶ **Figure 4: Examples of application of technology at the various stages of recruitment**



4.1 ICTs and the General Principles and Operational Guidelines for Fair Recruitment

The ILO General Principles and Operational Guidelines of Fair Recruitment (GP&OG) aim to inform the current and future work of the ILO, national legislatures, and social partners in promoting and ensuring fair recruitment. Within these principles and guidelines there are a few direct recommendations on the use of technology including:

Operational Guideline 7: Governments should take steps to ensure that employment contracts are clear and transparent and are respected

> 7.1: While respecting confidentiality and the protection of personal data, governments may consider the use of information technology to achieve the aforementioned objectives

Operational Guideline 11: Governments should raise awareness of the need for fair recruitment in both the public and private sectors and ensure workers have access to free, comprehensive and accurate information regarding their rights and the conditions of their recruitment and employment

> 11.1 a) development and maintenance of government websites that contain relevant information regarding fair recruitment policies, legislation, regulation and processes
>
> 11.1 b) development, distribution and/or online publication of "how-to" guides on fair recruitment
>
> 11.1 d) web seminars (webinar) or other outreach efforts

Beyond these specific operational guidelines where the role of technology is clearly and narrowly defined, ICTs also play a role in the realization of all the 13 GP&OG through both direct and indirect influences. This could broadly include the digitization and technological automation of administrative procedures; the use of digital information management systems by organizations; the development of new mobile applications, platforms, and websites; enhanced communication between actors using ICTs; online service provision; and more. In some cases, digital technology may represent a stand-alone primary solution that is linked with a single principle and in others, the use of technology may underpin interactions between recruitment stakeholders and carry secondary effects across multiple principles.

Principle	Potential Role of ICT/Digital Technology
Principe 1: "...including those expressed in international labour standards, and in particular the right to freedom of association and collective bargaining..."	-Enable social dialogue, collective voice, worker organization
Principle 2: "Recruitment should respond to established labour market needs..."	-Capture and analyse data to better understand market needs
Principle 3: "Appropriate legislation and policies on employment and recruitment should apply to all workers, labour recruiters and employers."	-Enhance capacity of enforcement measures
Principle 4: "... promote efficiency, transparency and protection for workers in the process, such as mutual recognition of skills and qualifications."	-Automation and digitalization of administrative procedures; online skill assessments
Principle 5: "... The role of the labour inspectorate and the use of standardized registration, licensing or certification systems should be highlighted..."	-Use of digital labour inspection tools, information systems for standardization, data storage and processing
Principle 6: "...Recruitment across international borders should respect the applicable national laws, regulations, ... of countries of origin, transit and destination..."	-Enable institutional actors, such as border enforcement, to screen for, monitor and record violations
Principle 7: "No recruitment fees or related costs should be charged to, or otherwise borne by, workers or jobseekers."	-Digital record of financial transactions
Principle 8: "...written contracts should be in a language that the worker can understand, ... should be subject to measures to prevent contract substitution.."	-Secure storage of original contracts

Principle	Potential Role of ICT/Digital Technology
Principle 9: "Workers' agreements to the terms and conditions of recruitment and employment should be voluntary and free from deception or coercion."	-Online support services & consultation
Principle 10: "Workers should have access to free, comprehensive and accurate information regarding their rights and the conditions of their recruitment and employment."	-Websites/mobile phone applications containing information on rights & general employment conditions
Principle 11: "... Workers' identity documents and contracts should not be confiscated, destroyed or retained."	-Secure digital repositories for storing copies of contracts & identity documents
Principe 12: "Workers should be free to terminate their employment and, in the case of migrant workers, to return to their country..."	-Gather information, access consular services, request repatriation
Principle 13: '... Access to free or affordable grievance or dispute mechanism..."	-Online grievance mechanisms

4.2 Research method and limitations

To obtain a comprehensive understanding of the ways in which specific technology solutions can meet the needs of migrant workers, we undertook a landscape analysis of existing and relevant tools to answer the following question:

What existing and relevant digital technology solutions could contribute to addressing the needs of migrant workers?

We began this analysis by reviewing seminal background documents on the nexus of technology and labour migration such as Tech Against Trafficking (OSCE and Tech Against Trafficking 2020), Mobile Women & Mobile Phones (ILO 2019b), Transformative Technologies for Migrant Workers (Farbenblum, Berg, and Kintominas 2018) and Digitalization to Promote Decent Work for Migrant Workers in ASEAN (ILO 2019a). From there, we expanded our search to other relevant reporting undertaken by international bodies (including IOM, ILO, Global Forum on Migration and Development (GFMD)), as well as keyword searches within relevant government websites, Google Play, Apple Store, and search engines. Stakeholder interviews complemented this review and, in some instances, helped inform us of previously unidentified tools.

Our review was not intended to be sufficiently complete as to be inclusive of all ICTs related to migration and recruitment, but rather sought to identify a representative sample of unique, innovative tools and platforms across the labour migration lifecycle linked to the ILO's Principles and Guidelines for Fair Recruitment. The landscape analysis found that the tools and solutions which were already available could be grouped together according to the following categorizations from which we summarize a few best examples of each at the global, regional and corridor level throughout the remaining sections of this chapter:

- apps/platforms (ICT solutions) that provide either corridor-specific or general migration related information (4.3);
- apps that enable communication with frontline responders (4.4);
- online recruitment platforms for direct hiring (4.5);
- apps/platforms that recognize skills and/or connect returned migrants with new jobs (4.6);
- platforms that enable workers to rate and review recruitment agencies (4.7);
- apps /platforms that reduce or eliminate cost of remittances and enhance financial literacy and inclusivity (4.8);
- electronic management systems for migration governance and/or grievance mechanisms (4.9);

- digital tools and platforms for the private sector to enhance their fair recruitment practices (4.10).

In the remainder of this section, we discuss the gaps and challenges that motivated the exploration of ICT interventions with respect to these categories. We also describe the role technology could play in disrupting current models of recruitment or enhancing existing information and service provision. We briefly summarize the core functionalities and include information on the organizations that are developing and implementing the various tools, as well as on whatever qualitative and quantitative findings were available.

It is important to note several significant limitations to this approach. None of the tools or solutions we identified had published independent assessments detailing the successes, shortcomings or short/long-term impact. That is not to suggest these studies have not been completed and reported on internally, but our analysis relied solely on information that was publicly made available and accessible online. The lack of such assessments may also be partly explained by the reality that many initiatives were only developed and launched within the past year or two, which is broadly reflective of the overall space of migrant technology which remains in its relative infancy. This entails constraints in objectively analysing and comparing the success of one tool versus another within the same category. For example, a proxy measure for user uptake could be the number of times an app was downloaded or a website was visited. However, this does not give any indication of how the technology was used or its impact on individual users. Likewise, other forms of quantitative data (for example. total dollar amount of recruitment debts avoided as a result of using technology) that were occasionally showcased within project descriptions did not generally include a detailed methodology of how organizations arrived at these figures. That being said, we nonetheless include any examples of this type of information that was able to be found and take it at face value rather than making any claims that A is better than B by X per cent since the information collected and published varied substantially. Furthermore, even qualitative comparisons cannot be made across categories as the tools fundamentally address different needs and offer differ opportunities and limitations. As we have mentioned in our review of migration corridors and infrastructures, there are significant variations from country to country and the design of a specific digital solution would need to be tailored towards the specific context and needs.

4.3 ICT solutions providing information for migrant workers

ICTs are becoming increasingly critical to migrants, enabling access to up-to-date information before and during their migration journeys, in order to support safe, regular and orderly migration. The abuses carried out against migrant workers at the hands of their recruiters, employers and other intermediaries are underpinned by significant information and power asymmetries (Farbenblum, Berg, and Kintominas 2018). Often recruitment agencies do not provide comprehensive and accurate information about job responsibilities, working and living conditions and how to access support or grievance mechanisms while overseas. ICT-based solutions can play a role in balancing these disparities by providing timely, pertinent, and verified information to help migrants plan their journeys abroad, understand their rights in a destination country, and be aware of deceptive practices they may encounter (ILO Principle 10).

Migrant workers require a broad range of information, including working conditions, contract terms, relevant labour laws, customs and culture, social protection benefits and skills in financial management. Education and information dissemination about migration can help prevent exploitation and empower vulnerable migrant workers to be knowledgeable of and to assert their rights. Access to information on recruitment and employment standards, as well as workers' rights is a key mechanism through which the promotion of international labour migration standards can be achieved. This information can be utilized or accessed at varying stages of the migration process from pre-recruitment, recruitment, post-recruitment, travel-transit and employment. ICTs can enable critical planning prior to departure such as transport options, costs, and general safety information. To help

migrants settle and integrate into destination countries after arrival, they can use ICTs to connect with migrant networks and access local information. However, obtaining accurate and relevant information about labour migration continues to be a challenge for migrants at all stages of their journey.

Pre-departure orientation programmes are an important tool for the protection of migrant workers. Some countries such as Nepal and the Philippines have government-mandated programmes to provide basic information to departing migrant workers in order to help them as they transition to life in a destination country and to maximize the benefits of overseas employment. By providing insights about living and working conditions in specific countries and sectors, migrants can realistically have more informed and grounded expectations. **Post-arrival orientation programmes** offered by some sending and receiving countries also help to reinforce and contextualize the information provided prior to departing, once the worker has arrived in the country of destination. **Digital technology can provide an alternative and complementary form of service delivery by enabling online sessions and streamlining dissemination of information, with multimedia tools making this information more engaging and accessible.** As an example, the ILO Country Office for the Philippines has recently announced the development of an online Post-Arrival Orientation Seminar (PAOS) learning system to be administered by the Philippine Overseas Labour Office (POLO) in Hong Kong SAR (ILO 2019c). This consideration is also particularly important in the context of the COVID-19 pandemic, as social distancing requirements, movement restrictions and other measures may interrupt face-to-face sessions.

Peer-to-peer networks enable workers to share authentic migration and recruitment experiences through apps or tech-enabled platforms such as mainstream social media sites and messaging apps. Websites designed for migrant workers' communities can house directories of relevant contact information, addresses and phone numbers for NGOs, charities and government offices. Interactive graphics, videos and reference guides embedded in such websites can provide simplified and clear information that can easily be shared among migrant networks. Information must be provided in an accessible fashion inclusive of national and sub-national language or dialects, while utilizing formats such as audio recording or cartoons that can be understood by low-literate or illiterate migrant workers. There is also potential for the gamification of learning about migration risks and quantifying learning by answering questions. Interfaces should be designed in ways that are user-friendly, practical and include either simplified instructions on use or are designed to be intuitive enough for self-instruction. Platforms need not be limited strictly to information sharing and can serve multiple, complementary functions including being interactive spaces for migrant learning and support, a hub for user surveys, or be presented in different languages and in multiple formats including text, audio and visual graphics.

Social media platforms, in general, are widely used in networks of migrant workers for peer-to-peer connection, sharing migration experiences, and accessing information. Governments, NGOs, recruitment agencies, and CSOs also leverage existing social media platforms such as Facebook and WhatsApp to reach prospective migrants and diaspora communities because of their convenience, low cost and extensive reach. For example, the POEA requires by law that all private recruitment agencies maintain an active Facebook page and act as a platform for sharing information, answering queries, and accepting complaints. The Nepali Mission in Malaysia conducts a weekly Facebook live programme containing information on Malaysian laws, culture, health and safety matters that are relevant to migrant workers, as well as on services provided by the Mission and Q&A with workers (Government of Nepal 2020).

The following tables introduce examples that we identified of innovative uses of ICTs to provide tailored information to migrant workers, from a global (Table 7), regional (Table 8), and corridor-specific (Table 9) perspective.

▶ Table 7: Global ICT solutions providing information for migrant workers

MigApp Launched 2017	MigApp is a mobile phone app that offers reliable and practical information to help migrants make well-informed decisions pre-departure, during transit and upon arrival. It provides information and tools related to money transfer services, visa regulations, health care options, rights in specific countries, and voluntary return options. MigApp was developed and is managed by IOM and is currently available in English, Arabic, French, Spanish, Chinese, Italian, Russian and Portuguese. To date, it has been downloaded more than 10,000 times.
Migrants as Messengers West Africa Launched 2017	Migrants as Messengers is a peer-to-peer awareness-raising campaign that empowers young people in West Africa to make informed decisions about migration by leveraging digital communications technologies. Implemented across three countries in Senegal, Guinea, and Nigeria between 2017 and 2019 IOM worked with volunteer returned migrants who tell the story of their journey captured on a special designed Community Response App. These videos were then uploaded onto a digital platform and shared through community engagement activities and social media platforms such as Facebook, radio and television.

▶ Table 8: Asia-based ICT solutions providing information for migrant workers

BdeshJaatra Bangladesh Launched 2020	BdeshJaatra is a mobile phone application and information platform that was developed by IOM in collaboration with BDjobs, Bangladesh's largest jobs site, to deliver migrant-friendly information services. The app contains information that is relevant to prospective migrants, migrants currently overseas, and returnee migrants such as remittance management, medical services and legal services. All of the content within the app is based upon "Publicly Available Information of Government of Bangladesh", a project led by the Ministry of Expatriates' Welfare and Overseas Employment. Since the app was launched in late 2020, it has been downloaded over 500 times.
Miss Migration Myanmar Launched 2018	Miss Migration (Mel Shwet Pyaung) is a Facebook chatbot that was developed and is managed by IOM X with support from USAID as part of a regional anti-trafficking campaign. The chatbot processes information queries and directs users to official migration information on government websites to help them make informed migration decisions. Miss Migration is regularly updated by IOM to answer questions related to procedures for regular migration, security during migration, and rules and regulations in destination countries. The Facebook profile page that houses the chatbot very regularly posts additional relevant content and has over 20,000 followers.

▶ Table 9: Corridor-specific ICT solutions providing information for migrant workers

Shuvayatra Nepal Launched 2016	The Asia Foundation, the Non-Resident Nepali Association (NRNA) and Young Innovations created and manage "Shuvayatra" (Safe Journey), a mobile application that provides Nepali migrant workers with the tools that they need to plan a safer period of travel and work abroad. The mobile app connects the user to multimedia content supplied by a consortium of experts, advocates and peers. Migrants can access quick capsules of relevant information on a range of topics such as practical financial information, changes in government rules and procedures regarding migration, services offered by Nepali Embassies abroad, contact information for migration-related organizations, and read stories and advice written by other Nepali migrants currently living abroad. To date, the app has been downloaded more than 50,000 times.
FDH Portal Hong Kong SAR Launched 2016	The Foreign Domestic Helper (FDH) Portal of the Hong Kong SAR Labour Department is a one-stop online platform that helps FDHs to understand their rights and benefits before coming to work in Hong Kong SAR. The website is available in English, Chinese, and the top ten most spoken native languages by FDHs. In addition to extensive housing information, there is an integrated form for FDHs and employers to make enquiries and complaints. There is also a dedicated 24-hour hotline to provide support for FDHs seeking advice on their employment rights and obligations.

4.4 Apps to enable communication with frontline responders

ICTs can support simple interpretative or translation services and enable basic communication between migrant workers and frontline responders[14]. These responders regularly come into contact with vulnerable workers who may have been victims of fraudulent recruitment or exploitation. However, because labour migrants may come from several different countries or may not be able to speak any of the national languages spoken by the translators, communications barriers end up preventing effective initial screening. Moreover, migrants may be suspicious of the intentions of law enforcement or government officials and not self-identify as victims even if given the opportunity to do so. Due to the sensitive information victims would have to disclose, they may not feel comfortable doing so in traditional face-to-face interviews, whether by themselves or in a group of other migrants. Interviews with migrant workers often take place within the presence of a supervisor (at the worksite) or recruiter (in transit) and this lack of privacy can inhibit truthful responses. Technology can be leveraged to address these concerns through the use of pre-determined, pre-recorded audio questions embedded within mobile phone apps, such as in the case of an expert system known as Apprise. In transit and destination countries, migration management officials or other authorities at border crossings and checkpoints can use similar tools to support communication during initial contact if there is suspicion of fraudulent recruitment or indicators of trafficking in persons. This would enable further investigation or enhance the possibility of directing a migrant worker to information resources or services depending on their needs.

Table 10 introduces apps and platforms used internationally that provide interesting examples from which we we can learn about the use of technology in supporting communication between migrant workers and frontline responders.

▶ Table 10: Global apps to enable communication with frontline responders

Apprise Launched 2018	Apprise was developed as a tool to support frontline responders such as labour inspectors, NGO workers, and law enforcement officers to identify victims of forced labour and human trafficking. While downloaded onto the frontline responder's mobile phone, ultimately it is a tool to support migrant workers to confidentially disclose details of their work situation and seek help. Apprise uses a series of sector specific yes/no questions that are recorded in popular migrant worker languages. At the end of the interview, a vulnerability calculation is performed to inform frontline inspectors' next steps, as well as to summarize the key indicators of exploitation raised my workers.
MiTA – Migration Translation Application Western Balkans Launched 2018	The Migration Translation Application (MiTA) is a smartphone application, developed and managed by IOM, that allows migration management officials in the Western Balkans to access a basic interpretation service with pre-determined and pre-recorded questions during first contact with migrants. The aim of MiTA is to provide a basic mode of communication between the migrant and a border official to understand any immediate protection needs by inquiring about the migrant's identity, country of origin and travel route. The app is available in 12 languages that are most commonly spoken by migrants that encounter border officials in the Western Balkans region. In the context of COVID-19, the app has been updated to include questions to identify risk or need for medical screening.
IOM Indonesia Indonesia Launched 2019	IOM Indonesia developed a simple phone app for frontline law enforcement officers to quickly detect victims of human trafficking in the fisheries sector. The app includes a list of 21 questions available in multiple languages so investigators can gather information from non-Indonesian crew members regarding their age, contractual status, living and working conditions and any restrictions on movement or ability to communicate with others.

14 A broad term used in this document to refer to stakeholders with mandates to assess working conditions including private auditors, labour inspectors, NGOs.

4.5 Online recruitment platforms for direct hiring

Migrant workers are often susceptible to excessive or hidden recruitment fees that can result in debt bondage, exploitation and forced labour. Both the ILO's GP&OG with its definition of recruitment fees and related costs (Principle 7) and the GCM call for the elimination of recruitment fees and related costs to prevent such abuses from occurring. Employers seeking to keep costs low pass the recruitment expenses onto the worker while recruitment agencies competing with each other for contracts with employers further pass the cost burden down to the prospective migrant worker as well. Recruitment agencies and employers in both countries of origin and destination frequently use sub-agents, adding multiple layers of complexity and opacity to the process, thus making their activities notoriously difficult to regulate. Due to the intricacies of securing overseas employment, as well as the oversupply of low-skilled workers seeking a limited number of positions, migrant workers frequently have little alternative other than to rely on unscrupulous intermediaries. While increased regulation and monitoring of private and public agencies in the migrant labour recruitment industry is necessary to enforce standards and align them with international guidelines and best practices, this process will inevitably occur only gradually across time.

Migrant workers may rely on disparate sources of information to seek out jobs such as word of mouth, interpersonal network referrals, or social media postings. There are a number of well-developed platforms specializing in job matching and recruitment, such as LinkedIn; however these sites are generally targeted towards highly skilled professionals, rather than low-paid migrant laborers. Such existing recruitment platforms geared towards high-skilled professionals can be modified and improved to allow for the recruitment of migrant workers using similar functionalities such as video interviews, remote trainings, task simulations and interactive assessment activities. Technology can help to support fair recruitment by directly connecting job seekers to employers through digital platforms or apps. Mobile or web-based platforms can improve the efficiency and transparency of matching of labour supply and demand (ILO Principle 4) by reducing the reliance on intermediaries who receive commissions or who can charge unauthorized fees due to lack of oversight. Well monitored and managed platforms can lower costs, improve accountability, and ensure a digital trail of interactions.

Platforms that centralize and list valid job postings within the informal or low-skill economies represent a one-stop solution to simplify and expedite the process of identifying employment opportunities. E-based recruitment through a central clearing house can minimize the involvement of intermediaries and is potentially a good practice. Excluding labour intermediates through direct employer recruitment is a practice that the ILO recommends can be promoted and one that can be facilitated through the use of ICTs (ILO 2016a). These platforms can integrate search functions to allow comparison of factors such as terms and conditions, locations, sector, and so on, enabling migrants to assess options and weigh various considerations. It may be possible to use artificial intelligence to search, verify and compile relevant and current employment opportunities in a destination country. By combining different technologies such as the web, Facebook, and WhatsApp it is possible to reach workers who may not have the ability to apply for jobs in more traditional ways or without the assistance of an intermediary. In terms of practicality, such a job portal can have a specific focus on a single migration corridor, rather than including a multitude of origin and destination countries. Moreover, rather than adopting a cross-sector approach to job matching and recruitment, most available platforms targeting low-skill migrant workers have a sector-specific focus such as agriculture, construction or domestic work. Projects that have a more narrowly defined scope and targetted set of users may be more likely to be successful than attempting to integrate multiple sectors.

The use of the Internet to facilitate online recruitment of migrant workers has greatly expanded the reach and number of available options to prospective job seekers. In some sectors and countries, the use of ICTs has overtaken traditional methods of job brokering as the primary mechanism for the recruitment of migrant workers. However, just as it has become incredibly easy for legitimate businesses

to create postings for overseas employment, it is also just as easy for fraudulent offers to be posted which can lead to exploitation. Very little research to date has explored the ways in which deceitful online recruitment practices can lead to labour trafficking and how to prevent this from occurring. Research has examined the use of machine-learning techniques to help identify online advertisements potentially linked to sex trafficking in order to help law enforcement investigations and prevention activities (Alvari, Shakarian, and Snyder 2017). This approach can also potentially be useful and insightful if combined with operational indicators of labour trafficking online. Job portals or matching sights should also include in-built complaint, grievance or anonymous whistle-blowing functionalities as a mechanism to maintain the credibility and trustworthiness of the platform and service.

The following tables introduce key technologies that we identified from a global (Table 11), regional (Table 12), and corridor-specific (Table 13) perspective, that provide interesting examples from which we can learn about the use of technology to match job opportunities with job seekers and how to support the elimination or reduction of recruitment fees.

▶ Table 11: Global online recruitment platforms for direct hiring

AgHelp United States Launched 2019	AgHelp is a mobile web platform that was developed with funding from Techstars Impact Accelerator and is now independently managed. AgHelp addresses agricultural labour shortages by directly connecting employers, migrant farmworkers, and worker support agencies and empowers workers to find supportive services such as migrant education programmes, migrant head start programmes, immigration services, legal services, and job training programmes. This platform is free for workers and service providers and AgHelp does not endorse the use of recruiters. According to the website, AgHelp "will never charge workers to find jobs or supportive services." Since its launch, AgHelp has signed up 140 growers across the U.S. and more than 40 service agencies that provide help to migrants, including information on who was hiring, what they paid, while connecting them to resources and information in the community.
INMI Chile Launched 2019	INMI (Integración laboral de migrantes) is a Chilean start-up company that supports the integration and inclusion of refugees and migrants in the economy. The digital platform links candidates and companies, where applicants can apply directly and coordinate interviews, while employers can view profiles and have informal chats with prospective migrant workers. Since its launch, it has registered nearly 7,000 people and 110 companies.

▶ Table 12: Asia-based online recruitment platforms for direct hiring

BongPheak Cambodia Launched 2016	BongPheak is an innovative Internet-based employment service for low-skilled and unskilled factory, construction, and hospitality workers in Cambodia. Its development and management was a Winrock-implemented USAID project, with technical support from a company called EZECOM. The platform charges no fees to jobseekers and uses a referral system whereby employers are added to the platform on the basis of word-of-mouth referrals from existing employees. The platform reduces the use of intermediaries and allows employers to directly communicate opportunities to workers that previously had little access to information about jobs available domestically. The associated Facebook page has more than 263,000 followers.

▶ **Table 13: Corridor-specific online recruitment platforms for direct hiring**

WorkAbroad.ph Philippines Launched 2003	WorkAbroad.ph is an online recruitment website that offers overseas jobs and employment opportunities to Filipino job seekers wanting to pursue careers abroad. The job openings in this website are posted and processed by Philippine Overseas Employment Administration (POEA)-licensed recruitment agencies sending OFWs to different countries and it is the Philippine's leading overseas job site. Applicants can search for jobs by country or position, as well as view an agency directory and check for the validity of a recruitment agency's license.
Rensol Recruitment Philippines Launched 1999	Rensol Recruitment is a private Philippines based recruitment firm that sources workers for overseas job offerings in a number of sectors, including heavy industries, oil and natural gas, construction and manufacturing. Rensol employs a "no placement fee" model for jobseekers and helps foreign employers to file registrations with relevant government agencies such as POLO and POEA. Their recruitment process is facilitated through several digitized processes including skills- assessment tests, online verbal and numeracy skills tests, and a psychometric assessment.
Pink Collar Malaysia Launched 2019	Pink-collar is a private professional recruitment agency for migrant domestic workers that hosts a digital web and mobile platform directly connecting women from sending countries seeking domestic work with prospective employers from destination-countries looking to hire them. Pink-collar hosts employer and maid profiles, providing the technological capacity and access for employers and maids to undergo a transparent matching process; it takes care of the technical and logistical delivery of the service for both user groups. To date it has placed 67 workers and saved migrants an estimated US$18,000 in recruitment related debt.
Baideshik Rojgar Nepal Launched 2018	Baideshik Rojgar is a mobile phone application that helps Nepali foreign job seekers search for jobs and helps manpower/foreign companies hire qualified candidates. It was developed and is managed by a private company called SajhaJobs. The app allows workers to check listings of overseas employment opportunities, filtering by category, country, salary, and company. Meant to serve as a bridge between workers and entrepreneurs, it helps employers connect directly with prospective migrant workers. To date the mobile phone app has been downloaded over 100,000 times.
HelperChoice Hong Kong SAR Launched 2012	HelperChoice is a private recruitment agency that offers a transparent and ethical platform to match employers and domestic workers . By empowering foreign domestic workers through an online platform that allows them to find jobs for free, HelperChoice reportedly has facilitated more than 50,000 recruitments and estimates that more than 60 million euros of illegal placement fees were saved.

4.6 Skills recognition and connecting returned migrants to employment opportunities

The adoption of ICTs in the labour migration life cycle extends beyond recruitment, placement, and employment to include the return and reintegration of migrant workers as well. The creation of digital platforms and e-documentation can support an easier, more efficient, and more transparent management of this stage of migration. ICTs can not only streamline and improve operational processes associated with return and reintegration but can also be used as a tool for social and economic empowerment. ICTs can be used to evaluate and recognize skills more comprehensively based on formal credentials as well as non-formally acquired competencies. Standardized data collection methods can record details into digital information management systems either upon return to countries of origin or in diplomatic missions of countries of destination for information such as the number of returnees, details of skills, sector of previous employment and training needs. This can then be used for job-matching purposes, priority setting and resource allocation. Many returning migrants, including low-skilled workers, acquire various occupational and technical skills while working abroad or in a different state of their home country, however few systems exist for facilitating skills' recognition and matching labour market needs once they have returned home. Identifying and connecting these migrants with relevant skill sets can help close gaps in domestic labour markets and optimize the chances of successfully reintegrating in their home country. For example, migrant workers returning to Nepal with newly acquired technical skill sets report being unable to connect with employers seeking to hire skilled workers (Government of Nepal 2020). The skills acquired by returnees are not necessarily being utilized or optimized because they have chosen to opt out of the labour market, are employed in

a different sector than where they acquired skills while abroad or are simply unemployed.

Prior to the COVID-19 pandemic, the return and reintegration of migrant workers had already been an issue of major concern for governmental and civil society bodies engaged with migration. However, because of the massive forced deportations and voluntary return of migrants under COVID-19 circumstances this has become a top priority, particularly for major countries of origin such as Nepal, Sri Lanka and the Philippines. Between November 2013 and March 2014, over 163,000 Ethiopians were forcibly expelled from Saudi Arabia as part of the political strategy aimed at nationalizing a workforce that relied heavily on migrant labourers (Lecadet and Tafesse Melkamu 2016). This represents an event to draw on for recent historical comparison with regard to the size and scope of returning migrant workers that has occurred in the previous months and will continue over the coming months and likely, years. For example, the government of Kuwait has recently approved a bill that could deport as many as 360,000 migrant workers as the country aims to mitigate the looming recession and increase national participation in the workforce (Dudley 2020). An estimated 127,000 migrant workers are likely to return to Nepal in the short term because of job losses and health concerns related to COVID-19 and an additional 400,000 may follow in the medium term because of expiring visas and non-renewal of contracts (ILO 2020a). While much focus has been on the circumstances of international migrants because of border closures and lack of commercial flights, COVID-19 lockdowns also severely impacted India's enormous internal migrant worker population, with millions returning to their villages and home states in a short period of time.

▶ Table 14: Global digital tools and platforms that connect returned migrants to employment opportunities

SIRA App Ethiopia Launched 2018	The SIRA application was designed by the Ethiopian Ministry of Labour and Social Affairs in collaboration with the ILO. It links returned migrant workers with employers (both public and private) in low and semi-skilled occupations. The app aims to facilitate an easy access for returnees and other members of the community to suitable and decent job opportunities. It allows employers to post vacancies and search for potential candidates, while job seekers can search or subscribe for job alerts, and upload and update their information on the platform. SIRA takes into consideration the educational levels of users and supports Amharic and English languages. While it works in settings of limited Internet access, the app can also be used offline, to enable employers and job seekers to access previously downloaded data. To date, it has been downloaded more than 5,000 times.

▶ Table 15: Asia-based digital tools and platforms that connect returned migrants to employment opportunities

Good Worker India Launched 2020	Good Worker (formerly known as Pravasi Rojgar) was designed and launched by Sonu Sood in partnership with Schoolnet India and Affinidi Group in the midst and context of the COVID-19 pandemic. Its aim is to provide job linkages and support for the millions of blue-collar and informal Indian migrant workers who were displaced by lockdown measures. The platform has partnered with hundreds of companies around the country in diverse sectors including construction, security, agriculture, food processing, maintenance and housekeeping and garment export. It has reportedly onboarded over 1,000,000 job seekers within a few months of its initial launch and it has been downloaded more than 100,000 times on Google Play.
SWADES India Launched 2020	The Government of India recently launched the Skilled Workers Arrival Database for Employment Support (SWADES) to harness the skills of Indian migrant workers who are returning home from abroad amidst the COVID-19 circumstances by conducting skill mapping and creating a database of workers who can be referred to for employment opportunities.
Karma-Setu India Launched 2020	Karma Setu is an electronic employment exchange platform for informal workers designed and managed by Sixth Sense IT Solutions. Its aim is to facilitate access to work opportunities for the millions of informal migrant workers throughout India whose employment has been disrupted by COVID-19. Through a mobile application, it connects informal job seekers and employers in sectors such as manufacturing, service and construction. At the time of writing, the app is being piloted in Madhya Pradesh.

The following tables introduce key technologies that we identified, from a global (Table 14) and regional (Table 15) perspective, that provide interesting examples from which we can learn about connecting returned migrants to local employment opportunities.

4.7 Platforms that enable workers to rate and review recruiters, employers, and other intermediaries

Identification of both legitimate and illegitimate recruitment agencies can spread organically through networks of prospective migrants who seek insights and perspectives from returned workers or those who are currently overseas. However, this information is limited to the personal experiences of one's proximal social network, making it too disparate to have a broader impact. Crowdsourcing based on a shared economy approach such as what is found in Yelp, Trip Advisor, and so on, can foster a degree of self-regulation amongst unscrupulous agencies by allowing for transparent feedback and ratings between key actors. This has led to the creation of another general category of ICT solutions which are apps or platforms that enable migrants to rate and review their recruitment agencies.

In the past few years a number of platforms have been developed to facilitate access to user-generated reviews of recruitment agencies as a way of incentivizing them to improve performance. Designed on the principle that with the contribution of a sufficient amount of reviews, agencies will self-monitor and reform their practices, since publicly available negative reviews exposing deception or fraud would dissuade jobseekers from using the agency's services. This type of service with a monitoring approach designed to increase accountability and transparency has generated interest, particularly where relevant government agencies lack the capacity for sufficient oversight.

Table 16 presents examples of web platforms that demonstrate the principle of enabling workers to rate and review recruiters, employers, and other intermediaries.

▶ **Table 16: Global platforms that enable workers to rate recruitment agencies**

Contratados Mexico/United States Launched 2014	Contratados is a platform developed and managed by Centro de los Derechos del Migrante, where workers can anonymously post and read reviews of recruiters and employers online, sharing qualitative information about their experiences. The website allows users to search by name or location and includes a variety of questions regarding the employment conditions and practices associated with a company or agency. In addition to its review function, Contratados also contains a repository of information on workers' rights, and shares relevant news stories and resources that are of interest to migrants. The platform is available in both English and Spanish. At the time of writing, the platform listed 22,262 unique employers, individual recruiters, and recruitment agencies in total, with roughly 750 user reviews.
Recruitment Advisor Launched 2018	Recruitment Advisor is a global recruitment and employment review platform developed and managed by the International Trade Union Confederation (ITUC) that lists thousands of recruitment agencies in a number of origin and destination countries. The platform enables users to anonymously share comments, feedback and rate their experiences by answering a number of questions. Governments provide a list of licensed recruitment agencies to be shared on the website while trade unions, civil society organizations and migrants help to promote its usage. Currently the platform hosts reviews about agencies in the origin countries of Nepal, the Philippines, Sri Lanka, Indonesia and Kenya, as well as in 13 destination countries. The website is available in English, Sinhala, Swahili, Tamil, Hindi, Filipino and Bahasa Indonesia.
Pantau PJTKI Indonesia Launched 2014	Pantau PJTKI (Recruitment Watch) is a digital platform developed and managed by the Institute for Education Development, Social, Religious, and Cultural Studies (INFEST) and PTK Mahnettik for Indonesian migrant workers to rate recruitment agencies. The platform facilitates access to user-generated reviews about the services offered by agencies to help inform other migrant workers and assist in civil society in improving their advocacy efforts against recruitment malpractice. It has approximately 1,000 reviews in total, with a comprehensive detailed assessment for each agency. However, the most recently posted review has a time stamp of July 2017, likely indicating the website has fallen out of use over the past few years.

Countries that have compulsory licensing systems for private recruitment agencies (ILO Principle 5) can leverage digital technology by creating publicly available registries of licensed recruitment agencies available through the Internet or digital portals. A regularly updated registry allows prospective migrants to confirm whether an agency they are interested in has the proper license to facilitate job placement or if their license has been revoked for regulatory violations.

Table 17 presents corridor-specific relevant public registries of licensed private recruitment agencies. This is a relatively simple and cost-effective verification mechanism to promote fair recruitment and can help to prevent jobseekers from going through unlicensed agencies that are more prone to abuses due to lack of government oversight and monitoring. Repositories should ideally include the names of agencies, addresses of physical locations, license number, contact information such as phone numbers and email addresses, and the expiration date of license validity. Information should further be organized in one centralized platform or database that includes a user-generated feedback function to allow migrant workers to share comments and insights. However, none of the registries have an option for user feedback. A further example of best practice (although not within the corridors of interest for this study) is Pakistan's public registry of overseas employment promoters, which included statistics on the number of individuals sent abroad per agency in the last four years, as well as the received and pending complaints against the agency in the last three years. It includes a ticker function of the most up-to-date information of license suspension, transparent documentation related to individual complaints, and warnings against agencies including the amount of fines imposed.

▶ **Table 17: Relevant public registries of licensed private recruitment agencies**

Relevant public registries of licensed private recruitment agencies	
Country	**Maintained by:**
Nepal	Nepal Association of Foreign Employment Agencies
Philippines	Philippine Overseas Employment Administration
Sri Lanka	Bureau of Foreign Employment
Hong Kong SAR	Employment Agencies Administration of Labour Department
Pakistan	Bureau of Emigration & Overseas Employment

4.8 Digital technologies supporting financial literacy, payment and remittances for migrant workers

The development of new digital solutions for remittance transfers, e-banking and mobile payments offer new opportunities for reducing costs and enhancing financial inclusivity amongst migrant workers. Reducing remittance costs as a proportion of the amount remitted has been included in the 2030 Agenda for Sustainable Development under SDG Target 10.c, and digital technology will be crucial towards achieving this objective. Having alternatives to in-person interactions at brick-and-mortar service providers can lead to significant time and cost savings for migrants. Mobile money, or digital wallets, as a means to fund and disburse remittance transactions have consistently been found to be the least costly option relative to other mechanisms such as using the formal banking sector and money transfer operators (World Bank 2020). These reductions in transaction cost directly translate to either additional saved income for a migrant worker, or the potential of a greater share of their salary to be remitted. Apps or platforms can centralize information for migrants to enable comparison of available remittance options, exchange rates and conditions of service so they

can pick the one that best suits their needs. New technology can enable comparisons of remittance options to be more precise, corridor specific, and make use of real-time data. Blockchain-based technologies also hold potential within the payments industry that could enable more transparent and efficient transactions for migrant workers at a reduced cost and without the need for intermediaries (Flore 2018). Remittances are crucial to the economies of sending countries in this study, representing upwards of one quarter of national GDP (Table 18).

▶ Table 18: Remittances to sending countries as a percentage of GDP

Country	Total Remittances Received (2019)	Remittances as % of GDP (2019)
Nepal	US$8.1 Billion	26.92%
Philippines	US$35.2 Billion	9.33%
Sri Lanka	US$6.7 Billion	8.03%

Source: World Bank

Adoption of such digital tools can also benefit employers of migrant workers as they gain from enhanced security, convenience, and efficiency by distributing salaries through these channels instead of cash. The increasing digitization of financial transactions between employers and employees contributes to the overall formalization of the informal economic sectors where the workforce is predominantly comprised of migrant labourers. Electronic systems provide greater transparency as regards payments of wages, while utilizing third-party entities such as a digital wallet or a bank account can help provide evidence in the event of a wage dispute. Payment methods that leave a digital trail reduce the likelihood of non-payment and contribute to better compliance with minimum wage standards. Additionally, the verification of recruitment fees and related cost payments between employers and recruitment agents proves to be an objective and scalable technique in assessing the effectiveness of fair recruitment (Verité 2020).

Digital tools can also help to improve financial literacy and economic planning for workers before and during migration. Online modules provide advice on basic financial management, a cost-benefit analysis of migration, saving and responsible spending while abroad, as well as how to recognize scams or fraudulent fees. Features can also enable workers to calculate their wages, overtime payments, holiday pay and corresponding deductions from associated recruitment fees or related costs. Intuitively, most of the digital solutions for remittances and other related financial services that have been developed are corridor specific between a receiving country and the sending countries of significant populations of migrant workers. Establishing online payment channels for migration-related services can also improve efficiency and accessibility. For example, in Nepal, aspiring migrant workers need to make payments to the Migrant Workers' Welfare Fund in order to receive a work permit from the Department of Foreign Employment. However, payments have to be made at physical outlets of the insurance companies and labour offices, which presents accessibility barriers to those with limited transportation options or living in rural areas. Linking online payment gateways with all relevant stakeholders and government agencies can greatly improve service delivery.

The following tables introduce key technologies that we identified, from a global (Table 19), regional (Table 20), and corridor-specific (Table 21) perspective, that provide interesting examples to learn about the use of technology in supporting financial literacy, payment, and remittances for migrant workers.

▶ Table 19: Global apps and platforms that support migrant workers with remittances and financial literacy

PickRemit Launched 2015	PickRemit is an app developed and managed by the World Bank Group to help migrants make the best choice of services when sending money back home to their families by comparing different providers. PickRemit has detailed information on relevant data points such as exchange rates, service fees, transfer speed, type of service provider, how the transaction is paid for and how money is dispersed. The app is available in English, French, Spanish, Italian and Bahasa Indonesia.

▶ Table 20: Asia-based apps and platforms that support migrant workers with remittances and financial literacy

SaverAsia Launched 2018	SaverAsia is a financial tool that allows users to compare remittance prices and services across major ASEAN corridors. It provides information on various financial services, such as mobile wallets and includes features like a budget and overtime hours wage calculator. The website also has a repository of local support services that address the various needs of migrant workers. The website helps migrants improve their financial literacy and awareness of services, while helping them find the best option for sending remittances. SaverAsia is managed by Developing Markets Associates Pty Ltd (DMA) and 360 South Pty Ltd. The establishment and maintenance of the website are supported by the ILO's TRIANGLE in ASEAN programme. The website is available is English, Bahasa Indonesia, Burmese, and Khmer.
Rise Launch 2018	Rise is a digital platform developed and operated by Dubai-based Kayan Labs that provide migrant and domestic workers in the GCC region with financial products and services, as well as educational material. The platform, accessible mainly through a mobile app, offers products including a bank account with no minimum balance or salary, remittance services, and insurance products, amongst others. Rise also uses a chatbot to engage with customers on topics such as financial literacy, planning and account opening.

▶ Table 21: Corridor specific apps and platforms that support migrant workers with remittances and financial literacy

Instapay eWallet Malaysia Launched 2020	Instapay eWallet is an app developed by Instapay Technologies Sdn Bhd that was designed to promote financial inclusion of unbanked migrant workers in Malaysia. Instapay eWallet comes with a linked Mastercard prepaid card and offers international remittance services through a partnership with a licensed remittance and money changer. Users can send and receive digital payments, withdraw cash from ATMs and purchase mobile reloads, all without the need to open a bank account. It is available to both individuals and businesses to streamline secure payroll management operations. To date the app has been downloaded more than 10,000 times and it is available in English, Bengali, Burmese, Hindi, Malay, Nepali, Tamil, Thai, Urdu and Vietnamese.
Uplifters Hong Kong SAR Launched 2018	Uplifters is a non-profit organization that develops and operates online education modules for migrant domestic workers accessible through a mobile phone platform. Courses on financial management and vocational skills are available free of charge and since their launch in 2018, have enrolled more than 3,200 students with a completion rate of 51 per cent. Uplifters partners with the Philippines Consulate General in Hong Kong SAR and various NGOs supporting domestic workers. It also employs a chatbot on Facebook to facilitate course registration.

4.9 Electronic management systems for migration governance and/or digitally accessible grievance mechanisms

Governments in both countries of origin and destination are looking to harness technological advances to provide and extend services to migrant workers. Digitization and the development of online platforms for work permit/visa applications and document processing are a growing trend in labour migration governance throughout the world. A one-stop portal or platform that integrates information and services across all government agencies that have labour migration mandates can help address key issues for workers along each stage of the migration cycle and improve the overall collection and reporting of migration-related data. In addition to facilitating and streamlining administrative processes associated with recruitment and placement, such systems can help support workers to receive services such as legal support, welfare assistance and online training opportunities. The lack of such a centrally coordinated database and electronic management system can be a hindrance to the study and implementation of evidence-based policy. Investments in building or upgrading the technical infrastructure and skills necessary to operate such systems can deliver substantial results for both migrants and governments. Data-driven insights enabled by digitization can reduce recruitment costs, close domestic labour market gaps with returned migrants, increase remittance levels, and reduce inefficiencies (IOM 2018). Any technological advancements in migration management also need to be complemented with accountability mechanisms to protect migrants' rights, especially those related to sensitive, personal data. Bilateral IT integration can further strengthen joint government oversight over recruitment and deployment processes and one good example of this can be found in India's eMigrate system that has a platform-based data sharing agreement with the United Arab Emirates Ministry of Human Resources and Emiratization (Abu Dhabi Dialogue n.d.).

In an effort to make service delivery quick, responsive, transparent and effective, the Nepal Department of Consular Services has established an online system. As a result, migrant workers or their families do not have to go to Kathmandu to file complaints or requests to avail themselves of the services of the Department for search and rescue of workers in distress, repatriation of dead bodies or compensation for disabled or deceased migrant workers. A requirement for Overseas Filipino Workers (OFWs) in order to travel abroad is to obtain an Overseas Employment Certificate (OEC); the Philippines Oversas Employment Agency (POEA) has launched an online portal to facilitate obtaining an OEC without having to go to a physical office. The following tables introduce key technologies that we identified, from a global (Table 22), regional (Table 23), and corridor-specific (Table 24) perspective, that provide interesting examples from which we can learn about the use of electronic management systems for migration governance and digitally accessible grievance mechanisms.

▶ Table 22: Global electronic management systems for migration governance/digitally accessible grievance mechanisms

Together Kuwait Launched 2017	"Together" is an e-platform developed and operated by the Kuwait Society for Human Rights in cooperation with the Embassy of the Kingdom of the Netherlands in Kuwait. The aim of the platform is to educate migrant workers about their rights through multilingual education services and direct inquiry hotlines. Workers can submit complaints about rights' violations directly through the platform where they are connected to lawyers and legal advisors that help document and respond to abuses. There is also a mobile phone app to complement the website that has been downloaded to date more than 5,000 times. The website and mobile application are available in English, Amharic, Arabic, Hindi, Urdu, Tagalog, and Sinhala.

▶ Table 23: Asia-based electronic management systems for migration management/digitally accessible grievance mechanisms

eMigrate India	eMigrate is an initiative of the Overseas Employment Division of the Ministry of External Affairs, Government of India to automate and digitize the entire emigration ecosystem. This e-governance system fully automates the operations of all key stakeholders in the emigration lifecycle including Indian Overseas Missions, the Protector General of Emigrants, recruitment agencies and insurance companies and links them together on a common platform. This portal also includes a management system for Indian migrant workers called MADAD, offered by Indian Missions/Posts abroad to users who wish to submit a grievance. Consular services regarding compensation, court cases, domestic help, repatriation, and wage disputes can also be lodged through this portal.
ATIS **ASEAN** Launched 2018	The ASEAN Trade Union Council (ATUC) created the ATUC Information System for Migrant Workers, aka ATIS, to provide migrant workers' greater access to justice and help them resolve their inquiries and complaints about working overseas. National focal points receive notification of inquiry or complaint and then provide the appropriate information or service referral.

▶ Table 24: Corridor-specific electronic management systems for migration management/ Digitally accessible grievance mechanisms

FWCMS Malaysia Launched	The Foreign Workers Centralized Management System (FWCMS) is a private, integrated digital platform to streamline the process of recruiting migrant workers that was developed by the Malaysian company Bestinet. Its fully online system was designed to assist users and stakeholders in all compliance and regulatory processes related to employing migrant workers from selection, recruitment, periodic management, and monitoring, all the way to ensuring workers return home safely. FWCMS eliminates manual and time-consuming processes by enabling all application processes to be completed online. Some of its features include allowing employers to apply for a quota and the government to verify and approve the application online; recruitment agencies in source countries to register and assign workers; and it allows employers to apply for work permit renewal on behalf of their employees.
Contact Sri Lanka Sri Lanka	The Ministry of Foreign Relations and Information and the Communication Technology Agency of Sri Lanka have recently created an online portal called "Contact Sri Lanka". The aim of this open access platform is to facilitate overseas Sri Lankans to interact between government stakeholders and access services through a single centralized point. There are plans for the portal to be expanded to serve as an official source of information and to make it easir for overseas Sri Lankans to obtain a wide range of digital services offered by the government.
Foreign Employment Information Management System (FEIMS) **Nepal**	The Foreign Employment Information Management System (FEIMS) links together key stakeholders in Nepal such as the Department of Foreign Employment, Department of Passport, Department of Immigration, Department of Consular Services, recruiting agencies, medical examination institutions, pre-departure orientation training providers, insurance companies and select banks. A companion mobile phone application has also been developed to help migrants and aspiring migrants access information, track their applications for work permits and check on the status of grievances.

4.10 Digital tools for the private sector to facilitate fair recruitment of migrant workers

Private corporations have an important role to play in designing innovative tools for promoting fair recruitment practices. These can range from specific industry initiatives to encourage fair recruitment within their own supply chains, to data-driven risk management, to innovative applications of frontier technologies such as blockchain. Table 25 provides examples of global technologies developed by the private sector to ensure fair recruitment of migrant workers.

▶ **Table 25: Global digital tools for private sector to ensure fair recruitment of migrant workers**

eMin Diginex & The Mekong Club Launched 2019	Diginex, an ESG data infrastructure company, and the Mekong Club, an anti-slavery NGO, have partnered to create eMin – a mobile-optimized and blockchain-based platform that stores information about employment contracts, migration costs, and recruitment experiences which are uploaded by migrants onto a transparent and immutable ledger. Companies are then able to audit their supply chain easily with the comfort of knowing the information is immutable.
Quizrr App Thailand Launched 2019	In collaboration with the ILO, Quizrr developed and manages a migrant-friendly online training application which provides pre-employment and on-the-job app-based learning to migrant workers. The app aims to educate both workers and their managers on their basic rights and responsibilities, with a focus on the importance of fair recruitment, and ways to put these principles into practice. It is currently available in Khmer, Myanmar and Thai—and provides voice support in each language—the app was projected to reach at least 1,000 migrants from Cambodia, Lao People's Democratic Republic, and Myanmar in Thailand during its initial pilot phase. The hour-long training is interactive and contains short films designed to help migrants to easily gain and retain information about their rights and responsibilities, occupational safety and health and workplace dialogue.
Verité's CUMULUS Forced Labor Screen™ Launched 2018	Verité's CUMULUS Forced Labor Screen™ is a cost-effective, technology-driven approach to identifying forced labour and human trafficking risk in global supply chains. Through a secure online platform, member companies can map their labour supply chains and proactively screen for forced labour risks introduced by supply chain partners' recruitment practices and recruitment agents. Through CUMULUS, Verité provides credible analytical insights to companies and their supply chain partners, allowing them to better protect workers from labour abuses and build a marketplace for ethical recruitment. Member companies securely share pre-competitive labour supply chain data about recruitment practices and recruitment agents with Verité, an independent subject-matter expert.

4.11 Challenges

As mentioned in the discussion of limitations, none of the digital technologies and ICT tools that have been identified had publicly available assessment reports related to the project's successes, shortcomings, and overall impact. Therefore, this research solely relies on information that was available and accessible online. An obvious limitation of this analysis is that it does not include analysis of tool usage on other platforms (web access or iPhone), or direct downloads of Android apps from other platforms (for example enterprise installations or systems that support users who have limited access to Google services).

In the absence of a comprehensive evaluation of every migration-related ICT tool available, a simple search on Google Play was revealing. Google Play displays information including the number of installations, when an app was launched and when the most recent software update has taken place. We assume the number of downloads as a rough proxy for user engagement, as there is no way of understanding how (and if) the app itself is used after downloading without primary data collection or developers sharing confidential information. Although many of the apps we highlighted in the landscape review had impressive uptake as suggested by more than 10,000 (sometimes 100,000+) user downloads, it is important to note that we selected these because they seemed successful. However, upon deeper review of the tools and digital solutions that were not featured, general trends emerged such as limited user uptake as evidenced by an insignificant number of downloads (<100 times) and problems with specific functionalities

or overall operation as evidenced by recent user comments indicating issues with logins, registration, and so on. These trends are similar to those found in a landscape review of anti-trafficking apps, where more than 75 per cent of apps listed fewer than 100 downloads, and 45 per cent showed fewer than 10 downloads (Mendel and Sharapov 2020). These observations support previous research on the use of ICT solutions by migrant workers which found that although digital platforms and apps were designed with good intentions and are indeed fit for purpose, the market fragmentation caused by the existence of too many systems contributed to user indifference, confusion, and irrelevance (Farbenblum, Berg, and Kintominas 2018).

For projects that centre on app development, it is necessary to understand the demand and need for such apps, but there is also a need for management, promotion, and maintenance beyond the initial phases of design and launch to ensure sustainability and relevance. Without such measures in place, apps whose primary or secondary function is to provide up-to-date information on employment procedures, labour regulations, visa processing, border restrictions, and so on would quickly become obsolete at best and unintentionally provide inaccurate information at worst. A lack of longer-term funding inhibits the capacity for operating organizations to conduct ongoing assessments and release updates that address system bugs or rework initial design flaw (Farbenblum, Berg, and Kintominas 2018). Without such funding, trends may emerge where an ICT solution is launched with great promise only to become neglected in a year or two. Designing new tools takes a combination of adequate seed funding and time, and the most successful initiatives require periods of time for piloting and iterative redesigning. Having an increasing number of apps available that are either poorly designed, poorly promoted, or only downloaded by a small number of people does not represent an effective use of human and financial resources. Therefore, any organization planning to launch a new tool should involve key beneficiaries in the design and development phase in orderto ensure uptake and sustainability.

4.12 Opportunities

Despite the afore-mentioned challenges, the widespread availability of mobile phones and high levels of Internet connectivity have nonetheless contributed to the massive democratization of online information and services available to migrant workers. ICT-based solutions have created new avenues for personal and economic empowerment of migrants across several dimensions. Dozens of apps and platforms designed for migrants as the end beneficiaries have been launched globally in recent years from a variety of developers and operating organizations including the private sector, NGOs, and IGOs. Many share similar features and functionalities and have been essentially replicated with slight variations to suit the context of different countries and corridors, pointing to the emergence of some best practices. We have chosen to highlight some well-designed and promising initiatives (based upon publicly available information) to harness the benefits of transferable lessons between stakeholders, even if the tools themselves did not directly pertain to the corridors of interest in this study. The range of services and innovations that have been developed in the past few years is highly promising, as different actors have creatively utilized technology in new ways with the intention of enhancing service delivery and protection of rights of migrant workers. This landscape analysis has provided an in-depth overview and compilation of already existing technologies and serves to enrich the findings from our primary data collection and subsequent discussion, as well as to inform our recommendations towards the objectives of the study.

5


Government of Nepal
Department of Foreign Employment
Foreign Employment Permit

▶ Assessing migrant worker needs / Use of technology

This section draws together the results of a survey and focus group discussions conducted with migrant workers in the five research sites regarding their use of technology in their migration process, with the coded findings of key informant interviews with key migration-related stakeholders. The findings are presented in this section in order to answer the following research questions:

1. To which digital technologies and online services do migrant workers have access ?
2. What sources of information do migrant workers use at each stage of their recruitment and migration journey?
3. What factors limit or enable migrant workers' use of digital technology during the recruitment process?

5.1 Use of digital technologies and online services

The survey asked workers what technologies they use daily, with the results presented below by migration corridor. As can be seen in Table 26, the smart phone is the most regularly used device, with almost all workers having access to a smart phone or a basic phone. In this table, as well as in subsequent tables, individual cells refer to the absolute number of responses, followed by the proportion that this represents per corridor. As an example, the number of respondents from Nepal-HK SAR who indicated that they use smart phones daily is 43, which represents 97.7 per cent of the total number of responses for this corridor.

▶ **Table 26: Usage of devices daily by corridor**

	Smart Phone	Tablet	PC	Basic Phone
Nepal – HK SAR	43 (97.7%)	3 (6.8%)	1 (2.3%)	1 (2.3%)
Nepal - Kuwait	27 (100.0%)	2 (7.4%)	3 (11.1%)	3 (11.1%)
Nepal - Malaysia	53 (94.6%)	2 (3.6%)	5 (8.9%)	5 (8.9%)
Philippines – HK SAR	58 (93.5%)	7 (11.3%)	8 (12.9%)	8 (%)
Philippines - Malaysia	46 (93.9%)	6 (12.2%)	2 (4.1%)	2 (8.2%)
Sri Lanka – HK SAR	49 (92.9%)	9 (17.0%)	4 (7.5%)	4 (7.5%)
Sri Lanka - Kuwait	4 (66.7%)	0 (0.0%)	2 (33.3%)	2 (16.7%)
Sri Lanka - Malaysia	20 (83.3%)	12 (50%)	2 (8.3%)	2 (8.3%)
TOTAL	**300 (93.5%)**	**41 (12.8%)**	**27 (8.4%)**	**28 (8.7%)**

While access to smart phones is high (93.5 per cent of the total survey), there are still some cases where workers do not have daily access to this device. Table 27 indicates the number of respondents interviewed in sending countries and receiving countries who did not have access to either a smart phone or a basic phone. For most corridors, migrant workers in receiving countries have higher levels of usage of phones. These figures suggest that most migrant workers acquire a mobile phone once they arrive in their destination country, if they did not have one already.

▶ Table 27: Respondents with no access to smart phone or basic phone, by place of interview

In sending countries	
in Nepal	2%
in Philippines	7%
in Sri Lanka	15%
In receiving countries	
in Hong Kong SAR	1%
in Malaysia	2%

For respondents who did not own a smart phone, they were asked to indicate the reasons that informed their decision. The responses to this question are summarized below in Table 28.

▶ Table 28: Reasons for not owning a smart phone, by corridor

	I don't need it	I can't afford it	Other
Nepal – HK SAR	0	1	0
Nepal - Kuwait	0	0	0
Nepal - Malaysia	2	0	0
Philippines – HK SAR	1	0	0
Philippines - Malaysia	0	2	0
Sri Lanka – HK SAR	3	0	3
Sri Lanka - Kuwait	2	1	0
Sri Lanka - Malaysia	1	1	0
Total	**9**	**5**	**3**

The responses for the three respondents from Sri Lanka – Hong Kong SAR corridor who selected *Other*, cited the following reasons:

- I am quite comfortable with the basic phone to carry out my daily activities
- I have a laptop and a tablet so Ii think it is better not to have a smart phone
- I can use all the facilities of the smartphone on my laptop

Table 28 also indicates that of the 321 respondents, only 5 (1.6 per cent of total sample) indicated that they could not afford a smart phone. Due to the prolific use of smart phones, the focus of analysis in this report now turns specifically to their use, considering the much more limited access and use of tablets, PCs and basic phones.

Respondents were asked which functions they use on their smart phones. A complete analysis of this question can be found in Table 43 in Annex III. For ease of reference, the most cited uses across each corridor are included below in Table 29. This table presents the top seven uses of digital tech by corridor, and across the whole sample, with colour coding responses to support the reader in identifying trends in responses. Responses are grouped as: making and receiving calls (turquoise), using social media or the Internet (grey), entertainment (watching videos and playing games - yellow), creating multimedia content (green), and sending text messages (pink). Across the whole sample are included here: making voice calls (92.4 per cent); receiving voice calls (89.1 per cent), Internet browsing (87.7 per cent); using social media (83.8 per cent); sending text messages (80.5 per cent); making video calls (79.5 per cent); receiving video calls (78.5 per cent). These findings differ by corridor, with Nepal – Kuwait indicating much lower levels of making and receiving video calls, and taking photos.

▶ Table 29: Functions used by respondents on smart phones

Nepal – HK SAR	Nepal - Kuwait	Nepal - Malaysia	Philippines – HK SAR	Philippines - Malaysia	Sri Lanka – HK SAR	Sri Lanka - Kuwait	Sri Lanka - Malaysia	Total
Make voice calls (100.0%)	Make video calls (38.5%)	Receive video calls (63.0%)	Receive video calls (83.3%)	Send text messages (78.7%)	Receive video calls (82.6%)	Watch videos (75.0%)	Play games (72.7%)	Receive video calls (78.5%)
Make video calls (100.0%)	Watch videos (42.3%)	Take photos/ videos (66.7%)	Make video calls (85.0%)	Receive voice calls (89.4%)	Use social media (84.8%)	Make voice calls (100.0%)	Make video calls (81.8%)	Make video calls (79.5%)
Send text messages (100.0%)	Read news (46.2%)	Use social media (68.5%)	Receive voice calls (88.3%)	Make video calls (89.4%)	Browse Internet (87.0%)	Receive voice calls (100.0%)	Receive video calls (81.8%)	Send text messages (80.5%)
Take photos/ videos (100.0%)	Browse Internet (80.8%)	Watch videos (68.5%)	Use social media (88.3%)	Receive video calls (89.4%)	Take photos/ videos (89.1%)	Make video calls (100.0%)	Take photos/ videos (81.8%)	Using social media (83.8%)
Browse Internet (100.0%)	Use social media (84.6%)	Receive voice calls (74.1%)	Browse Internet (91.7%)	Browse Internet (89.4%)	Receive voice calls (91.3%)	Receive video calls (100.0%)	Send text messages (90.9%)	Browse Internet (87.7%)
Use social media (100.0%)	Make voice calls (88.5%)	Make voice calls (77.8%)	Make voice calls (95.0%)	Use social media (91.5%)	Make voice calls (95.7%)	Send text messages (100.0%)	Make voice calls (100.0%)	Receive voice calls (89.1%)
Watch videos (100.0%)	Receive voice calls (92.3%)	Browse Internet (85.2%)	Send text messages (96.7%)	Make voice calls (93.6%)	Send text messages (95.7%)	Take photos/ videos (100.0%)	Receive voice calls (100.0%)	Make voice calls (92.4%)

With this access to technology in mind, we turn to whether respondents used digital technology to gather information to inform their most recent labour migration experience. Table 30 presents the responses to this question, showing by corridor how many indicated that they did use digital technology. What is striking about this table is the small number of respondents who indicate using technology, particularly in the Nepal – Hong Kong SAR corridor.

▶ Table 30: Use of digital technology to gather information about migration journey, by corridor

Nepal – HK SAR	1 (2.3%)
Nepal - Kuwait	16 (59.3%)
Nepal - Malaysia	36 (64.3%)
Philippines – HK SAR	39 (63.9%)
Philippines - Malaysia	34 (69.4%)
Sri Lanka – HK SAR	12 (23.1%)
Sri Lanka - Kuwait	3 (50.0%)
Sri Lanka - Malaysia	14 (58.3%)
Total	155 (48.6%)

If respondents did not use technology to inform their most recent labour migration, they were asked to explain why, by selecting from a list of options, or providing one of their own. Responses to this question can be found in Table 31. The most frequently selected responses to this question are: 'I thought other sources were more reliable'; 'I don't know what sources to consult'; and 'I have limited network / technology access'. The Nepal – Hong KongSAR corridor shows a stark difference in rating, with 'I thought other sources were more reliable' being selected by 81.8 per cent of respondents. Interestingly, those from Nepal – Kuwait as well as Sri Lanka – Kuwait indicated very different responses, to the rest of the sample.

▶ **Table 31: Reasons for not using digital technology to inform migration journey, by corridor**

	I don't know what sources to consult.	I thought other sources were more reliable.	I have limited network/ technology access.	There is no information in my language.	I would prefer not to use it.	I don't need it.	I don't know how to use it.	I can't afford it.	Other
Nepal – HK SAR	54.5%	81.8%	38.6%	13.6%	0.0%	2.3%	2.3%	11.4%	6.8%
Nepal - Kuwait	18.5%	0.0%	29.6%	0.0%	0.0%	0.0%	22.2%	18.5%	0.0%
Nepal - Malaysia	17.9%	16.1%	19.6%	0.0%	1.8%	0.0%	8.9%	5.4%	12.5%
Philippines – HK SAR	24.2%	25.8%	14.5%	0.0%	1.6%	3.2%	1.6%	0.0%	3.2%
Philippines - Malaysia	18.4%	12.2%	14.3%	2.0%	4.1%	0.0%	10.2%	0.0%	12.2%
Sri Lanka – HK SAR	49.1%	56.6%	20.8%	0.0%	11.3%	3.8%	1.9%	0.0%	1.9%
Sri Lanka - Kuwait	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	16.7%
Sri Lanka - Malaysia	33.3%	33.3%	0.0%	4.2%	8.3%	0.0%	0.0%	0.0%	0.0%
Total	**30.8%**	**32.7%**	**19.6%**	**2.5%**	**3.7%**	**1.6%**	**6.2%**	**4.0%**	**6.2%**

When analysing the open text descriptions to the 'Other' response, workers indicated that they prefer to use a recruitment agent, or obtain information on or referrals to recruitment agents from their family members. These collective findings are supported by previous research on the type of information sought by migrant workers via ICT, which found migrants didn't use the Internet to look up matters such as documentation, visa application procedures, or the work permit process, as they expect their employer or recruitment agency to be knowledgeable about these matters and to handle them (ILO 2019b).

This section now turns to a discussion of factors that impact workers' use of technology across different stages of migration. We begin with cross-cutting issues, and then focus specifically on pre-departure and issues on arrival in the destination country.

Cross-cutting issues

In this section, our analysis of migrant workers' access to digital technology is restricted to country level. It is understood, however, that within countries, we see varying levels of access and use of technology, with those in less developed areas (often outside of capital cities) having far less access than those in developed areas. This differing access has significant impact on migrant workers and their ability to make informed migration decisions, specifically when considering the pressure that governments and other high-level institutions are putting on the recruitment industry to digitize. This pressure disproportionately impacts already disadvantaged communities, as they will have less access to accurate and up-to-date recruitment information.

> *The worry I think is when technology becomes inaccessible to workers and regular migration is dependent on this access, then you may push people with no access into other ways of migrating. [MY-KI1]*

On a more macro level, as recruitment services are becoming digitized, migrant workers with low digital literacy levels are at risk of being left behind. In a number of KIIs and FGDs, participants mentioned that simply registering for government-based recruitment services often required an email account, a factor that excludes potential workers with low digital literacy and access levels [HK-PH-FGD1, NP-KW-FGD1]. These participants suggested that in order to ensure

that potential workers are not excluded further, existing mechanisms should remain in place while concentrated efforts are made to build capacity.

Another factor that was raised, stemming from low digital literacy levels, was that migrant workers do not know of the broad range of services that are available online. This finding further strengthens the answer of survey respondents to the question of why they didn't use technology to inform their migration, where they noted that they didn't know that sources of information existed in the first place. An example was given in a KII of the large number of tools that exist to calculate the cost of remittances [OTH-KI1]. They note that instead of using these tools, migrant workers go to remittance offices to look at exchange rates, as they do not know there are other ways.

Similarly, many migrant workers may be unaware of the legitimate costs involved with migration because the information they receive is not through official channels, let alone through official channels accessed via digital technologies [SL-MY-FGD1, PH-KI5, PH-KI4, NP-KI9]. For example, in focus groups, Nepali workers applying for jobs in GCC countries and Malaysia, and Filipino workers applying as domestic workers reported being charged excessive fees that exceed the government's cap on recruitment costs borne by the worker. This finding mirrors those identified in related studies, (Mandal 2019). In some cases, prospective workers may be entirely unaware of these policies.

Pre-departure

Turning now to accessing technology and pre-departure information, we understand that gender is a significant factor that impacts access to digital technology. Due to socio-economic hardships, some women migrant workers are not able to afford a basic feature mobile phone. If they do own a phone, participants described cases where their husband or family members restrict their access, or where the phone is shared amongst a group of family members thereby limiting their personal use [NP-KI1]. Women who also bear the disproportionate role of care-giving and domestic responsibilities may have less opportunity to use digital technologies throughout the day. In less developed or rural regions of a country, Internet connectivity may be weak or non-existent even if a device is owned.

> *So among the migrants, we realized that women are the most vulnerable because of the patriarchal society, they don't have access to information and they don't have access to other services that are provided by the government of Nepal. [NP-KI1].*

While gender is a significant factor, we can consider it as a form of exclusion from mainstream society. Other people who are also excluded from mainstream society are likewise excluded from access to technology.

> *This is very important. And this can play a very important role for safer migration, but still I am not quite sure due to the status of women and poor marginalized males, as well. As I mentioned earlier that majority of this men are and and this, I would say it's a class of the people in the society. These people are literally excluded from the mainstreaming of the state like they are economically, socially, culturally and politically excluded groups. [NP-KI1]*

Similarly to gender and socio-economic status, living outside of capital areas was a significant factor mentioned by KII respondents that impacted access to technology as well as access to recruitment information. In terms of efforts to increase awareness, a number of respondents described the use of campaigns through radio, street drama, print media and talk shows on labour migration, counter trafficking and safe migration [SL-KI1].

Some participants noted that despite these offline campaigns, many women (and by extension, other groups that are excluded from mainstream society) do not know about offline campaigns or services.

But the majority of Nepali women, they don't have access to information and they are not aware about this whole service that is provided by the government of Nepal. So there is a huge gap in the information so, because of this XX, my organization is trying to reach to community level, so we are mobilizing returnee women migrant workers as a peer educator and social worker in their respective community regarding safer migration and Human Trafficking issues as well. [NP-KI1]

They don't know how to use smartphones or some of the functions of the smartphones or they don't have access in the sense that if they are in their country of destination such as Hong Kong SAR or Malaysia, their employers or recruiters confiscate or restrict the access of the migrant worker to their own communication devices or they simply don't have Internet access as well in their work area. So all these things based on our experience hinder their use of technology. [PH-KI1]

After arrival

One FGD participant described that the primary benefit of accessing her phone was to allow her to maintain contact with her family.

Since we are falling in the category of unskilled/semi skilled workers, we do not have the opportunity of accompanying our family with us. However, smart phones, WhatsApp, Face Book and Viber facilities enable us to constantly be in touch with our family members and friends at home and abroad. [SL-KW-FGD1]

Ownership of a mobile phone when migrating to another country does not ensure continual access to that phone once arrived in the destination. In FGDs, participants described cases where employers frequently confiscate workers' phones or heavily restrict access to the device itself or the Wi-Fi network in the place of work. This was also highlighted as one of the top five issues and risks that impacts the use of the Internet (Table 36).

Restricted access to devices can be a concern for those in socially isolated environments, such as domestic workers, who rely heavily on mobile phones as their primary, and sometimes only, means of communication and information gathering. In FGDs, domestic workers in Hong Kong SAR noted that the only uninterrupted use of their phone is in the evening before they sleep.

Even though people are tech savvy it is quite difficult for people to use their phones all the time initially, we try our best to reach out to a lot of them but you know not all employers are happy if they check their cell phones, not all of them will be satisfied if we keep pushing them. [HK-KI1]

I'm not using too much phone and sometimes I see the message I keep the phone. I'm scared to speak. Only in night time, I call my parents and chat. That's all. [HK-NP-FGD1]

Around one hour in the evening to help me sleep. Then answer messages that you were not able to reply to during the day. [HK-PH-FGD1]

Some KIIs describe how actors rationalize the confiscation of mobile phones, as a paternalistic act to help workers adapt and overcome feelings of homesickness.

> *She needs to adjust but how can she concentrate at work when her mind is in the Philippines, thinking about her family... [MY-KI3]*

As well as limiting access to digital technology, respondents mentioned cases where unscrupulous agencies confiscated other sources of information, whether booklets provided by immigration upon arrival into a country or provided by embassies at post-arrival training seminars. Some NGOs describe efforts they undertake to get workers to memorize hotline numbers, such as:

> *It is good if they are able to memorize the numbers we give them but it is almost impossible to do so because they receive many numbers to contact. [MY-KI3]*
>
> *I: Don't the recruitment agencies give you any information ... about support groups?*
>
> *All: No! No, agency will not tell.*
>
> *I: Embassy hotline numbers etc.?*
>
> *All: not even embassy numbers we get... the agents will take away any contact numbers, any list numbers...they will check the bag, they will confiscate all.*
>
> *I: So when you come here, do they brief you? "Your Philippines Embassy is here...", "this is the phone number..."?*
>
> *All: no nothing at all*
>
> *R1: You need to be wise enough to memorize all the numbers... of course you cannot remember all the numbers. We have the pre-departure seminar in the Philippines, but that seminar is also very general. Not specific to countries, how you send your money etc. Rest of information, you still ask from the agency and they advise to follow the agency. [MY-PH-FGD1]*

This is important to note, as restricting access upon arrival in the destination country is not limited to digital means of communication but extends to offline forms of support as well.

5.2 Sources of information

We understand that the usefulness of information sources may differ at different stages of migration, so this discussion is divided into pre-departure and post-arrival information in the sending country and destination country, respectively. Pre-departure participants were provided with a list of different sources of information and asked to rate how critical they found them to be in informing their migration, on the following scale: very critical, sometimes helpful, not helpful, or I did not use it. We analysed this by calculating the frequency with which a source was rated according to the above scale and include the top six answers per corridor below (Table 32). Responses are categorized and coloured below to support the reader in noticing patterns in the responses: personal connections (turquoise); new ICTs (Internet and social media – grey); traditional ICTs (radio, news and PSA – pink); job agencies and recruitment brokers; government sources (sending and receiving countries – green). Full details for the highest and lowest ranked sources can be found in Annex III, Table 46.

A similar analysis was undertaken on sources that were ranked as 'not helpful', with the top five sources per corridor as seen in Table 35. Note again, due to the small sample size that answered this question, the Nepal – HK SAR corridor only indicates the one source that the respondent selected. A similar process is undertaken with the colouring of sources in Table 33, to support the reader in noticing patterns in responses across both the highest and lowest ranked sources of information. In this case we grouped responses into: government sources (green); trade unions (grey); traditional ICTs (news, radio, PSA - pink); civil society (turquoise); job agencies and recruitment brokers (yellow); new ICTs (social media - uncoloured).

As these tables show, some sources including job agencies / recruitment brokers, trade unions, and news / radio / PSAs are ranked highest and lowest within the same migration corridors. This speaks to the different perceptions that migrant workers have of the same sources of information.

▶ Table 32: Most critical sources to obtain information before migrating

Nepal – HK SAR	Nepal - Kuwait	Nepal - Malaysia	Phil – HK SAR	Phil - Malaysia	Sri Lanka – HK SAR	Sri Lanka - Kuwait	Sri Lanka Malaysia	Total
Family (2.3%)	Internet (44.4%)	Internet (42.9%)	Friends (56.5%)	Gov agency (send and receive) (65.3%)	Friends (11.3%)	Friends and community (33.3%)	Recruitment broker (33.3%)	Job agency (35.2%)
Friends (2.3%)	Radio (44.4%)	Radio (46.4%)	News (56.5%)	News (65.3%)	Gov agency (Send) (11.3%)	Internet (33.3%)	News (37.5%)	News (38.6%)
Social media (2.3%)	Gov agency (48.1%)	Family (48.2%)	Job agencies (56.5%)	PSA (65.3%)	Job agency (13.2%)	Job agencies (33.3%)	Social media (41.7%)	Friends (39.9%)
Job agencies (2.3%)	Family (51.9%)	News (48.2%)	Social media (56.5%)	Friends (67.3%)	Community (15.1%)	News (33.3%)	Family (45.8%)	Internet (40.2%)
PSA (2.3%)	News (55.6%)	Friends (53.6%)	Family (59.7%)	Internet (67.3%)	Family (15.1%)	Social media (33.3%)	Internet (45.8%)	Family (41.1%)
Community (2.3%)	Social media (59.3%)	Social media (60.7%)	Internet (61.3%)	Social media (67.3%)	Internet (15.1%)	Family (50.0%)	Job agency (45.8%)	Social media (42.4%)

▶ Table 33: Least critical sources to obtain information before migrating

Nepal – HK SAR	Nepal - Kuwait	Nepal - Malaysia	Phil-HK SAR	Phil - Malaysia	Sri Lanka – HK SAR	Sri Lanka - Kuwait	Sri Lanka Malaysia	Total
News (2.3%)	Gov agency (Receive) (11.1%)	Trade union (16.1%)	Gov agency (Send) (1.6%)	Community (2.0%)	PSA (3.8%)	Gov agency (Send) (16.7%)	Gov agency (Send) (8.3%)	Police (5.3%)
	Trade union (11.1%)	Gov agency (Receive) (19.6%)	Gov agency (Receive) (3.2%)	NGO (2.0%)	Radio (3.8%)	Gov agency (Receive) (16.7%)	NGO (8.3%)	Gov agency (Receive) (6.2%)
	Recruitment Brokers (22.2%)	Gov agency (Send) (26.8%)	Police (3.2%)	Religious networks (2.0%)	Social media (3.8%)	NGO (16.7%)	Trade union (8.3%)	Job agencies (7.2%)
	Job agencies (25.9%)	Recruitment Brokers (26.8%)	Recruitment Brokers (3.2%)	Radio (2.0%)	Trade union (3.8%)	Police (16.7%)	Police (12.5%)	Recruitment Brokers (7.5%)
	Gov agency (Send) (37.0%)	Job agencies (28.6%)	Religious networks (3.2%)	Police (6.1%)	NGO (5.7%)	Radio (16.7%)	Religious networks (12.5%)	Gov agency (Send) (9.3%)

These findings mirror the responses provided by participants in FGDs. In Nepal, participants described limited Internet access in villages, and as a result, information about employment opportunities is circulated in newspapers, on radio stations, and by agents (who themselves share details from newspapers). In some cases, Nepalese respondents described using online platforms including LinkedIn and Pravasi Nepali to search for job opportunities. As can be seen in this table, the highest- rated sources of information were social media (42.4 per cent), the Internet (40.2 per cent), family members (41.1 per cent) and friends (39.9 per cent) and news (39.9 per cent). Participants rated the following sources as the least helpful: government agencies in sending (9.3 per cent) and receiving countries (6.2 per cent), recruitment brokers (7.5 per cent), job agencies (7.2 per cent), and police (5.3 per cent). It is interesting to note that opinion was

split with regard to recruitment agencies, as they were ranked as both the most critical and least critical by similar numbers of participants. Some participants cited fears in the accuracy of online ads, which incentivized them to seek employment through recruitment agents. Those with positive recruitment experiences described the process of going through recruitment brokers as very reliable.

> *... look at Facebook, now that vacancies like announcements and newspaper articles have come, I can't believe how many news. Lies are spread, false news is not believed, that's why we handed over all the work to the agent. [NP-MY-FGD1]*

Other respondents shared negative recruitment practices they experienced when going through agencies.

> *R1: A brother of mine had left here from Malyasia. He said that is a good company. Then I went to the manpower that the visa comes in this way. After going there, they said that it is very good. They not applied visa for the prescribed company. Visa was applied to another company. And now I know only after I came here. [NP-MY-FGD1]*

In Sri Lanka, key informants and focus group participants described using their mobile phones for social purposes, but rarely for looking for job opportunities. Instead, participants described seeking information or referrals from friends, family and returned workers. Other survey respondents described listening to radio stations for information. Focus group participants described consulting newspapers for job adverts for placements in Kuwait.

Filipino respondents described using many informal referral networks, including Facebook groups and connections through religious networks and returned / overseas workers. An interesting observation is that very few respondents cited sources that they found to be 'not helpful'. In itself, this substantiates later claims by KII and FGD respondents that Asian culture is not confrontational (see full discussion in Section 4.1.3).

Respondents were asked what sources of information they used in order to select a recruitment agency. Table 34 provides frequency data indicating the source of information used by corridor. As this table shows, friends and family members account for almost 60 per cent of the responses.

The importance of friends and family in informing decisions to migrate was a finding that was echoed both in KIIs and FGDs, with participants in all recruitment corridors noting that they often sought information on migration and job opportunities from people they knew, and then used this as a basis to reach out further. Participants in FGDs and KIIs described workers seeking information about migration predominantly through their personal networks or from returned migrant workers, who in turn connect them to recruitment agents.

> *Friends and family members who currently employed overseas or returned to home countries provide valuable information about job opportunities, terms and conditions, salary information and also details about the employers. [SL-KI2]*

Focusing on electronic sources of information, we then asked respondents to indicate all online sources of information that they used in their job search. The results are included in Table 35, by corridor. As this table shows, the most used online sources are Facebook, online job portals, and websites of recruitment agencies. Those that selected the response 'other' provided the following additional information: LinkedIn (33 per cent), TopJobs (11 per cent), Bayt (11 per cent), George Stewart website (11 per cent), Google (11 per cent), Imo (11 per cent), Hamro Patro News (11 per cent), and specific company websites (11 per cent).

In FGDs, participants described triangulating reviews from different sources to verify the authenticity and legitimacy of different recruitment agencies, local as well as overseas. In so doing, participants described using Facebook reviews, YouTube videos and Google Maps.

▶ Table 34: Sources of information to select a recruitment agency, by corridor

	Community events	Friends	Family members	Internet	Job agencies/ recruitment agencies	Government agencies (in country of origin)	Non-Government Organizations	Recruitment broker	Social media/ Social networks	Trade Unions
Nepal - Kuwait	0	3	3	0	0	0	1	1	1	0
Nepal - Malaysia	2	10	3	1	0	0	0	2	0	0
Philippines – HK SAR	0	6	1	4	3	0	0	0	1	0
Philippines - Malaysia	0	9	1	2	2	2	0	1	0	1
Sri Lanka – HK SAR	0	0	1	1	0	0	0	0	0	0
Sri Lanka - Malaysia	0	3	1	3	0	0	0	0	0	0
Total	**2**	**31**	**10**	**11**	**5**	**2**	**1**	**4**	**2**	**1**

▶ Table 35: Use of online sources during job search: (a) social media, (b) other

	Facebook	Twitter	Instagram	WhatsApp	WeChat	Viber
Nepal – HK SAR	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)	1 (2.3%)
Nepal - Kuwait	11 (40.7%)	(0.0%)	(0.0%)	3 (11.1%)	(0.0%)	(0.0%)
Nepal - Malaysia	25 (44.6%)	1 (1.8%)	2 (3.6%)	6 (10.7%)	2 (3.6%)	4 (7.1%)
Philippines – HK SAR	15 (24.2%)	(0.0%)	(0.0%)	5 (8.1%)	(0.0%)	(0.0%)
Philippines - Malaysia	15 (30.6%)	1 (2.0%)	(0.0%)	2 (4.1%)	(0.0%)	1 (2.0%)
Sri Lanka – HK SAR	1 (1.9%)	1 (1.9%)	1 (1.9%)	4 (7.5%)	(0.0%)	(0.0%)
Sri Lanka - Kuwait	1 (16.7%)	(0.0%)	(0.0%)	1 (16.7%)	(0.0%)	1 (16.7%)
Sri Lanka - Malaysia	3 (12.5%)	1 (4.2%)	2 (8.3%)	2 (8.3%)	(0.0%)	1 (4.2%)
Total	**71 (22.1%)**	**4 (1.2%)**	**5 (1.6%)**	**23 (7.2%)**	**2 (0.6%)**	**8 (2.5%)**

	No online sources	Recruitment advisor	Online job portals	Recruitment agency website	Other
Nepal – HK SAR	(0.0%)	1 (2.3%)	(0.0%)	1 (2.3%)	(0.0%)
Nepal - Kuwait	5 (18.5%)	(0.0%)	2 (7.4%)	3 (11.1%)	1 (3.7%)
Nepal - Malaysia	11 (19.6%)	1 (1.8%)	9 (16.1%)	13 (23.2%)	1 (1.8%)
Philippines – HK SAR	4 (6.5%)	9 (14.5%)	26 (41.9%)	11 (17.7%)	1 (1.6%)
Philippines - Malaysia	5 (10.2%)	13 (26.5%)	19 (38.8%)	13 (26.5%)	1 (2.0%)
Sri Lanka – HK SAR	3 (5.7%)	1 (1.9%)	2 (3.8%)	1 (1.9%)	(0.0%)
Sri Lanka - Kuwait	(0.0%)	(0.0%)	1 (16.7%)	1 (16.7%)	(0.0%)
Sri Lanka - Malaysia	3 (12.5%)	2 (8.3%)	5 (20.8%)	5 (20.8%)	5 (20.8%)
Total	**31 (9.7%)**	**27 (8.4%)**	**64 (19.9%)**	**48 (15.0%)**	**9 (2.8%)**

Although word of mouth and information from brokers may not be authoritative in nature, KIIs described migrants relying on these sources because of the element of trust, as these individuals are more often than not members of the same community.

a lot of what we know about how migrant workers obtain information is still based on their own personal circles, and if you look at people in countries of origin where there are multiple layers in the recruitment process, that information gets mediated and of course at the village level not everyone has access to the Internet. [MY-KI1]

Migrant workers often rely exclusively on recruitment agencies or intermediaries to handle documentation and information gathering on things such as visa applications and work permit procedures and as a result may not see a need for support from NGOs or civil society in this area.

I think this was recently launched but I don't know how effective this has been and also I don't know how many workers use that. There is also this issue of trust. … And most migrant still believe that migration is only possible only if they go through the agent or you know…processed through the agent … [NP-KI2]

One KII participant described how recruitment agencies prefer migrant workers to contact them through an agent or intermediary, allowing them to charge more money for recruitment-related services.

Recruitment agencies also prefer to contact migrant workers through the agent because agents help them in making these kinds of transactions… otherwise how could they charge a 120k or 200k rupees per migrant worker right and so asking directly would be difficult so they need agents who are trustworthy and who work on behalf of these recruitment agencies. So there are like several factors. So it is not only the labour law or migrant situation or access to these data or Internet but also the issue of trust and this trust issue for both the recruitment agency and the migrant workers. [NP-KI2]

In Sri Lanka, FGD participants noted that the Sri Lankan Bureau of Foreign Employment (SLBFE) is a useful source of information about overseas jobs. Participants noted that they trusted recruitment agencies that were listed by SLBFE, as they were officially registered. However, other participants noted that it is difficult for them to find out if a recruitment agency has a valid license.

As a prospective migrant worker, when we approach a recruitment agency, it is not ethical to ask for their license to practice as a recruitment agent. Therefore practically it is not possible for us to know whether these agencies are registered or their registration has been expired. [SL-MY-FGD2]

They noted that a benefit of social media was that it enabled them to validate the credentials of a recruitment agency, by checking experiences of other workers.

When we go to social media, we will have opportunities read or access comments made by other migrant workers … cross check the information and credibility of the recruitment agency. [SL-MY-FGD2]

Participants were asked to select the types of digital information they sought in order to inform their migration journey from a list. The top five responses per corridor are included in Table 36, with a complete listing in Annex III, Table 45. Again, responses are grouped and coloured to support readers in identifying patterns in responses. In this case the following grouping is used: contract and working conditions (pink); living conditions (accommodation, transport - turquoise); documentation, requirements and

recruitment process (yellow); training (green); job search (grey); other (uncoloured).

In the Nepal – Hong Kong SAR corridor, only one participant responded to these questions. Fifteen participants selected 'other' types of information, providing further information as follows: knowledge of the language (9); environment (3); personal security (3); culture (2); religious freedom (1). One survey respondent in the Nepal – Malaysia corridor described the other sources of information that they sought as: "*I don't care about those things I only applied through my trust with friends*".

As this table shows, respondents cited that they had most interest in obtaining information regarding: salary, terms of their contract, accommodation, support with documentation, and their working conditions. Discussions in KIIs as well as focus groups correlate with these findings [PH-KI1, NP-KI6, MY-KI4, HK-KI4].

One participant described a 'lack of interest' shown by migrant workers in obtaining information. When asked to expand further, she explained:

About rights, that's not an immediate interest from their perspective oftentimes what is more important would be bread and butter issues-getting work, their desperation to earn money. [PH-KI1]

▶ **Table 36: Types of information sought to inform migration journey, by corrdiorg**

Nepal – HK SAR	Nepal - Kuwait	Nepal - Malaysia	Philippines – HK SAR	Philippines - Malaysia	Sri Lanka – HK SAR	Sri Lanka - Kuwait	Sri Lanka - Malaysia	Total
Accommodation (2.3%)	Health screening (14.8%)	Transport(25.0%)	Working conditions(43.5%)	Pre-departure training (40.8%)	Accommodation (11.3%)	Salary info (33.3%)	Job search (37.5%)	Working conditions (29.0%)
Contract info (2.3%)	Recruit process (14.8%)	Accommodation (32.1%)	Contract info (51.6%)	Accommodation (51.0%)	Contract info (11.3%)	Accommodation (33.3%)	Skills training (41.7%)	Documentation (30.5%)
Documentation (2.3%)	Other (18.5%)	Working conditions(32.1%)	Accommodation (53.2%)	Documentation (59.2%)	Recruit process (11.3%)	Documentation (33.3%)	Accommodation (45.8%)	Accommodation (31.2%)
Transport(2.3%)	Salary info (25.9%)	Salary info (35.7%)	Documentation (58.1%)	Contract info (61.2%)	Job search (11.3%)	Contract info (50.0%)	Working conditions (45.8%)	Contract info (33.3%)
Working conditions (2.3%)	Working conditions(37.0%)	Contract info (41.1%)	Salary info (62.9%)	Salary info (63.3%)	Salary info (17.0%)	Working conditions (50.0%)	Salary info (50.0%)	Salary info (37.4%)

After arrival

After arrival in the destination country, KII and FGD participants describe a wide variety of sources of information. Depending on the migration corridor, KIIs described different levels of connectedness within migrant worker communities. In Hong Kong SAR for example, KIIs described the Filipina migrant worker community as being very organized and connected, compared to, for example, the Indonesian community that they believed was much more fragmented. Many communities gather in groups around shared faith or beliefs.

When turning to the purpose of using digital technology, all respondents highlighted the use of digital technology to connect with family and friends at home, and for news and entertainment as some of the top reasons for using digital technology (Table 37). Those who answered 'other' provided the following additional information: shopping (4), connecting with family (2), online learning (2), web design (2), watching movies (1), listening to music (1), religious celebrations (1) and making business calls (1).

Some participants in focus groups had been long-term migrant workers, giving them the opportunity to reflect on how their migration experience had changed across their placements. For example, participants from Malaysia reflected on their experience 25 years ago, compared to their current experience.

I: What was your experience 25 years ago when there was no digital technology and no Facebook groups?

R1: It was very difficult, in my first few months I just cry when I feel alone. I did not know where to go whenever I needed something and it was scary to ask help from neighbours, I only waited for my scary employers to come back.

R2: But I think at this time, everything has changed better because we now have digital technology.

All: Yes!

R2: Before, we had to spend so much for top-up credits just to call our families yet still we could not see them. But today, we can see them through using messenger and video calls. [MY-PH-FGD2]

In FGDs, participants described that they would like to use technology to find out more about the culture, language, and the workplace expectations, both while in their home country as well as once placed in their destination country.

▶ **Table 37: Sources of information to select a recruitment agency, by corridor**

	Connecting with family and friends back home	Making local friends in host community	Finding compatriots/ community in host country	Accessing information related to my new commu-nity or job	Entertainment	News	Banking	Other
Nepal – HK SAR	44 (100.0%)	40 (90.9%)	32 (72.7%)	41 (93.2%)	42 (95.5%)	39 (88.6%)	21 (47.7%)	4 (9.1%)
Nepal - Kuwait	26 (96.3%)	3 (11.1%)	3 (11.1%)	6 (22.2%)	24 (88.9%)	19 (70.4%)	2 (7.4%)	(0.0%)
Nepal - Malaysia	56 (100.0%)	16 (28.6%)	27 (48.2%)	24 (42.9%)	47 (83.9%)	47 (83.9%)	3 (5.4%)	3 (5.4%)
Philippines – HK SAR	60 (96.8%)	37 (59.7%)	42 (67.7%)	47 (75.8%)	44 (71.0%)	50 (80.6%)	22 (35.5%)	(0.0%)
Philippines - Malaysia	45 (91.8%)	27 (55.1%)	31 (63.3%)	26 (53.1%)	32 (65.3%)	36 (73.5%)	13 (26.5%)	2 (4.1%)
Sri Lanka – HK SAR	50 (94.3%)	32 (60.4%)	31 (58.5%)	41 (77.4%)	41 (77.4%)	41 (77.4%)	20 (37.7%)	4 (7.5%)
Sri Lanka - Kuwait	6 (100.0%)	2 (33.3%)	2 (33.3%)	1 (16.7%)	2 (33.3%)	2 (33.3%)	1 (16.7%)	1 (16.7%)
Sri Lanka - Malaysia	23 (95.8%)	11 (45.8%)	5 (20.8%)	22 (91.7%)	22 (91.7%)	22 (91.7%)	12 (50.0%)	3 (12.5%)
Total	310 (96.6%)	168 (52.3%)	173 (53.9%)	208 (64.8%)	254 (79.1%)	256 (79.8%)	94 (29.3%)	17 (5.3%)

Seeking help

Respondents described different help-seeking behaviours, depending on the severity of the situation they faced. Previous research suggests that once abroad, migrant workers will often turn to recruitment agencies as a primary source of support due to a lack of awareness of other avenues even when they exist (including ICT-related support services) (ILO 2019b). In some cases, participants described asking their friends who are employees at the same company for support in talking to their supervisor.

> *there may be instances their friends be able to help them to come out from their difficult situation if they find out their problems. For example some of their friends are long standing employees and therefore try to influence the supervisors or they may be fluent in the language of communication to clarify concerns much better than us. [SL-MY-FGD1]*

Other participants reflected on a key benefit of technology that enabled them to access support networks overseas.

> *And the family has the technology to discuss and share their pains, their achievements with their friends.[NP-KI10]*

In some cases, participants described sharing information with their friends or family, but only if they perceived that this would not cause their family to worry about them too much.

Participants in a number of countries described fears of requesting help from police in foreign countries.

> *R1: It seems like a difficult option to depend on the police because if you're not a celebrity or a politician, nothing. Nothing will happen.*
>
> *R2: It's hard to trust the police these days, it's scary ... And then, if they do help you, they'll try to extort money. [PH-HK-FGD1]*

In situations where respondents had a positive experience with their recruitment agency, they suggested that the agency itself would be their first avenue to seek help. Returned migrant workers from Kuwait described seeking help from the consulate in the destination country [NP-KW-FGD1], noting that they were provided with contact details on arrival in the country, which they kept until they needed them.

A number of respondents from the Philippines cited having most faith in seeking help from a Filipino broadcast journalist, Tulfo.

> *I: For example, you're still in the Philippines, would you know who you can report an issue or case to in case something bad happens?*
>
> *R1: If you're an OFW? And if you go abroad, and then for example something bad happens? ... Just go to Tulfo, he's fast!*
>
> *I: What about you, Ms. R2?*
>
> *R2: Ma'am, the same. Maybe it's better to just go to Tulfo because he'll act more quickly... That's what we need, immediate action. [HK-PH-FGD1]*

Other key informants described the reason for turning to this broadcaster:

> *The worker, sometimes with their family, they have this notion that the easiest way to get have their case acted on is to file the case with Erwin Tulfo. (laughs) That's the problem, no? When you don't have a systematic information system. They'll immediately go to the media or complain to a senator and before you know it, the case has been sensationalized... The reason why they go to Tulfo is because on his show, they dissect the problem, then they call an agency director and ask him to explain what's going on with the complainant's issue. [PH-KI6]*

This particular key informant highlighted an underlying factor that drives workers in their search for help. Due to the opaque nature of the recruitment process, workers do not understand how to solve problems they face. The informant

further described that a key benefit of a systematic information system-driven recruitment process would be to provide greater feedback to workers, allowing them to understand the status of their submissions, as well as how to problem-shoot any issues they face.

5.3 Factors that limit or enable migrant workers' use of digital technology

This section aims to understand the factors that limit or enable migrant workers' use of technology during the recruitment process.

Self-efficacy

While access to technology is a critical factor, self-efficacy, or the perception of one's own ability to use technology is also a significant factor. Perceived self-efficacy refers to how well an individual believes they can use a device and is often used as a proxy for their willingness to try unfamiliar computer systems. Respondents were asked to rate their proficiency at smart phone usage on the following scale: 'I can teach someone how to use this'; 'I can use this well'; 'I sometimes struggle to use this'; 'I often struggle and need help in using this'; 'I don't know how to use this'; 'not applicable'. Table 38 indicates the number of responses per category, as a proportion of the size of the migration corridor.

An interesting first thing to note is that no respondents indicated not knowing how how to use a smart phone. This table also indicates that Sri Lankan respondents (in Hong Kong SAR and Malaysia) indicate lower self-efficacy levels than Nepalese and Filipino respondents. However, over 80 per cent of respondents indicate that they can use smart phones well or feel confident enough to teach others how to use them.

▶ **Table 38: Self efficacy in smart phone usage, by corridor**

	I can teach someone how to use this	I can use this well	I sometimes struggle to use this	I often struggle and need help in using this
Nepal – HK SAR	35%	49%	16%	0%
Nepal - Kuwait	22%	52%	22%	4%
Nepal - Malaysia	35%	50%	15%	0%
Philippines – HK SAR	34%	57%	7%	2%
Philippines - Malaysia	28%	68%	4%	0%
Sri Lanka – HK SAR	28%	34%	38%	0%
Sri Lanka - Kuwait	25%	50%	0%	0%
Sri Lanka - Malaysia	27%	36%	36%	0%
Total	**31%**	**51%**	**17%**	**1%**

Risks and issues

Respondents were asked to indicate all the reasons that hindered their use of digital technology to inform their migration journey, selecting options from a list, or including their own option. To analyse these responses, we calculated the frequency for each option per corridor, presenting this frequency as a proportion of the total survey responses per corridor (Table 39).

This table indicates that overall, respondents top reasons for not using technology to inform their migration journey was that they did not know what sources to consult to obtain

▶ Table 39: Factors that affected use of technology to inform migration journey, by corridor

	I don't know what sources to consult.	I thought other sources were more reliable.	I have limited network / technology access.	There is no information in my language.	I would prefer not to use it.	I don't need it.	I don't know how to use it.	I can't afford it.	Other
Nepal – HK SAR	54.5%	81.8%	38.6%	13.6%	0.0%	2.3%	2.3%	11.4%	6.8%
Nepal - Kuwait	18.5%	0.0%	29.6%	0.0%	0.0%	0.0%	22.2%	18.5%	0.0%
Nepal - Malaysia	17.9%	16.1%	19.6%	0.0%	1.8%	0.0%	8.9%	5.4%	12.5%
Philippines – HK SAR	24.2%	25.8%	14.5%	0.0%	1.6%	3.2%	1.6%	0.0%	3.2%
Philippines - Malaysia	18.4%	12.2%	14.3%	2.0%	4.1%	0.0%	10.2%	0.0%	12.2%
Sri Lanka – HK SAR	49.1%	56.6%	20.8%	0.0%	11.3%	3.8%	1.9%	0.0%	1.9%
Sri Lanka - Kuwait	33.3%	0.0%	0.0%	0.0%	0.0%	0.0%	16.7%	0.0%	16.7%
Sri Lanka - Malaysia	33.3%	33.3%	0.0%	4.2%	8.3%	0.0%	0.0%	0.0%	0.0%
Total	**30.8%**	**32.7%**	**19.6%**	**2.5%**	**3.7%**	**1.6%**	**6.2%**	**4.0%**	**6.2%**

migration-related information and felt that other sources were more reliable.

Respondents were also asked to indicate which of the following risks and issues affect their use of the Internet. This question solicits responses on migrant workers' overall use of the Internet, rather than specifically regarding their migration journey, ranking each risk and issue on a scale of importance: very high, high, moderate, low, very low, don't know, not applicable. To analyse these responses, we calculated the frequency of each very high and high response per corridor, and present the top five risks and issues per corridor below (Table 40). Note that for Sri Lanka – Kuwait, only three risks or issues were rated as very high or high. In the Nepal-HK SAR corridor, respondents cited high levels of concerns across many of the different factors, rating the following equally at 93.2 per cent: sexual harassment, being physically threatened, called offensive names, cyber stalked, data stolen, account hacked, cyberbullying, privacy, exposure to harm, phishing, unwanted contact, receiving inappropriate messages, identity theft, and costs. A full listing of all responses is included in Annex III, Table 48. Responses are colour coded in the table below: risks / issues related to unwanted contact (pink); account hacking and identity theft (green); physical restriction of access (turquoise); costs (yellow); lack of skills (grey).

This table shows that the most highly-ranked risk overall (and in a number of corridors) is fake news. Almost half of the respondents cited issues related to cost as impacting their use of the Internet. In focus groups, participants often cited concerns about the reliability of job postings, a fact that correlates with findings presented in Table 39 which illustrates the top concerns in using digital technology to inform their migration journey.

> *Because there are a lot of posts that are really just scams, people just wanting to make money off you online, so it's hard to trust online sources. [PH-HK-FGD2]*

Employers' restrictions on the use of technology means that while workers may have a mobile phone and Internet connectivity, they may not be able to use them whenever they want. In KIIs, a number of NGO staff and organizations that provide support to migrant workers described the implications of this restricted access to their own use of technology.

▶ **Table 40: Risks and issues that affect use of Internet, by corridor**

Nepal -HK SAR	Nepal -Kuwait	Nepal -Malaysia	Phil – HK SAR	Phil -Malaysia	Sri Lanka -HK SAR	Sri Lanka - Kuwait	Sri Lanka - Malaysia	Total
Unwanted contact (93.2%)	Digital literacy (14.8%)	Unwanted contact (12.5%)	Cyber bullying (48.4%)	Costs (28.6%)	Account hacked (60.4%)	Privacy (16.7%)	Online predators (58.3%)	Unwanted contact (43.9%)
Receive inappro-priate messages (93.2%)	Unwanted contact (18.5%)	Receive inappro-piate messages (17.9%)	Exposure to harm (48.4%)	Offensive names (30.6%)	Exposure to harm (60.4%)		Exposure to harm (58.3%)	Receive inappro-priate messages (44.2%)
Identity theft (93.2%)	Costs (40.7%)	Employer restricting access (17.9%)	Account hacked (50.0%)	Exposure to harm (30.6%)	Identity theft (60.4%)		Receive inappro-priate messages (58.3%)	Exposure to harm (44.5%)
Costs (93.2%)	Employer restricting access (40.7%)	Fake news (33.9%)	Privacy (50.0%)	Receive inappro-priate messages (30.6%)	Fake news (60.4%)	Fake news (16.7%)	Digital literacy (58.3%)	Costs (48.3%)
Online predators (95.5%)	Fake news (70.4%)	Costs (39.3%)	Fake news (50.0%)	Fake news (32.7%)	Unwanted contact (62.3%)	Digital literacy (33.3%)	Unwanted contact (62.5%)	Fake news (53.3%)

Case managers call them at convenient times, sometimes at 8 or 9 in the night, I've had case manager calling clients, because that is the nature of the work. So sometimes domestic workers that's the time they finish their work and their employer permits them to look at their phone for an hour a day. And

I think that it's important that organizations identify that and adapt to the fact that domestic workers don't work on the schedule of 9am to 6pm every day. And definitely technology has helped us immensely over the past few months in responding to this issue. [HK-KI2]

Language

Language barriers and literacy levels are widely recognized as key factors that limit workers' use of digital technology. Interface localization refers to the adaptation of a digital technology to meet the language and cultural requirements of a new market. This factor includes both the translation of text from one language to another, but also includes factors such as: translating date and time formats, colours and symbols, and varying legal requirements. While language barriers and literacy levels were raised in FGDs and KIIs, the lack of information in the preferred language was only raised in the survey by workers in the Nepal – HK SAR corridor (13.6 per cent, see Table 40).

There were two other language-related factors that were raised in KIIs regarding the localization of digital technology interfaces in recruitment. Firstly, one KII in Nepal suggested that care must be used in all aspects of localization, including down to the URL that users must type to access online recruitment platforms and other recruitment-related advice.

And even we need to write the URL in English and the worker very hardly, very few workers can write in English so that is the problem that we hear ... [NP-KI3]

When considering the different keyboards and alphabets used in different communities the importance of this often-forgotten factor becomes even more critical.

Another KII described the importance of considering literacy levels of workers.

> *We are very dependent on visual information, so we expect people to be able to read, to be able to consume information through reading. But a lot of workers are actually illiterate. I mean people from Myanmar for instance, we had so many*

> *undocumented workers who can't read. They can speak and they can understand probably more than two languages. I think that gap... understanding how migrant workers consume information is very important and technology has a role in closing that particular gap. [MY-KI1]*

They went further to suggest different ways that stakeholders could use digital technology to support migrant workers, regardless of their literacy levels.

> *So if you have a jingle, a ringtone that sings hotline number, that's quite different from having access to a Facebook page... [MY-KI1]*

Digital literacy

Previous sections have discussed digital literacy issues, and have also touched on the critical factor of self-efficacy. Section 5.1 also indicated that the leading factor cited by survey respondents for not using digital technology to inform their migration is that they didn't know such sources existed. This points to the importance of digital literacy. One KII expanded on this point:

> *It's just that there should be some initiatives for example in helping out the workers to be educated to become literate in using digital communication and probably for government to... [PH-KI2]*

It is important to note that there is a wide disparity in digital literacy levels amongst migrant workers.

> *So along that spectrum, access, awareness and knowledge of how to use this technology vary between different groups of migrant workers. [MY-KI1]*

Some FGD participants described the complexity of some of the information-seeking behaviour, where data is triangulated from different sources, such as combining word of mouth information with Internet searches, YouTube reviews, and Google Street View to check the legitimacy of overseas recruitment agencies. Others described having very limited digital information seeking skills.

The business of recruitment

Another factor that was cited a number of times which impacts not only online recruitment, but the industry as a whole is recruitment. This is a very profitable business, with its own entrenched interests and patterns of work. KIIs and FGDs described a number of different patterns of exploitation within the recruitment industry that range from grass-roots level corruption by intermediaries and recruitment brokers, up to government-level corruption.

At village level, participants described how intermediaries circulate scams and misinformation using job-finding public groups on Facebook.

> *Yeah, because the technology, social media in particular, can be the source of, is the source of information for many. So even in the most remote areas, people will have access to Facebook. And of course, it's always double-edged. What you see in the Facebook is not always the truth. And in many instances, these are really platforms that are being used as well by unscrupulous recruiters and traffickers. So there are people who do not know any better. It's very interesting that you get a lot of reports still of people being scammed through social media and on Facebook. [PH-KI3]*

Other participants described how recruitment agencies themselves purposefully share inaccurate information or find loopholes on how to charge additional fees to prospective workers in order to get around policies that aim to reduce the recruitment burden on workers. In addition, one KII also suggested the involvement of public service staff in this corruption.

> *The thing is I guess, it's also part of government corruption, and sometimes, people in government who are also involved in employment agencies. That is where you have the issue of accountability. I think even if you have a good technology that is available for migrant workers, if governments are not accountable and will not look into this and will regard it as something, a step forward, or a strong innovation to uphold the rights of migrants, if they are not going to take action on it, and how they will effectively respond to needs and grievances that will come out of this technology then. [HK-KI3]*

This KII brought up the critical role of accountability in ensuring that migrant workers' rights are respected.

5.4 Summary

This section has aimed to answer three research questions regarding migrant workers' access, and use of technology, as well as factors that limit or enable use of digital technology during the recruitment process. The section began by illustrating that overwhelmingly, migrant workers have access to smart phones more than any other digital technology. As a result, most of the analysis presented in Chapter 5 discussed use of Internet-enabled mobile phones within the recruitment process. The chapter illustrated that in sending countries, many migrant workers, particularly in less developed areas, may not have access or skills that are required to use digital technology. Participants described using digital technology for specific tasks, where they indicate high levels of proficiency, but added that this digital literacy does not encompass a large suite of uses of digital technology. Many participants described using Facebook frequently to search for information, but not feeling confident with other existing platforms. Once arrived in the receiving country, participants described having less access to their device / Internet due to work-based restrictions. This review highlighted the importance of considering asynchronous modes of communication in order to enable workers to access and respond to messages when they have time.

Throughout their recruitment and migration journey, some workers describe receiving suggestions from friends and family for recruitment agencies, and then following up, in some cases, with complex triangulation of online data to check the trustworthiness of recommendations. Other workers describe relying on recommendations of personal connections for intermediaries or recruitment agencies themselves, and then going directly to these sources themselves. These differing information seeking behaviours demonstrate the complexity of developing solutions that could support all potential workers in their recruitment journey.

One key factor that we aimed to understand was the self-efficacy of migrant workers, or belief in their own ability to use digital technology. This factor is crucial to understanding how easy it may be for workers to adapt when new uses of technology are suggested. Results indicated differing levels of self-efficacy within migrant populations depending on age, gender, citizenship, and stage of employment. Participants were also aware of the risks and issues relative to the use of digital technology, with the highest ranked issue being related to the accuracy of information that is available online. Other key issues raised by migrant workers regarded access to devices and online privacy. Participants also raised concerns about language, and specifically the need for support for low-literate and illiterate potential workers. Finally, they discussed the darker side of migration, referring to the business of recruitment and use of disinformation (whether using technology or otherwise) to control and restrict workers.

6

▶ Discussion and recommendations

This section provides a discussion on and recommendations regarding the study objective of "development / support of a specific digital technology solution addressing identified gaps in access and use of critical information and services; to be pilot tested in one of the FAIR project's migration corridors". The discussion and recommendations can be subdivided into two components: the migration corridor and the solution presented by technology. This chapter also includes a summary of key findings taken from the entire study.

6.1 Recommendations for a migration corridor

The FAIR project's scope of work covers several migration corridors including Nepal to Jordan; the Philippines to Hong Kong SAR; Tunisia to the Middle East; West Africa to Tunisia; Nepal to Qatar; and the Philippines to Qatar. The present study, for the most part, covered a different geographical scope, with corridors of focus being Sri Lanka to Hong Kong SAR, Sri Lanka to Malaysia, the Philippines to Hong Kong SAR, the Philippines to Malaysia, Nepal to Malaysia and Nepal to Hong Kong SAR. Aside from being the only bilateral corridor that overlaps between the FAIR project and the current study, the **Philippines to Hong Kong SAR** stands out for a number of reasons as the most suitable candidate for the study.

The Philippines has arguably the most well-developed labour migration infrastructure in Asia and has indeed become a model for other countries due to their innovative policies and administrative provisions. There are multiple institutionalized points for intervention and education in the recruitment and migration life cycle, as the Philippines migration governance includes three key information dissemination programmes (PEOS, PDOS, and PAOS). The various governmental agencies administering labour migration in the Philippines have also already adopted a wide range of digitized services and have prioritized integrating digitalization into their core functions. The size of the Philippine – Hong Kong SAR corridor was second largest in our study (only behind Nepal–Malaysia) and therefore any finding has greater potential for widespread positive impact. The Philippines and Hong Kong SAR were the best origin and receiving countries respectively in terms of quantitative dimensions of technological infrastructure, Internet usage, and mobile phone subscriptions. Qualitative and anecdotal evidence from KIIs also indicated that labour migrants from the Philippines are the most digitally connected group in Hong Kong SAR and other studies have found they use the greatest diversity of mobile applications. The combination of these factors points to factors such as digital literacy, ICT usage, and overall migration governance being particularly strong within this specific corridor.

6.2 Recommendations for the development / Support of a specific digital solution

As we have noted in the discussion regarding the limitations of our landscape analysis (Section 6.2), the exercise served to map existing digital tools, identify common points between them, and summarize key or innovative features. However, beyond this overview and synthesis, determining the true impact and efficacy of individual ICT tools, and particularly a comparison between them, was not feasible. Considering these constraints, we conclude that we do not have enough evidence to support the creation and/or piloting of a novel digital solution, strictly on the basis of our research alone. The feasibility of a pilot study relies primarily on the buy-in from institutional stakeholders that would support implementation, and this was outside the scope of this research. Also, the findings from our primary data analysis did not uncover any specific gaps in access to information or services (namely, remittances, job

search, grievance mechanism) **but rather (and perhaps more importantly) revealed broader trends of how migrants utilize (and don't utilize) ICTs in the recruitment journey**.

Migrants reported gathering a wide range of information in support of their overseas employment journey including documentation, information on salary, accommodation, and contracts; however for many, ICTs did not play a crucial role in accomplishing this objective as it was done exclusively offline. Most notably, **approximately half of survey respondents indicated that they did not use digital technology at all to gather information about their migration experience** (Table 30). The top reasons provided by participants as to why they did not utilize digital technology to inform their migration experience were (1) a lack of knowledge on sources to consult, and (2) the belief that other sources (such as family/friends or recruitment intermediaries) are more reliable (Table 31). When analysing the open text descriptions to the 'Other' response to this question, workers further indicated that they prefer to use a recruitment agent, or to gather information on or referrals to recruitment agents from their family members, which can justifiably be collapsed into the second line of reasoning. These sentiments accounted for 70 per cent of why migrants did not use technology, whereas a lack of accessible content and lack of Internet connection/ICT device, and affordability issues only accounted for roughly 25 per cent. Migrants further indicated high levels of ICT usage for a range of purposes, such as making and receiving video and voice calls to connect with family back home, making local friends, finding community connections in the destination country, as well as entertainment, news and banking (Table 37). Although our sample is not illustrative of the entire migrant community in these corridors, we can assume it is at least a reasonably representative slice of the digitally connected migrants given that access to an ICT device was an inclusion criterion for participation. However, as discussed above, many migrants do not have access to ICTs so we can assume that overall, the proportion of migrants who are not using digital technology to inform their labour migration experience is even higher than is captured within this study.

Research studies on the use of ICTs by migrants to date are still very limited, however our findings mirror that of another major research study (Mobile Women & Mobile Phones) which ultimately produced several key findings that corroborate what was uncovered in the present study:

> *Usage to date is limited to what women migrant workers believe ICT exists for: social connectivity. There is a lack of understanding among many women migrant workers of how ICT can aid in the migration process. (ILO 2019b) p. 5*
>
> *Women migrant workers … did not use the Internet to look up information on migration documentation, visa application processes or work permit process, as they expected their employer or recruitment agency to handle such matters. (ILO 2019b) p. 3*
>
> *The majority of respondents were unaware of support services available for migrant workers [including those enabled by ICTs]. (ILO 2019b) p. 4*

Although that particular study had a gendered focus, as it only collected data from female migrant workers, the findings hold true across our sample as well. This suggests that even if in theory there were universal access to network coverage, local language content, ICT devices, and fit for purpose apps, as well as digital platforms, migrants may still lack the knowledge of relevant sources, distrust official and/or digital sources relative to people they know, or not perceive the potentially positive role of technology in the migration journey. **It further implies that the problem does not necessarily lie in a gap of information or services that can be resolved with the thoughtful design and introduction of a new digital tool, but rather it lies in the existing knowledge, information- seeking behaviour, and perceptions on the part of migrants themselves.**

Promoting official, reliable and verifiable information is crucially important as the top-rated concern reported by study participants with regard to using digital technologies was fake news or misleading information (Table 40). Respondents indicated they found the government agencies in sending countries

(arguably the most critical potential source of official information) in fact to be the least helpful in terms of obtaining information about migration (Table 33).

While there is a clear impetus towards deploying ICTs in new ways, even if barriers in terms of access and affordability were to be alleviated, our findings suggest that migrants do not universally see technology as a means through which to obtain relevant information, and when they do use ICTs for this purpose, it may be limited in scope relative to their overall use of ICT. Considering these key findings and the multitude of tools already available for various purposes related to migration and recruitment, we recommend that rather than piloting a new tool it may be more worthwhile to **invest in the promotion and information dissemination of already existing tools as a strategic focus.** For example, we can draw on a case study of one tool we highlighted in our landscape analysis that provides financial inclusion and remittance services for migrant workers: Instapay eWallet. The managing company of this app partnered with a digital marketing company to aggressively campaign for adopting the app and registering new users by targeting key community leaders and influential members of migrant networks across the most utilized social media platforms and with native language content. The reported direct results of this campaign showed that 3,000–5,000 migrant families were registered, 200 new queries were received per day, and more than 50 employers adopted the platform as a way to pay their workers (BestMediaInfo Bureau 2021). However, impact assessments of the tools were non existant and in addition, there was a paucity of information regarding marketing and information dissemination campaigns to promote uptake, although it is entirely possible (and likely) that these were conducted and documented, albeit not available to the public.

This mirrors another key conclusion from the Mobile Women & Mobile Phones study that found:

> *For the most part, service providers and stakeholders have fallen short in their digital outreach, failing to harness ICT in a way that can make migration safer and fairer. (ILO 2019b) p. 5*

6.3 Summary of key findings

Key findings of the secondary research:

- An ever-increasing amount of "migrant technology" solutions are being developed that address the various needs of migrants in innovative ways; however the true impact of these tools remains largely unclear.
- Technology has the potential to enable all recruitment-related actors to undertake its core functions at each stage of the recruitment/migration lifecycle in new and improved ways. To varying degrees, mobile and digital technologies can supplement, grow, and innovate already existing services, expanding their reach, coordination, and integration.
- The development of apps and technological innovations should involve key beneficiaries (migrant workers themselves) in the design and development phase to ensure uptake and sustainability.
- For projects that focus on app development, it is necessary for a top-down approach to understand the demand and need for such apps, and subsequently management, promotion, and maintenance must continue beyond the initial phases of design and launch in order to ensure sustainability and relevance.

Key findings of the survey:

- Participants reported widespread access to mobile phones and using them for a range of purposes, but primarily for facilitating social interactions.
- Approximately half (49 per cent) of the study participants did not use digital technology to gather information about their labour migration experience.
- Even among migrants who have access to ICTs and high self-reported efficacy on using ICTs, gathering information related to overseas employment remains largely or entirely offline.
- Migrant workers trust family, friends and recruitment agencies much more than

online sources, even when there is no way of verifying the information provided.

- Many migrant workers are unaware of relevant migration-related sources of information online.
- When migrant workers use online sources to search for jobs, Facebook is the most used platform, slightly ahead of job portals.
- The top-rated fear of using digital technology among study participants was misinformation.
- Friends and family were the most common source of information used by respondents when selecting a recruitment agency.
- Migrant workers ranked government agencies in sending countries as the least critical source of information provision.

6.4 General recommendations

- To intensify information dissemination and promotion of existing online support tools and digital platforms in both origin and destination countries.
- Complement traditional offline outreach mechanisms among migrant worker communities with the enhanced usage of ICTs to raise awareness of supportive services, particularly through social media and customized content.
- Consider that ICTs, while suitable for certain tasks, cannot resolve many structural challenges related to migration and recruitment, and their effectiveness is shaped by a wide range of factors including existing migration infrastructure, migration corridor, gender, occupation and they risk further marginalizing the most vulnerable.
- Build capacity for migrant workers to utilize ICT-enabled services by developing digital literacy and digital safety prior to migration.
- Build the capacity of migration and recruitment stakeholders through trainings and sharing of best practices to better analyse qualitative and quantitative data captured through ICT- enabled services to better understand their impact.
- Avoid unnecessary duplication of digital initiatives to prevent fragmentation and indifference towards ICT solutions. As part of this effort, ensure the interoperability of digital technologies and information systems between various governmental agencies and databases while maintaining data and confidentiality protections.
- Conduct regular monitoring activities of existing ICT tools and platforms to determine their usage and make data publicly available when relevant and possible.
- Ensure the most up-to-date content and information related to recruitment and migration is disseminated in a timely manner across all relevant digital platforms.
- Promote the use of e-wallets and other digital tools (including those utilizing blockchain technology) to facilitate lower-cost remittance transactions.
- Encourage the adoption of all relevant international treaties and ILO conventions, most particularly the Private Employment Agencies Convention (No. 181) due to its provision on prohibiting the charging of recruitment fees.
- Adhere to all of the ILO's Principles and Operational Guidelines for Fair Recruitment, especially Operational Guidelines 7 and 11 which specifically outline the role of technology.
- Adhere to all of the stipulations included in the Global Compact for Safe, Orderly and Regular Migration, particularly Objectives 4, 11, 12, 18, and 20 which contain specific provisions related to digitization and ICTs.

Recommendations for the Philippines – Hong Kong SAR Corridor

- Invest in the promotion and dissemination of already existing tools that have proven to be effective within this corridor. This includes both online and offline promotion of tools to ensure that already marginalized populations are not further marginalized.
- Integrate the Recruitment Advisor review mechanism into the Philippine Overseas Employment Administration (POEA) registry of licensed recruitment agencies[15] and the Hong Kong SAR Labour Department Employment Agencies Portal.[16]
- Include all of the review information from the POEA registry for each respective agency listed in the Recruitment Advisor (PH and HK SAR).
- Publish news updates with context information on the most up-to-date suspensions/restoration of agency licenses (PH).
- Add the license expiration date of each listed company to their respective agency profile (HK SAR).
- To enhance transparency, post documentation related to the opening and closing of complaints against recruitment agencies; reference Pakistan's recruitment agency portal (PH and HK SAR).
- Publish statistics about the number of complaints against each agency and the number of work placements they have facilitated (PH and HK SAR).

15 https://www.poea.gov.ph/cgi-bin/agList.asp?mode=all#

16 https://www.eaa.labour.gov.hk/en/search.html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▶ Annexes

Annex I: List of key informants

4. **Alfredo Palmiery -** President, Society of Hong Kong SAR Accredited Recruiters in the Philippines (SHARP) (Philippines)
5. **Amritha Muttiah** - Project Coordinator, IOM (Sri Lanka)
6. **Arjun Kharel -** Research Coordinator, Centre for the Study of Labour and Mobility (Nepal)
7. **Bijaya Rai Shrestha** - Founder and Chairperson, Aaprbasi Mahila Kamdar Samuha (AMKAS) (Nepal)
8. **Bijaya Rai Shrestha** - Founder and Chairperson, Aaprbasi Mahila Kamdar Samuha (AMKAS) (Nepal)
9. **Bishnu Gaire** - President, Nepal Association of Foreign Employment Agencies (NAFEA) (Nepal)
10. **Cheung Kit Man** - Chairman of Hong Kong SAR Employment Agencies Association ((Hong Kong SAR)
11. **Christoph Kühn** - Technical Officer, ILO
12. **Ellen Sana** - Executive Director, Centre for Migrant Advocacy (Philippines)
13. **Florida Sandanasamy** - International Labour Organization (Malaysia)
14. **Francis de Guzman** - Director of the Anti-Illegal Recruitment Branch, POEA (Philippines)
15. **Himeshika Samaradivakara** - Sri Lanka Buddhist Cultural Centre Hong Kong SAR (SLBCC) (Hong Kong SAR)
16. **Hussein Macarambon** - National Project Coordinator, ILO Integrated Programme on Fair Recruitment (Philippines)
17. **Ira Rachmawati** - Project Officer, ITUC
18. **Jerome Alcantara** - Executive Director, Blas Ople Policy Centre and Training Institute (Philippines)
19. **Jesse Mertens** - Technical Officer, ILO (Sri Lanka)
20. **Jillian Roque** - Advocacy and Research Head, Public Services Labor independent Confederation (PSLINK) (Philippines)
21. **Jodelen Mitra** - Technical Officer, International Labour Organization (Malaysia)
22. **Karen Fung** - Senior Labour Officer, Labour Department, HKSAR Government (Hong Kong SAR)
23. **Krishna Neupane** - Secretary, People Forum for Human Rights (Nepal)
24. **Kul Prasad Karki** - Chairperson, Pravasi Nepali Coordination Committee (Nepal)
25. **Laxman Bahadur Basnet** - General Secretary, South Asia Regional Trade Union Council (Nepal)
26. **Leo Selomenio** - Founder, Bethune House Migrant Women's Refuge (Hong Kong SAR)
27. **Liezl Galdo** - Head of the Organizing Committee, Asosasyon ng mga Makabayang Mangagagawang Pilipino Overseas (AMMPO) (Malaysia)
28. **Lito Soriano** - President, LBS Recruitment Solutions (Philippines)
29. **Macchindra Nath** - PNCC (Malaysia)
30. **Manisha Wijesinghe -** Director of Case Management, HELP for Domestic Workers (Hong Kong SAR)
31. **Manisha Wijesinghe** - Director of Case Management, HELP for Domestic Workers (Hong Kong SAR)
32. **Manju Gurung** - Chairperson, Pourakhi Nepal (Nepal)

33. **Maria Apostol** - Executive Director, The FAIR Hiring Initiative (Philippines)
34. **Maruja M.B. Asis** - Director of Research and Publications, Scalabrini Migration Center (Philippines)
35. **Maylin Hartwick -** Field Council Secretary, ABWE International (Hong Kong SAR)
36. **Melchor Dizon -** Labour Attaché, Philippine Consulate General in Hong Kong SAR (Hong Kong SAR)
37. **Ms. Milinda** - Manager, Emerald Isle Recruitment Agency (Sri Lanka)
38. **Nilambar Badal -** Program Director, Asian Human Rights and Culture Development Forum (Nepal)
39. **Prajwal Sharma** - Migration and Development Officer, International Organization for Migration (Nepal)
40. **R. Madhan** - Assistant Director, Tertiary and Vocational Education Commission (Sri Lanka)
41. **R.S. Sanka Mihiranga** - Sri Lanka Buddhist Cultural Centre Hong Kong SAR (SLBCC) (Hong Kong SARSAR)
42. **Rajan Shrestha** - Head of Labour Ministry's Foreign Employment Promotion Board (Nepal)
43. **Raju Shrestha** - Ministry of Labor, Employment and Social Security Department (Nepal)
44. **Rey Asis** - Program Coordinator, Asia Pacific Mission for Migrants (APMM) (Hong Kong SAR)
45. **Ric Casco** - Labour Migration / Migration and Development Unit, IOM (Philippines)
46. **Roland Edward** - Be My Protector (Malaysia)
47. **Soniya Dotel** - Attaché, Consulate General of Nepal in Hong Kong SAR (Hong Kong SAR)
48. **Sunil Neupane -** Project Coordinator, Recruitment Advisor (Nepal)
49. **Swarna Kumar Jha** - Coordinator, National Network for Safe Migration (Nepal)
50. **T.T. Mayuran** - Managing Director, Centre for Children's Happiness (Sri Lanka)
51. **Tara Dermott** - Head of IOM Hong Kong SAR Sub-office
52. **Yen Ne Foo** - National Project Coordinator, International Labour Organization (Malaysia)

Annex II: List of tools on Information and Communication Technology (ICT)

1. AgHelp
2. ASEAN Trade Union Council (ATUC) Information System for Migrant Workers
3. Baideshik Rojgar
4. Bantay OFW
5. BdeshJaatra
6. Bdjobs
7. Bong Pheak
8. Contact Sri Lanka
9. Contratados
10. eMigrate
11. eMin Project
12. Fair Employment Agency
13. Fair Hiring Toolkit – Verité
14. FDH Portal Hong Kong
15. Foreign Employment Information Management System (FEIMS)
16. Foreign Employment Information Management System (Online payment)
17. Golden Dreams / Inclusive Labour Monitoring System
18. GoodWorkers
19. Handshake
20. Helper Choice
21. InfoMigrants
22. INMI (Integración laboral de migrantes)
23. Instapay Technologies E-wallet for Migrant Workers
24. Just Good Work
25. Karma-Setu
26. MADAD
27. MamaHelpers
28. MigApp
29. MigCall
30. Migrants as Messengers
31. Migrants Rights Violation Reporting System
32. Miss Migration
33. MiTa – Migration Translation Application
34. MOHRE (app)
35. Musaned
36. My Labour Matters
37. OASIS – OFW Assistance Information System
38. OWWA Electronic Case Registry and Response System (e-CARES)
39. OWWA Mobile App
40. Pangyao
41. Pantau PJTKI (Recruitment Watch)
42. Pick Remit
43. Pink-collar
44. Prabasi Ko Saath
45. Quizrr and ILO Online Training App for Migrants in Thailand
46. Recruitment Advisor
47. Rights Migrate Too
48. Rise
49. Safe Migration and Emergency Information
50. SAFE Travel & Work Abroad
51. Sama
52. SaverAsia
53. Shuvayatra
54. Singtel Dash
55. SIRA
56. Smart Domestic Workers mobile app
57. Sri Lanka Bureau of Foreign Employment
58. Support for Migrants
59. The Ethical Recruitment Agency
60. TKI KEREN
61. Together (Kuwait e-platform)
62. Verite CUMULUS Forced Labor ScreenTM
63. WorkAbroad.ph
64. Worker Connect
65. Worker Insights, Smart Engagement

Annex III: Complete tables

▶ Table 41: Respondents without access to smart phone or basic phone per migration corridor

	Number without access	Percentage of sample
from Nepal in HK SAR	0	0.0%
from Phil in HK SAR	0	0.0%
from Phil in Mal	1	3.7%
from SL in HK SAR	1	2.3%
from SL in Mal	0	0.0%
in Nepal to Kuw	0	0.0%
in Nepal to Mal	0	0.0%
in Nepal to HK SAR	1	100.0%
in Phil to HK SAR	3	10.0%
in Phil to Malaysia	1	4.2%
in SL to HK SAR	1	5.0%
in SL to Kuw	2	50.0%
in SL to Mal	4	16.7%

▶ Table 42: Use of smart phones

	Making voice calls	Receiving voice calls	Making video calls	Receiving video calls	Sending (SMS)	Taking photos/ videos	Browse Internet	Using social media	Playing games	Watching videos	Mobile banking	Reading news	Looking up informa-tion for work	Listening to music	Shopping
Nepal – HK SAR	100.0%	97.7%	100.0%	97.7%	100.0%	100.0%	100.0%	100.0%	83.7%	100.0%	60.5%	90.7%	90.7%	93.0%	39.5%
Nepal - Kuwait	88.5%	92.3%	38.5%	34.6%	26.9%	19.2%	80.8%	84.6%	23.1%	42.3%	15.4%	46.2%	19.2%	23.1%	15.4%
Nepal - Malaysia	77.8%	74.1%	63.0%	63.0%	55.6%	66.7%	85.2%	68.5%	42.6%	68.5%	5.6%	53.7%	46.3%	29.6%	9.3%
Philippines – HK SAR	95.0%	88.3%	85.0%	83.3%	96.7%	78.3%	91.7%	88.3%	55.0%	78.3%	46.7%	70.0%	58.3%	66.7%	31.7%
Philippines - Malaysia	93.6%	89.4%	89.4%	89.4%	78.7%	68.1%	89.4%	91.5%	42.6%	61.7%	44.7%	70.2%	68.1%	42.6%	27.7%
Sri Lanka – HK SAR	95.7%	91.3%	82.6%	82.6%	95.7%	89.1%	87.0%	84.8%	76.1%	78.3%	34.8%	71.7%	45.7%	69.6%	21.7%
Sri Lanka - Kuwait	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	75.0%	50.0%	50.0%	75.0%	25.0%	50.0%	50.0%	50.0%	0.0%
Sri Lanka - Malaysia	100.0%	100.0%	81.8%	81.8%	90.9%	81.8%	68.2%	63.6%	72.7%	54.5%	59.1%	54.5%	36.4%	22.7%	9.1%
Total	92.4%	89.1%	79.5%	78.5%	80.5%	74.8%	87.7%	83.8%	56.6%	72.2%	37.1%	66.9%	55.3%	53.3%	23.2%

▶ Table 43: How critical were sources to obtain information pre departure

	Community	Friends	Family	Internet	Job agencies	LGA (sending)	LGA (receiving)	News	NGO	Police	PSA	Recruitment Brokers	Religious networks	Radio	Social media	Trade union
Nepal – HK SAR	2.3%	2.3%	2.3%	2.3%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	0.0%	0.0%	0.0%	2.3%	0.0%
Nepal - Kuwait	22.2%	37.0%	51.9%	44.4%	25.9%	18.5%	48.1%	55.6%	18.5%	33.3%	40.7%	25.9%	14.8%	44.4%	59.3%	14.8%
Nepal - Malaysia	30.4%	53.6%	48.2%	42.9%	32.1%	17.9%	23.2%	48.2%	12.5%	17.9%	14.3%	33.9%	10.7%	46.4%	60.7%	16.1%
Philippines – HK SAR	54.8%	56.5%	59.7%	61.3%	56.5%	54.8%	51.6%	56.5%	51.6%	43.5%	54.8%	43.5%	46.8%	48.4%	56.5%	46.8%
Philippines - Malaysia	59.2%	67.3%	63.3%	67.3%	65.3%	65.3%	65.3%	65.3%	59.2%	55.1%	65.3%	63.3%	59.2%	55.1%	67.3%	57.1%
SL – HK SAR	15.1%	11.3%	15.1%	15.1%	13.2%	11.3%	7.5%	7.5%	7.5%	5.7%	9.4%	5.7%	9.4%	7.5%	9.4%	3.8%
SL - Kuwait	33.3%	33.3%	50.0%	33.3%	33.3%	0.0%	0.0%	33.3%	16.7%	16.7%	16.7%	0.0%	16.7%	16.7%	33.3%	0.0%
SL - Malaysia	29.2%	45.8%	45.8%	45.8%	45.8%	29.2%	33.3%	37.5%	25.0%	20.8%	33.3%	33.3%	12.5%	16.7%	41.7%	8.3%
Total	32.4%	39.9%	41.1%	40.2%	35.2%	29.3%	31.8%	38.6%	26.2%	25.5%	31.2%	29.6%	24.0%	32.4%	42.4%	23.1%

Table 44: Types of information sought, by corridor

	Salary information	Accommodation	Contractual information	Documentation (including contractual documentation, visa, passport processing)	Filing an informal complaint (e.g with an agency, employer, informal complains mechanism)	Financial services	Health screening	Information regarding recruitment process	Job search	Other social-support services including clinics	Pre-departure training	Skills training	Transportation	Working conditions	Other (please specify)
Nepal – HK SAR	0 (0.0%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	0 (0.0%)	0 (0.0%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	1 (2.3%)	0 (0.0%)
Nepal - Kuwait	7 (25.9%)	4 (14.8%)	4 (14.8%)	3 (11.1%)	2 (7.4%)	3 (11.1%)	4 (14.8%)	4 (14.8%)	3 (11.1%)	2 (7.4%)	2 (7.4%)	2 (7.4%)	2 (7.4%)	10 (37.0%)	5 (18.5%)
Nepal - Malaysia	20 (35.7%)	18 (32.1%)	23 (41.1%)	13 (23.2%)	7 (12.5%)	8 (14.3%)	11 (19.6%)	13 (23.2%)	7 (12.5%)	5 (8.9%)	6 (10.7%)	9 (16.1%)	14 (25.0%)	18 (32.1%)	10 (17.9%)
Philippines – HK SAR	39 (62.9%)	33 (53.2%)	32 (51.6%)	36 (58.1%)	10 (16.1%)	18 (29.0%)	22 (35.5%)	21 (33.9%)	26 (41.9%)	12 (19.4%)	22 (35.5%)	12 (19.4%)	21 (33.9%)	27 (43.5%)	0 (0.0%)
Philippines - Malaysia	31 (63.3%)	25 (51.0%)	30 (61.2%)	29 (59.2%)	10 (20.4%)	11 (22.4%)	9 (18.4%)	10 (20.4%)	17 (34.7%)	7 (14.3%)	20 (40.8%)	11 (22.4%)	13 (26.5%)	18 (36.7%)	0 (0.0%)
Sri Lanka – HK SAR	9 (17.0%)	6 (11.3%)	6 (11.3%)	5 (9.4%)	2 (3.8%)	2 (3.8%)	4 (7.5%)	6 (11.3%)	6 (11.3%)	4 (7.5%)	4 (7.5%)	4 (7.5%)	3 (5.7%)	5 (9.4%)	0 (0.0%)
Sri Lanka - Kuwait	2 (33.3%)	2 (33.3%)	3 (50.0%)	2 (33.3%)	0 (0.0%)	0 (0.0%)	1 (16.7%)	1 (16.7%)	1 (16.7%)	1 (16.7%)	1 (16.7%)	1 (16.7%)	1 (16.7%)	3 (50.0%)	0 (0.0%)
Sri Lanka - Malaysia	12 (50.0%)	11 (45.8%)	8 (33.3%)	9 (37.5%)	6 (25.0%)	5 (20.8%)	4 (16.7%)	9 (37.5%)	9 (37.5%)	6 (25.0%)	6 (25.0%)	10 (41.7%)	7 (29.2%)	11 (45.8%)	0 (0.0%)
Total	120 (37.4%)	100 (31.2%)	107 (33.3%)	98 (30.5%)	37 (11.5%)	47 (14.6%)	56 (17.4%)	65 (20.2%)	70 (21.8%)	38 (11.8%)	62 (19.3%)	50 (15.6%)	62 (19.3%)	93 (29.0%)	15 (4.7%)

▶ **Table 45: Risks and issues per corridor**

	Nepal – HK SAR	Nepal - Kuwait	Nepal - Malaysia	Philippines – HK SAR	Philippines - Malaysia	Sri Lanka – HK SAR	Sri Lanka - Kuwait	Sri Lanka - Malaysia	Total
Sexually harassed	93%	15%	2%	44%	29%	60%	0%	50%	41%
Physically threatened	93%	15%	2%	35%	16%	58%	0%	54%	37%
Offensive names	93%	11%	2%	45%	31%	55%	0%	33%	39%
Cyber stalked	93%	11%	0%	39%	22%	58%	0%	54%	38%
Data stolen	93%	4%	5%	47%	24%	58%	0%	54%	40%
Account hacked	93%	4%	2%	50%	27%	60%	0%	54%	41%
Cyberbullying	93%	4%	4%	48%	22%	58%	0%	54%	40%
Privacy	93%	15%	9%	50%	29%	58%	17%	54%	44%
Online predators	95%	15%	2%	44%	20%	58%	0%	58%	40%
Exposure to harm	93%	15%	13%	48%	31%	60%	0%	58%	45%
Phishing	93%	15%	0%	40%	20%	58%	0%	54%	39%
Unwanted contact	93%	19%	13%	42%	29%	62%	0%	63%	44%
Receiving inappropriate messages	93%	15%	18%	44%	31%	58%	0%	58%	44%
Identity theft	93%	4%	2%	45%	22%	60%	0%	50%	39%
Online romance scams	91%	11%	7%	45%	27%	57%	0%	54%	41%
Fake news	91%	70%	34%	50%	33%	60%	17%	54%	53%
Costs	93%	41%	39%	44%	29%	55%	0%	46%	48%
Employer restricting access	82%	41%	18%	16%	14%	49%	0%	25%	33%
Unaware of how to use features	14%	15%	0%	11%	12%	38%	33%	58%	18%

Annex IV: Survey

UNITED NATIONS UNIVERSITY
Institute in Macau

Use of digital technologies in the context of migrant workers' labour recruitment experience

You are invited to participate in a research study titled "Study on the use of digital technology in the recruitment process". This study is being done by Dr. Hannah Thinyane and Mr. Don Junio from the United Nations University, Institute in Macau, with support from the International Labour Organization (ILO).

The aim of the study is to understand how migrant workers use digital technology throughout their recruitment and work. The study focusses on migrant workers from Nepal, Sri Lanka, and The Philippines, who previously worked/ are working / intending to work in Hong Kong and Malaysia.

Participation in this survey is voluntary and will take no more than 30 minutes of your time. You are free to withdraw at any time or leave any answer blank. All data that is collected is done so anonymously, with no identifying information about you being recorded. The information you provide will be analysed along with other respondents, in order to provide recommendations to support fair recruitment practices for migrant workers.

I understand that:

- Participation is voluntary, and I am able to withdraw at any stage.
- That the information obtained will be confidential to the research team mentioned above.
- That no financial or other incentive will be provided for participation.
- I am able to contact the research assistant with any questions.
- Data generated as part of this study will be used to contribute to open data sets following this study. I understand that this does not include any personally identifiable information.

☐ By checking this box, I give my consent to take part in this survey.

Thank you once again for your participation. Should you have further questions, please feel free to contact us at djunio@unu.edu

Screening Questions

Q1. Are you above 18 years of age?

Yes	Continue	Go to Q2
No	Terminate	

Q2. What is your country of citizenship?

Nepal	Continue	Go to Q2.1
Philippines	Continue	Go to Q3
Sri Lanka	Continue	Go to Q3
Others	Terminate	

Q2. 1 What is your caste (optional- only ask this for Nepali respondents): _____

Q3. Please select your employment status

Current migrant worker	Continue	Go to Q3.1
Potential migrant worker	Continue	Go to Q3.2
Returned migrant worker	Continue	Go to Q3.3
None of the above	Terminate	

Q3.1 **For current migrant worker,** please select the country/ region of employment

Hong Kong	Continue	Go to Q3.1.1
Malaysia	Continue	Go to Q3.1.1
Kuwait*	Continue	Go to Q3.1.1
Others	Terminate	

*This option is only available to Sri Lankan, Nepali respondents

Q3.1.1 How many years have you been working in (country/region of current employment) as a migrant worker? _____ (Go to Q4)

Q3.2 **For potential migrant worker**, do you plan to seek overseas employment within the next 12 months?

Yes	Continue	Go to Q3.2.1
No	Terminate	

Q3.2.1 Please select the country/ region where you plan to work?

Hong Kong	Continue
Malaysia	Continue
Kuwait*	Continue
Others	Terminate

*This option is only available to Sri Lankan, Nepali respondents

Q3.3 **For returned migrant worker,** did you return to (country of citizenship), within the last 12 months?

Yes	Continue	Go to Q3.3.1
No	Terminate	

Q3.3.1 Please select the country/ region of previous employment

Hong Kong	Continue	Go to Q3.3.2
Malaysia	Continue	Go to Q3.3.2
Kuwait*	Continue	Go to Q3.3.2
Others	Terminate	

*This option is only available to Sri Lankan, Nepali respondents

Q3.3.2 How many years did you work in (country/region of previous employment) as a migrant worker? _____ (Go to Q4)

Access to ICTs

Q4. Which of the following Information and Communication Technologies (ICTs) do you have access to? (check all that apply)

Personal Computer (PC) or Laptop	Continue
Table PC	Continue
Smart phone	Continue
Basic/ Feature phone	Continue
Internet	Continue
None of the above	Terminate

1. Demographic Information

1.1. What is your gender?

Female	1
Male	2
Non-binary/ Others	3

1.2. Which category below includes your age?

18-20	2	50-59	6
21-29	3	60 or older	7
30-39	4	Prefer not to say	99
40-49	5		

1.3. What is the highest level of education you have completed?

Primary school graduate	1	Some university credits, no degree	5
Some high school, no diploma	2	Bachelor's degree	6
High school graduate	3	Postgraduate degree	7
Trade/technical/vocational training	4	No schooling completed	99

1.4. Which sector/industry are/were you engaged in?

Manufacturing	1	Domestic work	4
Construction	2	Services	5
Security	3	Others:_____	99

1.5. What is your civil status?

Single	1	Separated	4
Married	2	Widowed	5
Divorced	3	Prefer not to say	99

1.6. How many dependent children do you have? ____

1.7. Have you attended a special pre-departure training before deployment overseas?

Yes	1
No	2
I will attend before departure	3

1.8. Please briefly describe this training:

_____

_____

2. Current use of digital technology

In this section, we want to capture aspects of your current use of various digital technologies and digital habits. The aim of this section is to draw a broad picture of how migrant workers interact with digital technologies, their perceived benefits from using digital technologies and potential risks and issues in using digital technologies.

2.1. Which of the following devices do you own or have access to, and how often do you use them?

	Number of devices owned	Number of devices I have access to	Frequency of use
Smart phone 			At least once per day At least once per week At least once per month Less than once per month Not used
Tablet 			At least once per day At least once per week At least once per month Less than once per month Not used
Personal Computer/laptop 			At least once per day At least once per week At least once per month Less than once per month Not used
Basic phone/ feature phone 			At least once per day At least once per week At least once per month Less than once per month Not used
Others (please specify)			At least once per day At least once per week At least once per month Less than once per month Not used

If you own or have access to a smart phone, please indicate the brand.

Oppo	1
Samsung	2
Huawei	3
Apple	4
Others_____	99

If you do not own a smart phone, please indicate any reasons that apply?

I don't need it	
I can't afford it	
I don't know how to use it	
I am not allowed to own one	
There is no network access where I live / work	
I had one but I gave it to a friend/family member	
Others (please specify)	

2.2. Rate your level of proficiency in using the following devices on the following scale.

	5 I can teach someone how to use this	4 I can use this well	3 I sometimes struggle to use this	2 I often struggle and need help	1 I don't know how to use this	99 N/A
Smart phone						
Tablet						
Personal computer/ laptop						
Basic phone/ feature phone						

2.3. Which of the following functions do you use on the devices that you own / have access to? (select as many as necessary)

Smart phone	**Tablet**	**Personal Computer/ laptop**	**Basic phone/ feature phone**
Making voice calls	Making voice calls	Making voice calls	Making voice calls
Receiving voice calls	Receiving voice calls	Receiving voice calls	Receiving voice calls
Making video calls	Making video calls	Making video calls	Making video calls
Receiving video calls	Receiving video calls	Receiving video calls	Receiving video calls
Sending text messages/ SMS	Sending text messages/ SMS	Sending text messages/ SMS	Sending text messages/ SMS
Taking photos/ videos	Taking photos/ videos	Taking photos/ videos	Taking photos/ videos
Internet browsing	Internet browsing	Internet browsing	Internet browsing
Using social media	Using social media	Using social media	Using social media
Playing games	Playing games	Playing games	Playing games
Watching videos	Watching videos	Watching videos	Watching videos
Mobile banking/ e-payments	Mobile banking/ e-payments	Mobile banking/ e-payments	Mobile banking/ e-payments
Reading news	Reading news	Reading news	Reading news
Looking up information for work	Looking up information for work	Looking up information for work	Looking up information for work
Listening to music/ podcasts	Listening to music/ podcasts	Listening to music/ podcasts	Listening to music/ podcasts
Shopping online	Shopping online	Shopping online	Shopping online
Others (please specify):	Others (please specify):	Others (please specify):	Others (please specify):

2.4. How often do you use the following online services on any of the devices you own/ have access to?

	Frequency	Please specify which apps
Social networking apps (e.g. Facebook, Twitter, etc)	At least once per day	
	At least once per week	
	At least once per month	
	Less than once per month	
	Not used	
Messaging Apps (e.g. Viber, Wechat, WhatsApp, Messenger, Skype)	At least once per day	
	At least once per week	
	At least once per month	
	Less than once per month	
	Not used	
Entertainment apps (e.g. YouTube)	At least once per day	
	At least once per week	
	At least once per month	
	Less than once per month	
	Not used	
Recruitment/ work related (e.g. online job portals)	At least once per day	
	At least once per week	
	At least once per month	
	Less than once per month	
	Not used	
Banking/ Remittance	At least once per day	
	At least once per week	
	At least once per month	
	Less than once per month	
	Not used	
News apps	At least once per day	
	At least once per week	
	At least once per month	
	Less than once per month	
	Not used	
Others (please specify)	At least once per day	
	At least once per week	
	At least once per month	
	Less than once per month	
	Not used	

2.5. What are the main reasons for your current use of different devices (please select all that apply)

Connecting with family and friends back home	
Making local friends in host community	
Finding compatriots/ community in host country	
Accessing information related to my new community or job	
Entertainment	
News	
Banking	
Others (please specify)	

2.6. How frequently do you access online services using the following?

	Frequency
Public Wi-Fi	At least once per day
	At least once per week
	At least once per month
	Less than once per month
	Not used
Employer's Wi-Fi	At least once per day
	At least once per week
	At least once per month
	Less than once per month
	Not used
Own data plan/ Wi-Fi	At least once per day
	At least once per week
	At least once per month
	Less than once per month
	Not used
Friend's hotspot/ Wi-Fi	At least once per day
	At least once per week
	At least once per month
	Less than once per month
	Not used
Others (please specify)_____	At least once per day
	At least once per week
	At least once per month
	Less than once per month
	Not used

2.7. Thinking about your current use of digital technologies, which of the following risks and issues affect your use of the internet? How important are these concerns to you?

	6 (Very High)	5 (High)	4 (Moderate)	3 (Low)	2 (Very Low)	1 NA	99 (Don't know)
Being sexually harassed							
Being physically threatened							
Being called offensive names / discriminatory language							
Being cyber-stalked							
My data being stolen							
My account being hacked							
Cyberbullying							
Privacy							
Online predators							
Exposure to illegal/ harmful contents							
Phishing attack							
Unwanted contact							
Receiving inappropriate messages or images							
Identity theft							
Online romance scams							
Fake news							
Costs (e.g. phone subscriptions)							
Employer or agency restricting access (not allowed to keep phone or access wifi)							
Being unaware of how to use certain features							
Others (please identify)							

3. Use of technology in migration

Thank you for sharing details about your use of digital technologies. This section focuses on your use of digital technologies in aid of your migration journey from pre-recruitment, recruitment, and post-recruitment. Kindly relate your answers to the succeeding questions based on **your most recent migration experience.**

3.1. Did you use technology to gather information about your migration journey?

Yes	Go to Q3.2
No	Go to Q3.1.1

3.1.1 If you did not use digital technology to inform your migration journey, please indicate all reasons that apply: (Go to Q4 after this question)

I don't know what sources to consult	
I thought other sources were more reliable	
I have limited network/technology access	
There is no information in my language	
I would prefer not to use it	
I don't need it	
I don't know how to use it	
I can't afford it	
Others (please specify)	

Thinking about your latest migration experience:

3.2. How critical were these sources to obtain information in relation to your migration **before leaving your hometown/ village or before deciding to migrate**? (check all that apply)

	Very critical	Sometimes helpful	Not helpful	I did not use it
Community events				
Friends				
Family members				
Internet				
Job agencies/recruitment agencies				
Local government agencies (in country or origin)				
Local government agencies (in country of destination)				
News and media reports				
Non-Government Organizations				
Police				
Public service announcements				
Recruitment broker				
Religious networks				
Radio				
Social media / Social networks				
Trade unions				
Other (please suggest)				

3.3. In what language did you access the information relevant to your migration journey?
Please select all that apply

Nepali	
Sinhala	
Tamil	
Filipino	
English	
Other language (please specify)	

3.4. Which **type of information** did you seek in relation to your migration journey and which **source of information** did you consult? (select all that apply)

	Community events	Friends	Family members	Internet	Job agencies/recruitment agencies	Government agencies (in country of origin)	Government agencies (in destination	News and media reports	NGOs	Police	Public service announcements	Recruitment broker	Religious networks	Radio	Social media/Social	Trade Unions	Others_____	Not applicable
Salary information																		
Accommodation																		
Contractual information																		
Documentation (including contractual documentation, visa, passport processing)																		
Filing a formal complaint (pursuing a case with the police or in front of a tribunal)																		
Filing an informal complaint (e.g with an agency, employer, informal complains mechanism)																		
Financial services																		
Health screening																		
Information regarding recruitment process																		
Job search																		
Other social-support services including clinics																		
Pre-departure training																		
Skills training																		
Transportation																		
Working conditions																		
Other (please specify):_____																		

3.5. Which **services** did you use in relation to your migration journey and which **source of information did you consult**? (select all that apply)

	Community events	Friends	Family members	Internet	Job agencies/recruitment agencies	Government agencies (in country of origin)	Government agencies (in destination country)	News and media reports	NGOs	Police	Public service announcements	Recruitment broker	Religious networks	Radio	Social media/Social networks	Trade Unions	Others_____	Not applicable
Pre-departure training																		
Post-arrival orientation including settlement and community networking activities for social interaction																		
Orientation program for returning worker and other migrants																		
Skills upgrade/ training																		
Counselling and legal services (including dispute resolution and filing of complaint)																		
Travel advisory																		
Welfare assistance including health and medical assistance																		
Loans																		
Remittance																		
Making and comparing informed decision on choice of recruitment agencies																		

3.6. In your **job search**, what was the most helpful source of information for you? (please select all that apply and rank in order of usefulness/ 1= most useful)

Community events	
Friends	
Family members	
Internet	
Job agencies/recruitment agencies	
Local government agencies (in country or origin)	
Local government agencies (in country of destination)	
News and media reports	
Non-Government Organizations	
Police	
Public service announcements	
Recruitment broker	
Religious networks	
Radio	
Social media / Social networks	
Trade unions	
Other (please suggest)	

3.7. Referring to your choices above, please rank the selected sources of information in order of usefulness, 1= most useful

Community events	
Friends	
Family members	
Internet	
Job agencies/recruitment agencies	
Local government agencies (in country or origin)	
Local government agencies (in country of destination)	
News and media reports	
Non-Government Organizations	
Police	
Public service announcements	
Recruitment broker	
Religious networks	
Radio	
Social media / Social networks	
Trade unions	
Other (please suggest)	

3.8. Which **online sources** did you consult in your **job search**?

I did not consult online sources	
Facebook (please specify which group if any)	
Twitter	
Instagram	
Whatsapp	
Wechat	
Viber	
Recruitment Advisor	
Online job portals	
Website of recruitment agencies	
Others (please specify)	

3.9. Referring to your choices above, please rank the selected **online sources** of information in order of **usefulness**, 1= most useful

Facebook (please specify which group if any)	
Twitter	
Instagram	
Whatsapp	
Wechat	
Viber	
Recruitment Advisor	
Online job portals	
Website of recruitment agencies	
Others (please specify)	

3.10. In the **recruitment process**, which was the most helpful source of information for you? Please select all that apply

Community events	
Friends	
Family members	
Internet	
Job agencies/recruitment agencies	
Local government agencies (in country or origin)	
Local government agencies (in country of destination)	
News and media reports	
Non-Government Organizations	
Police	
Public service announcements	
Recruitment broker	
Religious networks	
Radio	
Social media / Social networks	
Trade unions	
Other (please suggest)	

3.11. Referring to your choices above, please rank the selected sources of information in order of usefulness, 1= most useful

Community events	
Friends	
Family members	
Internet	
Job agencies/recruitment agencies	
Local government agencies (in country or origin)	
Local government agencies (in country of destination)	
News and media reports	
Non-Government Organizations	
Police	
Public service announcements	
Recruitment broker	
Religious networks	
Radio	
Social media / Social networks	
Trade unions	
Other (please suggest)	

3.12. Which **online sources** did you consult in your **recruitment phase**?

I did not consult online sources	
Facebook (please specify which group if any)	
Twitter	
Instagram	
Whatsapp	
Wechat	
Viber	
Recruitment Advisor	
Online job portals	
Website of recruitment agencies	
Others (please specify)	

3.13. Referring to your choices above, please rank the selected **online sources** of information in order of **usefulness**, 1= most useful

Facebook (please specify which group if any)	
Twitter	
Instagram	
Whatsapp	
Wechat	
Viber	
Recruitment Advisor	
Online job portals	
Website of recruitment agencies	
Others (please specify)	

4. Recruitment Advisor

The Recruitment Advisor is a global peer-to-peer recruitment and employment review platform developed by a consortium of unions from different countries and other relevant stakeholders. The platform allows workers to share their recruitment experience and promote recruiters that follow a fair recruitment process based on ILO General Principles and Operational Guidelines for Fair Recruitment. See here for more details: 2

4.1. How have you heard of Recruitment Advisor? Through which channels?

I have never heard of Recruitment Advisor before	
Facebook	
News	
Google	
Friend or relative	
Family members	
Trade union	
Employer	
NGOs	
Others (please specify)_____	

4.2. What did you use Recruitment Advisor for? Please select all that apply.

For information	
Completing a review	
Filing a complaint	
Other (please specify)	

4.3. How many times have you used Recruitment Advisor?

One time	
Two times	
Three times	
More than three times	

4.4. Describe briefly your experience in using Recruitment Advisor:

_____

_____

- End of Survey –

Thank you for participating in our survey, if you have any questions about this survey and if you wish to follow up with your answers, feel free to contact us at djunio@unu.edu

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