Use of technology platforms, as well as mobile phones and hand-held devices in migration operations is likely to grow and expand, rather than stagnate and decline. These platforms tend to enhance processing, increase accuracy, and generally improve flexibility and efficiency in data management. In some cases, they provide opportunities for reducing the cost operations. Furthermore, ongoing innovations and extensive marketing activities by emergent technology companies and established multinational industry leaders increase the adoption of these platforms worldwide. As such, it is important for migration-related policymakers and practitioners to be engaged in the evolution and application of new technology, in order to seek positive and equitable outcomes for migrants and all other stakeholders.

The COVID-19 pandemic is likely to increase the speed of adoption and innovation of new technologies in migration and other sectors. The inherent inefficiencies that come with the public health imperative of preventing formation of crowds and enforcing physical distances between people will require mitigation. Remote and distant document checking, iris and facial recognition for identity verifications and other technologies offer options and solutions to the new challenges facing different aspects of migration management. The pandemic has also forced many sectors and professionals to undertake their work remotely relying on technology, thus increasing familiarity, acceptance and adoption.

In considering the guiding questions set out below on how to leverage new technologies to empower migrants, policymakers, practitioners and all stakeholders are encouraged to consider amongst other things:

- Positive things they want to see emerge and be adopted
- Negative things that should be prevented from taking hold
- Actions that are practicable and desirable for migrants and all other stakeholders
- Actions, projects and programmes based on diverse cross-sectoral partnerships
- Tech-enabled targeted and personalised access to information and services for migrants.

Guiding Questions on 'Leveraging New Technologies to Empower Migrants'

1. **Examples of Migration-Related Technology Platforms:**

   Can you share examples of schemes and programmes that are currently operational or being planned by government and non-governmental entities, which use online, mobile, digital, blockchain, Artificial Intelligence (AI) and other forms of new technology, to assist and support prospective and actual migrants through the processes of emigration, employment, sending remittances and managing social and earned benefits?

Currently, machine readable and biometric passports are standardised worldwide, providing an example of how technology platforms can be used at global level at every stage of the international migration process. Visas, residence and work permits documents can so easily be standardised, similar to
passports. Blockchain technology enables recording of transactions in a transparent, cheap and secure manner, openly verifiable by multiple parties. This makes it applicable and viable for maintaining credible, searchable and updated records for a wide range of migrant-related information, including: educational qualifications and training; wages and salaries; tax, social security and other deductions. Access and verification of records are done remotely, not affected by location. Such platforms can greatly assist especially in underdeveloped practices such as pension and social benefit payments to returnees. In addition to governments, potential partners in these developments include organisations such as International Civil Aviation Organization (ICAO), UN Educational, Social and Cultural Organization (UNESCO), and Financial Action Task Force (FATF).

With all data-based new technology, it is vital that there is diligence to guard against in-built design bias on the basis of gender, ethnicity, nationality etc. In-built bias becomes hidden in what may appear to be a value-free technology application. Migration tech-platforms should also not be dominated by a small number of providers, able to impose restrictive practices and financially exploit migrants. It is already a negative practice that some governments use tech-platforms directly or through outsourcing to levy excessive and prohibitive charges for visa and permit applications and issuance.

2. How to Optimise Data Sharing and Processing:

To what extent is there interoperability between different migration-related technology platforms, aimed at optimising data sharing and processing whilst adhering to Data Protection laws and regulations in different jurisdictions? What should be the do's, don'ts and operational protocols when building and managing migration-related technology platforms?

It would be desirable to have seamless global migration tech-platforms, based on common, transparent and certifiable standards. International Organization for Standardization (ISO) and others can be credible partners with governments to set up agreed formats, templates, international protocols and conventions, with input from migrant, welfare, human rights and organisations. These standards can reduce operational gaps and disparities between countries, and facilitate easy sharing of verified data between immigration authorities, employers, trade unions, municipalities, civil society and international organisations.

Platform-based data sharing already exist at bilateral levels e.g. the eMigrate platform used by UAE and India1. These can be improved in functionality and versatility, and expanded to work for groups of countries, rather than being restricted to bilateral usage. Accuracy, security and privacy should be at the heart of data sharing. New technology allows for multilayered authentication, security and privacy checks. Sharing of identity and confidential personal information must meet the highest standards set out in protocols, and may require the express verified consent of the individual. However, derived anonymous data can safely be shared with relevant migrant, civil society and international organisations, within agreed protocols and ethical standards. Platforms must not be used for data harvesting and mining for purposes beyond the letter and spirit within which the data was collected. New technology allows for enhanced protection against identity and data theft, document counterfeiting, internal and external hacks and attacks. Platforms must have comprehensive actions for regular and independent compliance checks, security breach reports, and continuous improvement.

1 Information on ‘eMigrate’ recruitment and emigration platform (UAE and India): http://abudhabialogue.org/sites/default/files/document-library/The%20Use%20of%20Technology%20in%20Managing%20the%20Recruitment%20and%20Deployment%20of%20Workers_0.pdf
3. How to Improve Trust, Accessibility and Usage:

What are the actions needed to differentiate between technology platforms that provide migration-related information and those that collect personal and confidential information from actual and prospective migrants? What are the actions and protocols needed to improve trust, accessibility and usage of technology platforms by migrants from different socio-economic backgrounds?

For all migration tech-platforms, websites and apps, it is essential that first, they reach the actual and potential migrants. Online and social media businesses already use AI and machine learning to target and personalise adverts to individual users. Such technology is relevant in addressing accessibility to the content of migration platforms. Smart phone usage is on an upward trend, and migrants as a group are high users and sometimes they are even totally dependent on their mobile phones for work, travel, remittances etc. New technology already in the market include smart phone alternatives, whereby specific smart functionalities are put on stickers that can be stuck on any SIM card, for use on any basic mobile phone. Beyond accessibility, for effective usage of tech-platforms, the content needs to be relevant, current and practically useful to the migrants, for their diverse migration related goals. New technology allows for language and translation options, and it is important to provide content in bite-size audio and video formats, not just written text.

To create and maintain trust, especially for data-collecting platforms, it is vital to offer multiple and multilayered security options including passwords, iris, facial and voice recognition, and other versatile innovations. Migrants already use existing mobile money, banking, fintech and other systems to access and manage their moneys, thus they have a significant degree of familiarity with new technology. On the part of governments, they have partnered with tech companies to set up trusted fast track traveller programmes, which do automated identity, biometric, immigration, flight boarding and other security checks. In the UAE, Dubai Airports wants to extend this to all passengers. They have already piloted a scheme whereby pre-screened passengers walk through the airport and board their flights without showing passports or boarding passes.

Tech-platforms need to undertake ongoing checks and actions to eradicate or reduce predatory exploitation pursued through fake, ghost and mirror websites, platforms and apps, and other opportunistic fraudulent activities. On the authentic migration tech-platforms themselves, the security practices should include protection, monitoring, reporting and mitigation of internal data theft, external hacks, and general compromise of visitor and subscriber data and privacy.

4. How to Reduce Recruitment and Remittance Costs:

Beyond comparison websites, online platforms and apps developed in the past 15 years, how can the non-commercial public and non-governmental sectors use new technologies and open source platforms specifically to reduce migrant recruitment and remittance costs?

Portal or gateway websites and platforms, operated by credible independent organisations can help reduce the costs of recruitment. These platforms can use AI to search, verify and compile relevant and current job offers and employment opportunities in destination countries, from extensive primary and secondary sources. AI supplements rather than replaces the other relevant research methodologies and

---

2 Gulf News report on 16 October 2019: https://gulfnews.com/uae/transport/new-biometric-system-at-dubai-airport-no-passport-or-boarding-pass-needed-1.6694849
partnerships used in labour recruitment. For practicability, the portals can focus on single or a group of labour migration corridors. The new technology can help build a live register of vetted, credible and responsible employers and agents operating within ILO and other international protocols, within the selected corridors. Similarly, bogus, unethical or otherwise dubious recruitment operators can be identified. The portals can include in-built complaints, grievance and anonymous whistle-blowing functionalities as mechanism to maintain the credibility and trustworthiness of the platform and services.

Existing tech-based recruitment and selection platforms (generally used for highly skilled professionals), can be modified and improved for use in the recruitment of all classes of migrant workers. These platforms facilitate video interviews, remote exercises, video and Virtual Reality (VR) briefings and orientations, task simulations and exercises, and other forms of interactive assessment activities.

For the goal of reducing the cost of remittances, new technology can be particularly helpful in two particular areas, reducing operator costs, and providing detailed cost comparisons to remitters. Many Money Transfer Operators (MTOs) that use fintech and mobile money platforms already charge remittance fees that are nominally at or below the Sustainable Development Goal (SDG) target of 3%. It is expected that widespread use of blockchain processing and wallets will reduce the cost of remittance processing significantly. MTOs can then seek to make their margins through innovation, value-addition and allied services rather the mere transfer of funds.

AI can be used for ongoing detailed comparison of remittance costs, based not only on transfer fees, but also on margins and earnings from foreign currency exchange rates, and even interest earned by MTOs on aggregate transfer funds held with banks. Again, AI supplements other research methodologies such as regular and sample-based mystery shopping. Currently, MTOs already use online and social media platforms to feed personalised and targeted promotions and advertisement of their remittance and related services to actual and potential remitters. Similar technology can be used by credible independent organisations and institutions such as the World Bank to provide up to date and detailed cost comparison to actual and potential remitters and other stakeholders.

5. How to Improve Access to Welfare Services:

How can new technologies such as artificial intelligence be used to collate, aggregate and synthesise diverse data sources and services to provide accurate, relevant and remote legal, welfare, health and other social services to migrants, irrespective of status? How can such synthesised services be tailored to local, national and regional realities, and accessible to migrants with literacy and language limitations?

As with services such as recruitment and remittances, new technology offers a relatively cheap means of searching, verifying, compiling, personalising and feeding actual and potentially relevant information and alerts to identified target groups of migrants and organisations involved in supporting and empowering migrants. The technology is a powerful enabler, but usage and usefulness largely depends on the quality of the content and service presented to the migrants. This calls for new partners and new forms of technology-enhanced partnerships. For example, many law firms in destination countries provide pro bono legal advice to migrants, supplementing the work of civil society and specialist agencies. New technology allows for detailed matching of service offering to migrant needs, taking into account specifics such as nature of query, time availability of service provider, language of migrant, etc. As more institutions accept and adopt video and online deliberations (including hearings in Courts of Law and judicial tribunals), the diversity of options to support migrants through new technology increases.
One area of great potential is telemedicine. Migrant access to medical services can often be restrictive, due to costs, visa restrictions, lack of information, lack of time due to work hours etc. For irregular migrants and displaced people, fear of detention or other reprisals from authorities effectively excludes them from accessing formal health services. Credible migrant portals offering telemedicine consultations and referrals with medical specialists from diverse locations can be of immense benefit to migrants and public health. The technology already exist, and can be modified and improved to address specific migration-related socio-medical issues such as lack of medical records, language differences etc.

Accessing personalised legal, medical and welfare services require a high level of confidentiality, privacy and data security. These can be maintained through enhanced security options facilitated by new technology including iris, voice and facial recognition. Furthermore, the mobile phones and hand-held devices used to facilitate access to remote services can also be used for identify verification and other forms of authentication. This is of vital importance, especially to irregular migrants, asylum seekers and displaced people who may not have a passport or any other national identification document.