

Leveraging technology to enhance compliant labour selection practices and improve job-matching

Rebecca Napier-Moore and Anna Olsen, Regional Office for Asia and the Pacific, ILO

Version May 2021

Introduction

Addressing non-compliant labour selection and job-matching processes can tackle some of the major systemic issues that either give rise to, or increase risk of, migrant worker exploitation, including forced labour and human trafficking. Given that technological and digital ‘solutions’ are increasingly being developed for numerous social phenomena, including migration,¹ it is understandable that leveraging technology to enhance these areas is also of interest to Abu Dhabi Dialogue (ADD) Member States, and stakeholders, social partners and NGOs, dedicated to improving rights protection for migrant workers.

This paper briefly examines what technological and digital options exist to promote and streamline compliant labour selection and job-matching, what the opportunities for expansion or gaps are, and how labour migration stakeholders may approach the growing demand for technological platforms within labour migration governance frameworks. To do so, the paper draws on survey data from a questionnaire distributed by the ADD Secretariat,² good practices globally and secondary research. The paper was prepared in response to a request from the Secretariat, and adds to the body of work delivered by the ADD through Theme 2 of its research strategy on leveraging advanced technology to improve labour mobility governance.

Conceptual foundations

For this paper, compliant labour selection and effective job-matching are understood as follows:

- Compliant labour selection refers to recruiting in a legal manner. This involves labour recruiters and employers complying with legal standards on recruitment put in place by governments in countries of origin and destination and reduction of opportunities that labour recruiters and employers have to engage workers outside of the legal framework.
- Effective job-matching is the process of selecting the right worker for the job. Finding workers with appropriate skills from one country to fill labour market needs in another is often seen as a way to deal with demographic shifts and mitigate other labour market asymmetries. Effective job-matching may also have a positive effect on retention rates, presupposing working conditions are adequate. Job-matching may occur internationally or domestically (with migrant workers already in the country³).

Secondly, while job-matching and labour selection is highlighted in this paper, the broader labour migration experience, especially with respect to experience of any abuse, must be considered forefront in initiatives or responses. Labour migration governance systems benefit from systems thinking and design, and enhancing job-matching and/or labour selection in isolation from other processes that impact migration journeys is unlikely to have the overarching effect states and other stakeholders are striving for. Fragmenting the labour migration experience into steps and single processes, or looking at one part of job matching in destination without also looking at what happens in origin runs the risk of new measures and technologies being ineffective. Similarly, the experience of workers should not be considered in isolation from the needs or challenges faced by employers, or governments.

If it is accepted that the abuses we aim to prevent, including trafficking and forced labour, are linked to processes, or resultant of several different actions and actors, a single entry point is unlikely to adequately reduce the risk for individual migrant workers. Compliant labour selection, for example, will not be possible without robust and effective labour inspection and labour administration forming part of the labour migration governance framework in origin and destination. Effective job-matching will not be feasible without reliable skills recognition systems and meritorious selection processes in migrant workplaces.

Thirdly, job-matching and compliant labour selection have links to several areas in which significant research and policy progress has been made. Job-matching systems development should consider, at minimum, pre-departure training delivery and institutions, recognition of prior learning mechanisms and skills and language training and testing institutions.⁴ Compliant labour selection necessarily draws from working conditions’ assessments and sectoral knowledge to ensure compliance carries through to the workplace and is not

limited to immigration aspects of compliant recruitment.⁵ For example, the existence of access to justice mechanisms as preventative and remedial tools in workplaces is required for labour selection to be compliant with fair recruitment practices.⁶ Compliance will mean adherence to different standards for different migration corridors, and is likely to need to incorporate not only legislative and policy compliance, but also adherence to standards in bilateral labour agreements or Memoranda of Understanding, or even supply chain or business requirements.

Both focus areas of this paper, and indeed the success of any technological tool or platform, will be at least in part reliant on the level of awareness of migration issues in duty-bearer and migrant communities, a topic that has also been the subject of considerable research and development programming.⁷ As one Member State survey respondent for this paper said about an existing platform: “It works well as a system where all the stakeholders involved in the process of overseas recruitment participate. The challenge is to generate more awareness ... about [the] legal process of recruitment.” Research and predictions on changes anticipated in the future of work, and particularly gendered shifts, should also inform the scope and investment in development of any digital platforms. Fundamentally, migrant inclusive participatory design, development and piloting of the platform will be critical in delivering any successful tool.

With these principles in mind, this paper explores what digital and technology platforms exist to meet the needs of job-matching and compliant labour selection and factors to consider when (and if) developing these.

What exists? Summary of initiatives and learnings

This section outlines a selection of existing technology platforms and learnings gathered from their implementation in attempts to improve labour selection compliance and job-matching. It is not a comprehensive overview of all platforms, and given the scope of this paper, only brief information is included here.⁸ Several geographically focussed platforms are available. National and corridor-based technological initiatives offer to aid with specific migration processes (such as immigration processes or skills recognition) via digital platforms. Currently, there are few platforms that certify or recruitment conditions in compliance with State or bilateral standards.

The concept of ‘compliance’ within most of these existing platforms does not include certification with regards to specific standards beyond requirements to provide evidence of completed immigration processes (where necessary). While this does offer an increased transparency over some recruitment actors, the notion of compliance is necessarily determined by the national context, where regulations can be weak in countries of origin and/or destination.⁹ Few of these tools endeavour to consider compliance with international labour standards, such as the [ILO Private Employment Agencies Convention, No. 181 \(1997\)](#) and the [General Principles and Operational Guidelines for Fair Recruitment](#), which should be taken into account for future platform development among ADD Member States.

Box 1: Geographically-specific technological platforms and tools for compliant labour selection and job-matching

Government platforms:

[Baideshik Rojgari](#) (Nepal)

- Aims to make the Nepal Individual Re-Entry Process easier; migrant workers can use mobile phones to apply for re-entry and search for passport and other migration details.

[Easier Service](#) (Kuwait)

- Facilitates employment procedures and electronic clearance for recruitment and labour use. Workers can follow up complaints.

[e-migrate](#) (India)

- Digitalizes emigration processes for outbound Indian migrant workers.

[EURES](#) (Europe)

- Links migrant workers to job opportunities across the European Union.

[EPS](#) (Republic of Korea)

- Enables and regulates cross-border government-to-government employment of low-skilled migrant workers for identified labour migration corridors to the Republic of Korea.

[MUSANED](#) (Kingdom of Saudi Arabia)

- Designed primarily to streamline labour migration processes for migrant domestic workers entering Saudi Arabia.
- [Virtual Labour Market](#) (United Arab Emirates)
- Designed to support the migrant workforce inside UAE during the COVID-19 pandemic, this registry matches workers made redundant with employers who post vacancies.
- Private sector platforms (linked to ADD workplaces):**
- [Bayt](#) (Middle East and North Africa)
- Connects job seekers with employers, listing thousands of new vacancies daily.
- [Monstergulf](#) (GCC)
- Provides job seeking, career management, recruitment and talent management products and services.
- [NAUKRIGULE](#) (GCC)
- Provides for job matching across the GCC with a database of more than 9000 employers and of registered jobseekers' resumes.

Looking more broadly to platforms designed to provide international coverage, the IOM's International Integrity Recruitment System (IRIS) aims towards establishing a platform that would be able to offer labour selection compliant with international standards, particularly the 'zero fee to migrant worker' principle, to the extent that recruitment agencies are able to (and employers are willing to) meet these standards. Another platform with intended global scope, initiated from the workers' vantage point, the Migrant Recruitment Advisor seeks not to certify the recruitment principles of agencies and actors, but to draw on user input to assess their recruitment experiences, building on Trip Advisor and similar rating models.¹⁰ Through providing this information, the Migrant Recruitment Advisor can contribute also to effective job-matching, reducing the risk of mismatched expectations between workers and labour recruiters/employers.

Box 2: Global tools and platforms (selected)

- [IRIS](#)
- Establishes mechanisms to certify recruitment agencies using the IRIS Standard, creates a voluntary certification scheme, and a compliance and monitoring mechanism
- [Indeed](#)
- Gives job seekers access to search for jobs, post CVs and research companies on this private sector global job matching site.
- [Migrant Recruitment Advisor](#) (global, with limited countries at present)
- Establishes a recruitment and employment review platform offering a chance to workers to review and read reviews of recruitment agencies and information on workers' rights

Interestingly, efforts to provide job-matching services appear to be more prolific in the domestic worker sector, where a number of platforms offer the ability for domestic workers to post their availability and experience, and for potential employers to post their jobs, or seek specific candidates with the desired profiles.¹¹ The number of digital labour platforms in the domestic work sector, globally, has risen eight-fold in ten years, especially in high-income countries.¹² Absent the broader recognition within institutions of the skillsets involved in domestic work, this is likely to limit effective job matching in this sector, given that possession of the skills required for the job in question are almost entirely self-assessed by the worker.

While the government-led EURES platform offers job-matching, given the context of free movement and a relatively advanced skills recognition framework in Europe, and significant investment in site efficacy through regular contact with workers, employers and other partners,¹³ the situation may be unlikely to be mirrored in ADD Member States, though numerous private sector sites exist (see Box 1). Further, a meta-evaluation conducted of EURES concludes that the platform's primary utility has been in creating a network of labour market actors and information provision, and less so with job-matching and placement.¹⁴

Potential benefits of technological platforms for compliant labour selection and job-matching

Proponents of technological solutions claim numerous benefits from leveraging technology to enhance compliant labour selection and job-matching. A forthcoming ILO and IOM assessment of platforms options in the Arab States suggests benefits include reductions in time and cost for migration and increases in transparency and oversight of recruitment practices.¹⁵ In terms of job matching, a successful platform could also mean labour market efficiencies, as well as worker satisfaction in jobs to which they are well suited.

Reductions in time and cost for formal processes have been evident in several existing migration platforms. In India eMigrate has reduced the recruitment process for migrant workers considerably, from an estimated three months to two weeks.¹⁶ Through technological and other system control factors, the Republic of Korea EPS implementation has reduced reported recruitment costs for migrant workers from US\$3,500-4,900 to around US\$940.¹⁷ These figures are impressive, but other revenue streams associated with individuals who *do not* become migrant workers should also be considered in the broader assessment of cost reduction.¹⁸ The reported sale of application forms and placement opportunities in EPS communities of origin highlights the gaps that are readily identified and exploited by unscrupulous actors, even when technological platforms are successful in changing recruitment practices, and despite best intentions.

Data collection and analysis drawn from digital labour migration platforms can also provide evidence to be used in policy making and in designing appropriate interventions that further the realisation of relevant international labour standards and the objectives of the Global Compact for Safe, Orderly and Regular Migration and particularly its Objective 6,¹⁹ but will need to be supplemented with other survey and administrative data to capture a fuller picture of migration.

Blockchain technology promises to track contracts, recruitment costs, working conditions, and remittances.²⁰ Blockchain solutions often purport to ‘automate trust,’²¹ but many of the potential benefits rely on the ability of migrant workers to access and verify records on the chain. More broadly, this is not an insignificant barrier; one ADD Member State survey respondent noted: “[Our] system works well. However, not all migrant workers are capable to fill in the online form themselves.” Language and digital literacy remain a challenge (discussed further below), and in many cases, platform use may result in migrant workers disclosing private details to others who can manipulate the entries on their behalf almost certainly creating potential for confusion and, more egregiously, ‘system-sanctioned’ exploitation (see also the risk of “capture” below).²² Proponents of blockchain rightly identify scope for increased transparency on recruitment and working conditions, but there are few examples of blockchain used for these purposes at scale.

Requirements for effective development and implementation of technological tools

Several pre-conditions are suggested as the necessary foundation for building effective and sustainable technological interventions across countries of origin and destination, drawing from lessons learned from previous attempts to deliver migration governance technologies.

Data privacy, ownership and security

“A challenge specific to digital tools is that the collection of data creates new risks for workers’ wellbeing and safety.” – Musto, Thakor and Gerasimov²³

A worker, labour recruiter or employer who puts data into a job matching or compliance-driven system may assume that their personal/corporate information is secure and will not be used for other purposes. However, without robust data privacy provisions, persons with access to the data may tamper with or use it for other purposes, such as identity theft or selling of a workers’ data to labour recruiters or employers among others.²⁴ Without safeguards, financial or identity theft is also a risk if databases include bank account or credit card details or other unique identification information. While most of the ADD Member States who completed the survey for this paper felt that their data privacy laws were adequate to protect nationals’ and migrant workers’ data, not all did. One Member State respondent notes simply: “[The laws are] not adequate.” Another responded: “No, [the laws are not adequate]. Regular audit of systems, labour audits, and an update to the cyber security law [are] needed.”

Data privacy protections and data access and control systems should build appropriate safeguards for all parties. The right to privacy is firmly established in international law. Further, where a State exercises regulatory control over a third party, including technological service providers, that State is required to also extend human rights protections to those who might be affected by the access or use of that information.²⁵

The [ILO Private Employment Agencies Convention, 1997 \(No. 181\)](#), Article 6 states:

“The processing of personal data of workers by private employment agencies shall be: (a) done in a manner that protects this data and ensures respect for workers privacy in accordance with national law and practice; and
(b) limited to matters related to the qualifications and professional experience of the workers concerned and any other directly relevant information.”

Data ownership, responsibility for protecting data, and rights of access should all be clearly delineated before building any platform. Many platforms have third party hosts that may have also designed the platform or may only host them. Given migration platforms are necessarily used cross-border, there may be complications about which data privacy laws apply to a given platform. If privacy protections are uneven across migration corridor jurisdictions, it is recommended to apply the highest level of legal protection, or consider setting data protocols in bilateral agreements or similar to reduce confusion. Where legal standards are absent or not well developed, international data protection standards should be followed.²⁶ These issues must be settled before platform development so that there are neither overlaps in claims to data ownership for instance, nor accountability vacuums where no party steps in to solve problems or take responsibility for harms that the platform use may cause.²⁷ Protocols for access to the data, including in cases of alleged crimes or infringement of laws, should be established before any tool is ‘live.’²⁸

Box 3: ILO 1997 Code of Practice: Protection of Workers’ Personal Data

The *ILO 1997 Code of Practice: Protection of Workers’ Personal Data* was adopted by a Meeting of Experts on Workers’ Privacy in accordance with a decision taken of the ILO’s Governing Body its 264th Session. The meeting was composed of experts appointed following consultations with governments, Employers’ and Workers’ Groups of the Governing Body.

Article 5, General Principles may be of particular best practice guidance to platform developers:

1. Personal data should be processed lawfully and fairly, and only for reasons directly relevant to the employment of the worker.
2. Personal data should, in principle, be used only for the purposes for which they were originally collected.
3. If personal data are to be processed for purposes other than those for which they were collected, the employer should ensure that they are not used in a manner incompatible with the original purpose, and should take the necessary measures to avoid any misinterpretations caused by a change of context.
4. Personal data collected in connection with technical or organizational measures to ensure the security and proper operation of automated information systems should not be used to control the behaviour of workers.
5. Decisions concerning a worker should not be based solely on the automated processing of that worker’s personal data.
6. Personal data collected by electronic monitoring should not be the only factors in evaluating worker performance.
7. Employers should regularly assess their data processing practices:
 - (a) to reduce as far as possible the kind and amount of personal data collected; and
 - (b) to improve ways of protecting the privacy of workers.
8. Workers and their representatives should be kept informed of any data collection process, the rules that govern that process, and their rights.
9. Persons who process personal data should be regularly trained to ensure an understanding of the data collection process and their role in the application of the principles in this code.
10. The processing of personal data should not have the effect of unlawfully discriminating in employment or occupation.
11. Employers, workers and their representatives should cooperate in protecting personal data and in developing policies on workers’ privacy consistent with the principles in this code.
12. All persons, including employers, workers’ representatives, employment agencies and workers, who have access to personal data, should be bound to a rule of confidentiality consistent with the performance of their duties and the principles in this code.
13. Workers may not waive their privacy rights.

Data transparency

Data transparency is necessary for understanding how platforms operate and for combatting discrimination that may emerge from platform use, particularly when machine learning is used in candidate/CV sorting or hiring (see above). Some researchers have proposed a “datasheet for datasets,” a document that would accompany platforms and their datasets to improve transparency and accountability. It would detail a platform’s standard operating characteristics, test results, recommended usage, and other information.²⁹

Non-discrimination

Technological solutions can be developed with systems that enhance or disrupt a society's biases and discriminations. For instance, where nationality is listed or photographs of domestic workers are required for job selection, racial biases may become a factor in hiring decisions, resulting in systemic racial discrimination.³⁰ It has been shown that employers discriminate based on a person's name, gender, ethnicity, nationality and many other factors.³¹ Technology can anonymize those factors, so that the employer selects the worker based on skills and merit that are visible to them on the platform; or it can foreground and highlight those factors, fostering discriminatory employment decision-making.

Artificial Intelligence (AI) in job matching technologies may also result in discriminatory hiring. This can happen when a tool is programmed to favour workers based on the profiles of current employees, thus mirroring and repeating the human-based discriminatory hiring practices that went before it, or reflecting past profiles where a certain category of workers were trained in the field with more frequency than others.³² For instance, if in the past a construction company hired predominantly men from Bangladesh, and now equally skilled persons from Thailand, including women, apply, the AI-model (based on past hiring) would overlook both profiles from Thailand and of women.

Averting "capture", ensuring benefits to migrant workers

"Data-driven software and algorithmic decision-making...[can] act as a force-multiplier for the power held by firms, with no balancing agent on the side of workers."

-Adler-Bell and Miller³³

Unless explicitly designed in a participatory and tripartite manner, workers' interests and abilities may not be reflected in a job-matching technology. There may be "uneven benefits of technology on different actors, for instance, when technology 'solutions' benefit corporations more than workers, or where technical fixes hailed as innovative fail to address poor working conditions, substandard labour migration regimes, and business demand for profits."³⁴ For instance, a government body, employer or recruitment agent reliant on a job-matching interface may not respond to workers' queries or complaints, deferring to the algorithm. With a human manager, workers' concerns and their genuine complaints about unfair processes are more likely to be accommodated. "Workers' interaction with a system rather than humans depriv[es] them of opportunities for feedback or discussion and negotiation..."³⁵ unless these features and access are also available through the platform (or alongside it). This is especially concerning where labour selection platforms may deny the opportunity to work to those who have been unable to navigate and operate the platform effectively, or need to correct a record within the system.

Rights to access technology devices and data

One type of policy in particular undergirds technology's success: the right of migrant workers to retain their phones and have access to the internet and other communication channels. Through laws, Memoranda of Understanding, Bilateral Agreements, and standard employment contracts, stakeholders can commit to workers' right to communication, providing the foundation for a technological intervention. This is important for all sectors, but especially for domestic work, where confiscation of phones and restriction of access to data packages or Wi-Fi are common.³⁶ Where migrant workers face restrictions on using mobile phones, self-help programmes can be considered to teach "mobile phone negotiation" with an employer through win-win conversations, showing how ICT access is positive for both parties.³⁷ Other remote and isolated workers, including fishers, may face Wi-Fi access issues, and accessibility/cost of data plans needs to be considered during any platform development.

Platform accessibility, responsiveness, maintenance, sustainability and cost considerations

Accessibility

Any platform – whether designed for compliant labour selection or job-matching, or a combination– needs to be accessible to those who need to use it. Before development begins, this necessitates a thorough knowledge of the intended user cohort and testing throughout development. Multilingual platforms are likely to be required, and functions that allow users to hear, instead of read, information, may meet literacy challenges. For certain languages, Unicode may not be available, complicating the development of the tool and the ability to run it on certain devices.

As digital literacy may be low among platform users, an intuitive design can allow for 'self-learning' while using the tool. ADD Member State survey respondents particularly suggested that migrant workers' ability to access and operate digital services and platforms was either somewhat or very challenged. Several Member State representatives suggested that women migrant workers in particular have more challenges to access digital tools than men. Participatory design is key to ensure that all parties, and migrants especially, are able to access and use the platform and should also be considered from a budget perspective. An evaluation of the EURES job-matching platform suggests that there is also a risk that easier to reach groups such as those who are better educated may find access to platforms easier.³⁸ This is a technology bias that may or may not match with platform design intentions, and is especially relevant when building compliant labour selection platforms that may result in excluding migrant workers most in need.

Technology is not politically or socially neutral in either its development or impact, and being mindful of differentiated access to technology and the power imbalances within labour migration processes is critical.³⁹ It is strongly necessary that any technology initiative also invest in redressing digital imbalances within the target communities, including among women migrant workers and those in remote and isolated locations. Failing to do so will result in an unacceptable risk that the digital solutions entrench or exacerbate status quo power imbalances that give rise to migrant worker exploitation and abuse.

Accessibility considerations should also consider the kinds of devices from which the platform is likely to be accessed and the data needs required to run it effectively. Migrant workers most probably do not use the same mobile phones or operating systems as those designing the platform. It is important to ensure compatibility, otherwise platforms will need to be redesigned. Platforms that require frequent downloads and updates are unlikely to be easily accessible or desirable to migrant workers.

Responsiveness

As highlighted above, accessibility to the people behind the platforms is vital, especially where users are employers or migrant workers. Multilingual support will likely be required, and a 'helpdesk' or other function to respond to queries should be considered during design. Appropriately resourcing this function, and capacitating the human resources delivering responses, most likely across time zones, will also be critical. Disclosures of poor treatment of migrant workers, or alleged crimes, should be expected within these platforms, and appropriate protocols to deal with these and provide referrals should be in place.⁴⁰

Maintenance and sustainability

Ongoing platform maintenance requires not only technological maintenance, but investment to monitor and consider changes based on user feedback and patterns and policy developments. A study of labour migration-related ICT platforms found that some government and non-government organizations tended not to maintain or monitor platforms, citing gaps in capacity and infrastructure.⁴¹ Regular updates also need to take into account regulatory changes in origin and destination, and hence, government participation may be crucial to platform success. An out-of-date platform risks eroding trust of the user and may result in reputational and business risks. Available government capacity for providing timely updates or participating in the platform should also be considered with respect to sustainability. Platform sustainability requires financial stability, with long-term funding commitments or a functional model that does not require that and is not likely to give rise to situations where migrant workers must pay for the service. Where platforms are developed through development funding, ownership or transition of budget support should be planned. Where institutional funding is not the predominant means of support, advertising, support from government, worker or employer organizations, or other revenue streams will need to be carefully considered to ensure migrant workers are not burdened by additional costs.

Costs

Technological platform development is sometimes considered as a 'low investment, high rewards' option for the complex issue of labour migration governance. In part, this misperception that technological

development will be cheap, and then handed over to users, might go some way to explaining the numerous platforms that have been unable to meet their goals. Some labour migration tools “pilot and crash”.⁴² Stakeholders should consider the extensive resources in ongoing development and maintenance of the most popular platforms (WhatsApp, Facebook, Twitter, TikTok and so on) which provide the easiest and most user-friendly interfaces, support services and administrative control of public messaging, and allocate resources accordingly. With regards to user cost structures (if any), piloting can ensure that any ‘free’ tool does not have hidden costs that may be passed on to users, and eventually migrant workers.

Ensuring engagement: Incentives, trust, streamlined platforms, and worker protection

Incentivising use

The technological and bureaucratic burden of any platform should be low for the sake of sustainability and upkeep in the long-run, but the burdens and risk must also be low for users of the platform and the incentives for use clear. Especially where the platform is designed to operate responding to user input (for example in job-matching where workers and employers must upload data, or where reviews of processes or migration actors are expected), the necessary incentives for users to engage with the platform should be considered. Reward systems are one way that TripAdvisor provides incentive for individuals to post reviews; a similar principle may be considered. For compliant labour recruitment, government policies and legislation may require certain actors to participate in the platform, but in these instances, incentives should still be considered, lest the platform become another hurdle that prevents the uptake of regular migration.

Inspiring trust

Migrants’ trust in any platform and in what the government or other organization will do with their information can impact effectiveness. One ADD Member State survey respondent from a country of destination said that one of their biggest challenges is that migrant workers do not provide correct contact numbers or other information, making it difficult for the government officials to be able to provide help when needed. Communication about what the platform is for and how data will and will not be used are important, per the Data privacy section above. Demonstrating responsiveness to migrant worker needs can help build the necessary trust within the community.

Streamlining and combining with other platforms

Two recent studies suggest that the recent proliferation of labour migration-related apps could be streamlined into a “One-Stop App”.⁴³ Thus job-matching platforms could usefully combine with other services, such as recruitment rating, service provision, and redress mechanisms. This of course takes coordination across ministries, other organizations, and even countries to create a streamlined and coordinated interface, which needs to be weighed up against coordination gains.⁴⁴ In survey, two ADD Member States reported on the success of integration across ministries where two or more ministries collaborated on a platform, so that comprehensive data from multiple sources is available to the migrant worker and also the government – a positive development as long as data privacy protections and firewalls are operating effectively. One Member State anticipated a next step would be to integrate with the online platforms of destination countries. Due consideration should also be given to what existing platforms migrant workers already use to share information and job opportunities. For instance, Facebook ubiquitously has become understood as the entirety of the Internet by some migrant communities studied.⁴⁵

Access to redress as a deliverable and incentive for use

No matter if a platform is delivering job-matching or compliant labour selection functions, in every migrant work instance, migrant workers should have access to redress for any complaints related to the platform or any other aspect of their migrant work. Many ‘worker voice’ or similar technological tools provide a function to support complaint delivery, and access to this channel may be a strong incentive for worker use.⁴⁶ One ADD Member State survey respondent noted that migrant workers’ access to their case details on the government app has been a particular success. With proper data privacy considerations, worker protection measures built into platforms could include the use of anonymous, collated trend data from migrant workers to trigger investigations of labour recruiters and workplaces when the job is not as advertised or other irregularities surface. The governance of the complaints function on any platform should include sanctions,

penalties and compliance requirements, following national and international laws, and link to legal aid service providers in the national context to enable these measures. Investment in the legal aid systems that are often the target of platform referrals should accompany platform development budgets.

Practical possibilities for technological advancement in job-matching and compliant labour selection

Sometimes it is relatively easy and quick to deliver a technological platform designed for job-matching or compliant labour selection; it is much harder to ensure it is designed and delivered in a manner that furthers international development goals related to labour migration governance.

A practical strategy would include taking a staged, or incremental approach to platform development. For example, a time keeping tool for domestic workers could be designed first to allow workers to track their rest, stand-by and working hours, and linking to a calculator function that would enable them to estimate their weekly or monthly pay.⁴⁷ With assessment of this stage and perhaps provision of appropriate incentives, the platform could be extended to engage with existing employers to ensure their tracking of working hours and pay, or even to labour inspectors. Then with a user base and accessibility tested with migrant workers, the platform could expand its services to bring in prospective employers and recruitment agencies for job matching and recruitment functions, but only for those who adhere to legal compliance and remain open to independent inspection and monitoring.

At each stage, expansion of the platform would need to be carefully considered among tripartite and other stakeholders, with respect to the risks and incentives outlined above. Job-matching platforms may wish to begin by focussing on specific sectors or migration corridors and test usage among a limited number of employers seeking specific ascertainable and certifiable skillsets. Assessments that engage with both users of the platform and consider those that may be excluded from their use should inform iterated design.

Conclusion

Algorithms and other technology solutions may be presented as more efficient and fairer systems for job matching and compliant labour selection, but only where accountability and human beings lie behind their design and work to ensure outcomes benefit migrant workers as well as other stakeholders.⁴⁸ Technology can be made beneficial to migrant workers and employers if risks are minimized. It is clear that

*'digital technology platforms have the strongest capacity to facilitate fair, transparent and ethical recruitment practices only when participating States fully commit to, and invest in, using digital technology information ...'*⁴⁹

Where ADD Member States are able to meet this commitment, and support communities of origin in their effective and transparent participation in these platforms, the opportunities for streamlining a fairer and more protective labour migration governance system are apparent. A shared understanding of data privacy and protection, the ability of migrant workers' to meaningfully uphold their rights in destination legal systems and political will of States parties to deliver fair migration are the natural precursors to this commitment and realising the potential of digital platforms. It is recommended that ADD Member States, alongside international development actors strive in their programming to build these foundations before embarking on further digital 'solutions' to the complex phenomenon of international labour migration.

-
- ¹ See para. 14 A/HRC/39/29, Report of the United Nations High Commissioner for Human Rights on [The right to privacy in the digital age](#) (UN, 2018).
- ² Six ADD Member States responded to the survey.
- ³ See the United Arab Emirates' (UAE) [Virtual Labour Market](#) which supports the non-UAE workforce inside UAE. The registry matches workers made redundant during the COVID-19 pandemic with employers who post vacancies.
- ⁴ See resources at ILO, "[Skills and Migration](#)".
- ⁵ ILO, [Labour Inspection, Gender Equality and Non-Discrimination in the Arab States: Guide Book](#), 2014. ILO, [ILO Approach to Strategic Compliance Planning for Labour Inspectorates](#), 2017.
- ⁶ For access to justice related materials see: Eusebi Colàs-Neila and Estela Yélamos-Bayarri, [Access to Justice: A Literature Review on Labour Courts in Europe and Latin America](#) (ILO, 2020). ILO, [Access to Justice for Migrant Domestic Workers in Lebanon](#), 2014. For information on the concept of Fair Recruitment see the tripartite agreed [General Principles and Operational Guidelines for Fair Recruitment and Definition of Recruitment Fees and Related Costs](#) (ILO, 2019). See more broadly, ILO, [Resolving individual labour disputes: A comparative overview](#), 2016.
- ⁷ ILO and UN Women, [Mobile Women and Mobile Phones: Women Migrant Workers' Use of Information and Communication Technologies in ASEAN](#), 2019. Bassina Farbenblum, Laurie Berg and Angela Kintominas, [Transformative Technology for Migrant Workers: Opportunities, Challenges and Risks](#) (OSF, 2019).
- ⁸ For summaries of several of these platforms see: Farbenblum et al. ILO and IOM, [Promoting Fair and Ethical Recruitment in a Digital World? Lesson and Policy Options for Arab States](#) (forthcoming). For work completed by the Abu Dhabi Dialogue in related areas, see the [library](#).
- ⁹ See for national comparisons instance on recruitment fees and related costs, ILO, [Global Database: Definition of Fees and Related Costs in National Laws and Policies](#), 2020.
- ¹⁰ See further the paper prepared under this ADD research theme by Migrant Forum in Asia.
- ¹¹ Examples include [Helper Choice](#), [Maid Agency](#) and many similar sites.
- ¹² ILO, Progress made 10 years after the adoption of the Domestic Workers Convention, 2011 (No. 189) (forthcoming)
- ¹³ See further Piyasiri Wickramasekara and Nilim Baruah, [Fair Recruitment for Low-Skilled Migrant Workers: Issues and Challenges](#) (ADB, OECD and ILO, 2017).
- ¹⁴ European Commission, [Ex Post Evaluation of EURES Covering the Period 2009-2013: Final Report](#), 2015.
- ¹⁵ ILO and IOM.
- ¹⁶ ILO and IOM.
- ¹⁷ ILO and IOM, drawing from Y.B. Park and M.H. Kim, Korea's Temporary Low-skilled Foreign Worker Program: Employment Permit System, (Human Resources Development Service of Korea, 2016).
- ¹⁸ For instance, in 2017 it was reported that EPS forms were sold for profit to an estimated 30,000 potential workers. 4,100 workers were offered jobs. Zaw Zaw Htwe, "[Korean language test draws 30,000 workers](#)", in *Myanmar Times*, 23 March 2017.
- ¹⁹ GCM Objective 6: "Facilitate fair and ethical recruitment and safeguard conditions that ensure decent work".
- ²⁰ See examples: Massimo Flore, [How Blockchain-Based Technology is Disrupting Migrants' Remittances: A Preliminary Assessment](#) (European Commission, 2018). IOM, "[IOM Thailand, Diginex Deploy Blockchain Solutions to Better Protect Migrant Workers](#)", 2020.
- ²¹ Clarke Robertson, "[How Blockchain could stop migrant worker exploitation](#)", Noah Coin, 27 Dec 2018.
- ²² ILO and IOM.
- ²³ Jennifer Musto, Mitali Thakor, and Borislav Gerasimov, "[Between Hope and Hype: Critical Evaluations of Technology's Role in Anti-Trafficking](#)", *Anti-Trafficking Review*, No 14 (2020).
- ²⁴ Ellen Broad, Amanda Smith, Peter Wells, [Helping Organisations Navigate Ethical Concerns in their Data Practices](#), (Open Data Institute, 2017).
- ²⁵ See A/HRC/27/37, para. 34, as quoted in A/HRC/39/29, Report of the United Nations High Commissioner for Human Rights on [The right to privacy in the digital age](#) (UN, 2018)
- ²⁶ See Nexus Institute, [Legal and Ethical Issues in Data Collection on Trafficking in Persons](#), 2019.
- ²⁷ Musto et al.
- ²⁸ See para. 14 A/HRC/39/29, Report of the United Nations High Commissioner for Human Rights on [The right to privacy in the digital age](#) (UN, 2018)
- ²⁹ Janine Berg, "[Protecting Workers in the Digital Age: Technology, Outsourcing, and the Growing Precariousness of Work](#)", in *Comprehensive Labor Law and Policy Journal*, Vol 41. Timnit Gebru et al., "[Datasheets for Datasets](#)", Cornell University, ARXIV V4 (14 April 2019).
- ³⁰ See for instance [here](#); see also employer's preferences of nationality in ILO, [Employers' Perspectives Towards Domestic Workers in Jordan](#), 2015.
- ³¹ ILO, [Report of the Director General: Equality at Work: Tackling the Challenges: Global Report Under the Follow-up to the ILO Declaration on Fundamental Principles and Rights at Work](#), ILC.96/I(B) (2007). Colleen Sheppard, [Multiple Discrimination in the World of Work](#) (ILO, 2011). Vladimir Hlasny, [Patterns of Profiling of Job Candidates: Evidence from Application Forms](#) (2009). ILO, "[The sex and race workplace double whammy](#)" (2013).
- ³² See for example Jeffrey Dastin, "[Amazon scraps secret AI recruiting tool that showed bias against women](#)", in *Reuters*, 11 October 2018. Christina Colclough, "[When Algorithms Hire and Fire](#)", in *The Why Not Lab*, 7 September 2020.
- ³³ Sam Adler-Bell and Michelle Miller, [The Datafication of Employment: How Surveillance and Capitalism are Shaping Workers' Futures without Their Knowledge](#), (The Century Foundation, 2018).

³⁴ Musto et al.

³⁵ Berg.

³⁶ ILO and UN Women.

³⁷ ILO and UN Women.

³⁸ European Commission.

³⁹ ILO and UN Women. UNESCO, *I'd Blush If I Could: Closing Gender Divides in Digital Skills through Education*, 2019.

⁴⁰ Almost any platform is likely to receive requests for assistance, job matching or even allegations of criminal behaviour. For example, the ILO's TRIANGLE in ASEAN programme, a long-term development program dedicated to realizing the benefits of labour migration in the ASEAN region, designed and supported a Facebook page to promote the rights of migrant workers and received numerous requests for assistance through the Messaging function, despite the intended audience and purpose of the platform. Also for migrant hotline guidance, see: Jane Pillinger, *Running an Effective Migrant Resource Centre: A Handbook for Practitioners* (IOM, 2015), pp. 88-89.

⁴¹ ILO and UN Women.

⁴² Farbenblum et al.

⁴³ ILO and UN Women. USAID and Winrock, *Feasibility Study: Digital Options to Improve Migration Journeys to Thailand*, 2020.

⁴⁴ See evaluation of coordination and integration in practice in: European Commission, p. 15.

⁴⁵ Regarding Myanmar migrant women's use of Facebook, see ILO and UN Women. For more information on Facebook in Myanmar see also *The Economist*, "[In Myanmar Facebook Struggles with a Deluge of Disinformation](#)", *The Economist*, 22 Oct 2020.

⁴⁶ Lisa Rende Taylor and Elena Shih, "Worker Feedback Technologies and Combatting Modern Slavery in Global Supply Chains: Examining the Effectiveness of Remediation-Oriented and Due-Diligence-Oriented Technologies in Identifying and Addressing Forced Labour and Human Trafficking", *Journal of the British Academy*, 7(s1), pp. 131–165.

⁴⁷ One such calculator example can be found on the [SaverAsia](#) website and app.

⁴⁸ Ifeoma Ajunwa, "[The Algorithmic Capture of Employment and the Tertius Bifrons](#)", (LPE Project Yale Law School, 2020).

⁴⁹ ILO and IOM.