PalArch's Journal of Archaeology of Egypt / Egyptology

HOW DIGITAL TECHNOLOGY FACILITATES VISA FREE INTERATIONAL MIGRATION?

Yusupova Shakhnoza[1], Kadirova Zulaykho[2], Gazieva Sulkhiya[3], Raimjanova Madina[4]

[1]Senior lecturer at Department of World Economy, Tashkent State University of Economics, E-mail: shakhnoza.yusupova2@gmail.com
[2]PhD, Head of department of "Economy of Far Eastern and South Asian countries", Tashkent State Institute of Oriental Studies (TSIOS), E-mail: kzulayho@gmail.com.
[3]Assistant lecturer at Department of World Economy, Tashkent State University of Economics, E-mail: sulya_@mail.ru
[4]Associate professor at Department of Investment and Appraisal, Tashkent Institute of Finance, E-mail: madinahon2010gmail.com

Yusupova Shakhnoza[1], Kadirova Zulaykho[2], Gazieva Sulkhiya[3], Raimjanova Madina[4]: How Digital Technology Facilitates Visa Free Interational Migration? -- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(6). ISSN 1567-214x

Keywords: migration, digital technology, societies, benefits, social cost, humanity.

ABSTRACT

Current paper work offers reflection on doing digital migration study's methodology and practice. Modern information and communication technologies have fundamentally transformed migration processes in both positively and negatively. Migration movement control is increasingly dependent on digital technologies from the bottom-up migrants use smart phones and apps to access information, establish local connections and send remittances all over the world. Main purpose of this article is discussing concept of digitalization in migration process. As an outcome's authors explain migration destinations and advantages of digital technologies in migration process. As a conclusion authors suggest conceptual structure of digitalization framework for globally networking.

Introduction

While migration remains one of the most challenging life experiences one could face – which technology cannot magically solve the increasing global adoption of information and communication technologies has altered a variety of migration dynamics. This transformation is twofold. It includes a growing reliance on digital technologies for top-down governmental border

control, surveillance and migration management by state authorities. Secondly, smart phones, social media platforms and apps are used by migrants as new channels to access information, resources and news; for purposes including communication, emotion-management, intercultural relations, identification, participation, political protest and sending/receiving remittances. The rapid developments in migration that happen in conjunction with the spread of ICTs raise considerable theoretical, methodological and ethical challenges. Hence, in this chapter, we focus particularly on methodological concerns in the emerging research focus of digital migration studies. The growth of migration and ICTs are unprecedented and the two increasingly affect one another. While the number of expatriates is estimated to have reached 56.8 million by the end of 2017 [1], globally, over 65 million people were forcibly displaced in 2015 [2]. Nearly 2000 official entry ports and 60,000 km of land and sea borders are increasingly managed through digital technologies, and 'irregular migrants', for example, experience 'smart borders' entirely differently from expats. At the Mediterranean Sea, their phone signals may be traced by drones and satellites that are part of the European Border Surveillance System (Eurosur). There is need for such an intervention that spans the field of migration, anthropology, sociology, geography, media and communication studies. Although digital divides alongside axis of geography, gender, age, class, race, nationality, and generation persist and unevenly shape access, ownership and use, attention for the situated everyday experiences of migrants is vital to bring about societal change.

Literature Review

Media and communication technologies have historically played a crucial role in the lives of migrants. It is well documented how migrants have historically maintained transnational networks through letters, newspapers, radio, satellite television and the telephone. However, in recent years, both the scale and types of migration and digital networking have drastically changed [3]. Both voluntary and forced migrants are increasingly digitally "connected migrants" [4], who live in one place, but use mobile devices and social media platforms to conduct their lives across the world. While e-passports, iris scans and on-board airplane wireless internet facilitate the lifestyle of the global elites zipping in and out of the countries.

Upon arrival, they may be coerced to have their fingerprints scanned so that an algorithm can decide upon their futures on the basis of the European Dactyloscopy (EURODAC) biometric database [5].

Alongside connected migrants, recent buzzwords including "e-diasporas" [6], "mediatized migrants"[7], refugees' "information precarity" [8], "digital diasporas" [9], "smart refugees" [10], "digital deportability" [11] and migrant "polymedia" signal the emergence of a new research focus which can be labelled as digital migration studies. Although there is growing attention for migration and ICTs, a general "paucity of research" on the topic remains [12] this area is particularly "under-researched" in the field of migration studies [13].

In media and communication studies, the impact of ICTs on migrants in Europe also remains relatively uncharted [14]. These gaps urgently need to be addressed, as the "information migration society" may offer new opportunities, but also constructs a "new distribution of power" [15], particularly in the context of forced migration and digital connectivity [16].

While literature on forced migration and ICTs in particular is scarce, publications reflecting on methodologies of studying connected migrants are virtually non-existent. Indeed, while notions such as digital and e-diaspora are increasingly strongly theorized, "much less literature addresses methodological issues in diaspora research, particularly in the field of media and communication" [17]. As an emancipatory starting point, we seek to acknowledge "migrants are digital agents of change" [18]. Digital migration researchers are, for example, well equipped to counter dominant stereotypes that portray refugees as culturally handicapped and unable to handle advanced technologies [19].

We have mapped the field by distinguishing between three paradigms (1) migrants in cyberspace; (2) everyday digital migrant life; (3) migrants as data.

Importantly, Markham quickly realized it was unethical to only be a "distanced observer" of how "others" interacted in virtual spaces from her comfortable position behind her screen [20]. As an example of a conservative or reactionary approach to digital migration, European governments aiming to manage migration top-down are increasingly tapping into big data; not only are biometric databases augmented and interconnected with the aim of more efficient border control, authorities also scrape and analyses social media data to predict migrant flows and circulate specifically targeted deterrent information campaigns [21]. Digital technologies involve labour; rather than universal, digital technologies are distinctly situated [22].

Repurpose computing techniques as research tools – such as the ones developed at the University of Amsterdam's Digital Methods Initiative1 – to "diagnose cultural change and societal conditions by means of the Internet" [23].

Media and migration scholars have used computational methods including issue mapping, hyperlink and network analysis to study digital migrant connectivity. Diminescu's pioneering e-Diasporas Atlas2 project consists of a longitudinal mapping of 27 e-diasporas and 8.000 migrant websites [24].

Digital migration studies scholars should take into account the specificity of digital mediation while approaching it as inherently related to broader human processes. Conceptually, the "M.E.A.L.S" theoretical touchstones are helpful to develop this principle further [25]: rather than transcendental, digital technologies are material; rather than disembodied, digital technologies are actively embodied; rather than neutral, technology use solicits affective responses; rather than efficient and labour saving.

Methods

In this paper work authors used qualitative research methods with secondary source data from various scholars in this field. Especially, advantages of this methods can be discussed as a ground theory method. To date various methods have been developed and introduced to measure

digitalization level of the migration process. In most recent studies show that only regional point of view data and analyses. Previous studies have based their criteria for selection on pull or push factors migration policy. But authors have explained implementation of digital technology in a variety of ways.

As a material authors used UN, ILO, International Migration Reports and various scientific paper works from Google Scholar and Sciencedirect.

Results

Universally virtualization enhances service flexibility for migrant's network features mobility through accelerated flow of people. More optimal use resources and lower operating costs promotes easy and cheaper movement internationally. Virtualization also gives customers freedom use of various platforms. By examples
can serve as a network virtualization hypervisor features programmable extensible
operating system based origin of migrants and detail information of individual applicants. Full automation-based controllers and monitoring system modifies various policies, which allows custom checklists and professionals for resource allocation.

This approach speeds up application forms and services while reducing risks anywhere of the location of the migrants. Disclosure of contextual and the analytical potential of the network digitalization truly relevant and reliable for international human migration. Network contains data to collect from other sources impossible and which may be useful for related organization, and for the work of the central IT department. Today lots of software companies integrated in ILO office and central consulting services all over the world for easy mobility of the people. Moreover, development of cloud applications and services beyond the hard copy documentation provide scaling and new models consumption and support an extensive partnership in local societies. Perhaps, it will provide more simple and quick innovations in cloud networking management and electronic identity of people all over the continents.

How digitalization can help achieve fair migration

The 11th ASEAN Forum on Migrant Labour held in Singapore on 29-30 October discussed how to maximize the potential of digitalization to promote decent work for migrant workers in the Asia Pacific region. Anna Engblom, senior expert on labour migration at the International Labour Organization (ILO), reviews the opportunities and challenges brought by digitalization in this area.

Making regular migration more attractive

Digital migration management platforms can help reduce the cost and time induced by formal recruitment processes, which too often pushes many women and men to migrate through informal, undocumented, and unsafe channels [26].

The 'Fourth Industrial Revolution', as described by World Economic Forum Chairman Klaus Schwab, is characterized by a range of new technologies that are fusing the physical, digital and biological worlds. A lot

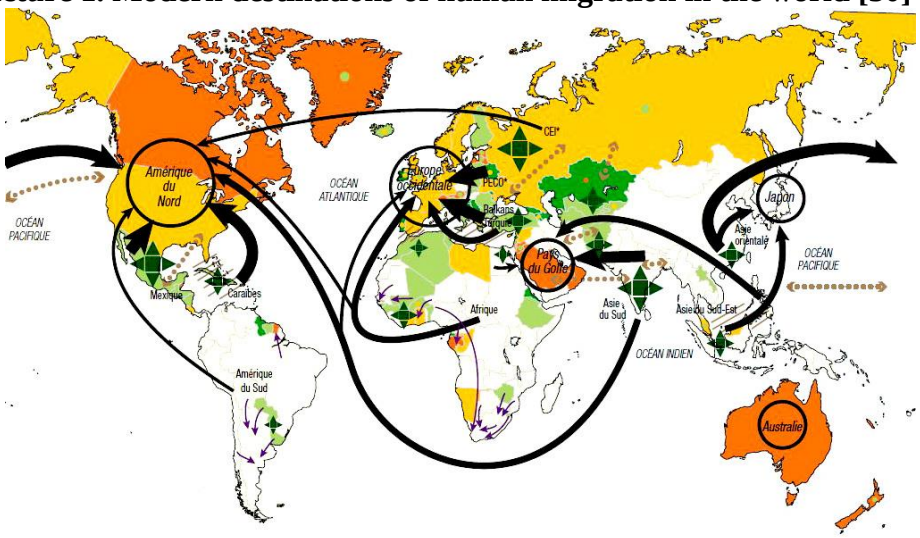
of attention to date has focused on robotization, driverless cars, cyber-weapons and biotechnology, and other developments: in this context, the effects of automation and its impact on jobs have been widely discussed. Less appreciated, however, is how digitalisation is affecting the future of work [27]. The biggest issue in migration and technology is that newer forms of social media activism are increasingly enabling disrupters to set the migration agenda, based on fear and lies, in a quest for power. It's time to focus our collective efforts - technological, intellectual, political, social, financial - to implement effective ways to minimize the impacts of this growing problem [28].

Over the past few decades, migrants have become increasingly connected, as have societies in both their home and host countries. The use of new technologies allows them to maintain ties with their home countries while helping them integrate in their new countries. Since the migrants are connected, they can, of course, be traced. This limiting aspect of digital technology also exists in the uses of new technology in destination countries. Technology has increased the burden of the informal contract between those who leave and those who stay behind. Families expect migrants to be very present [29].

Connectivity

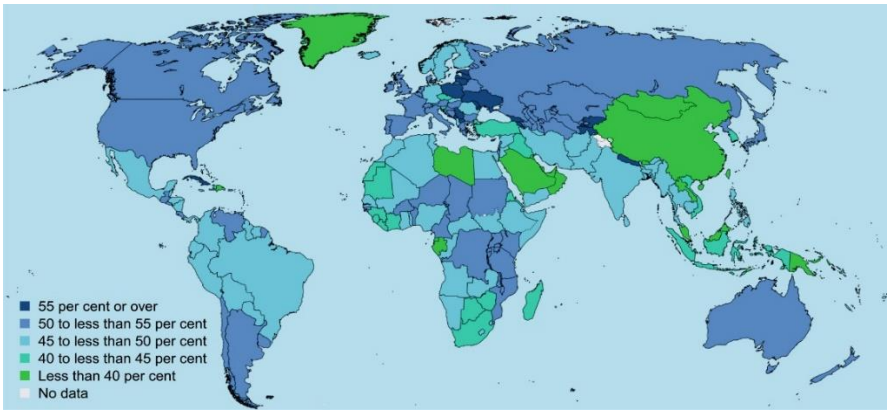
Within media and communication studies, connectivity refers more specifically to relations enabled via digital media technologies. This can take different dimensions according to the focus given to everyday networked relations versus media-centric approaches that focus on the Internet as an autonomous realm of interactions. Thus, connectivity can be articulated via social media platforms, apps, and other online channels while generating new notions of digital diasporas and virtual communities that require new methods of analysis, such as digital methods or virtual ethnography

Picture 1. Modern destinations of human migration in the world [30]

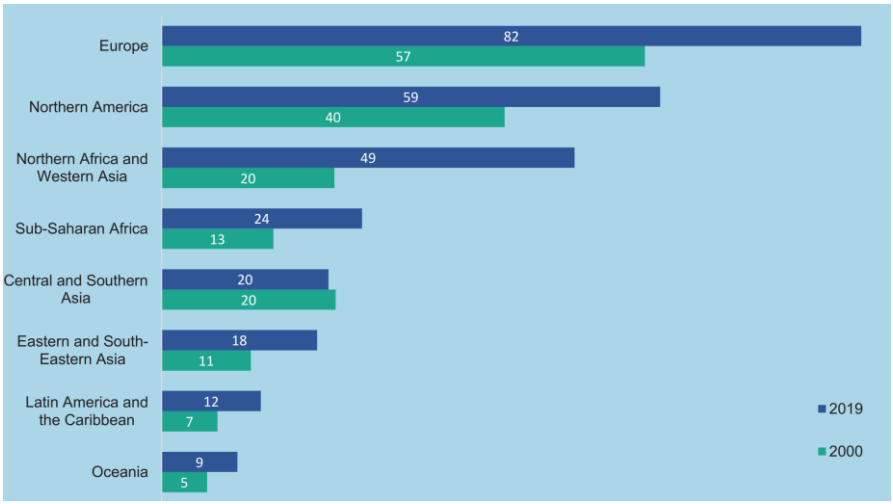


Source:
http://www.emersonkent.com/map_archive/world_map_2005_global_migration.htm

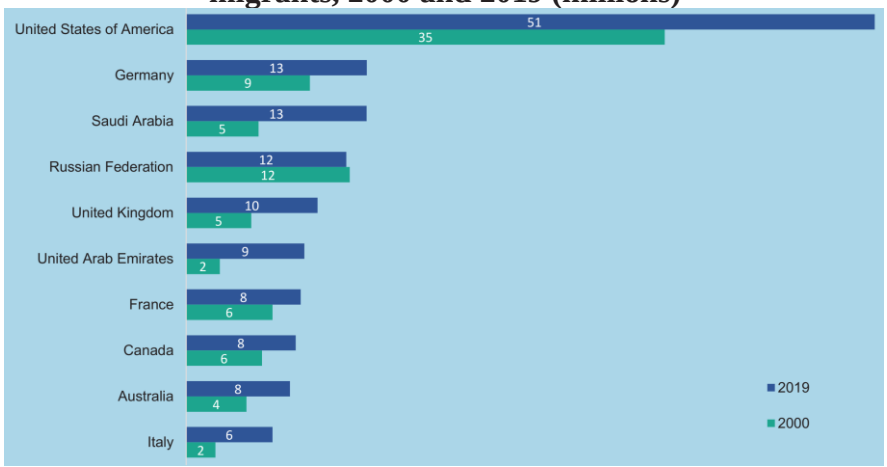
Picture 2. Percentage of females among all international migrants, 2019



Picture 3. International migrants by SDG region, 2000 and 2019 (millions)

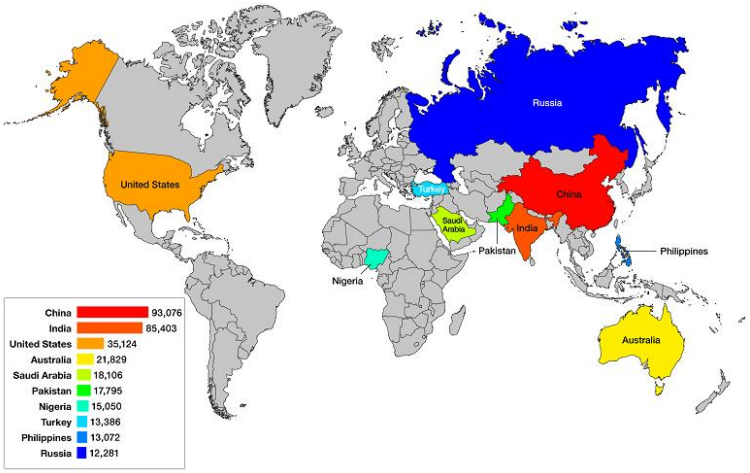


Picture 4. Countries with the largest numbers of international migrants, 2000 and 2019 (millions)



Source: International Migration Report 2019, www.unpopulation.org

Picture 5 Entry clearance visas granted (excluding visitor and transit visas) to the UK, top 10 nationalities, 2019 [31]

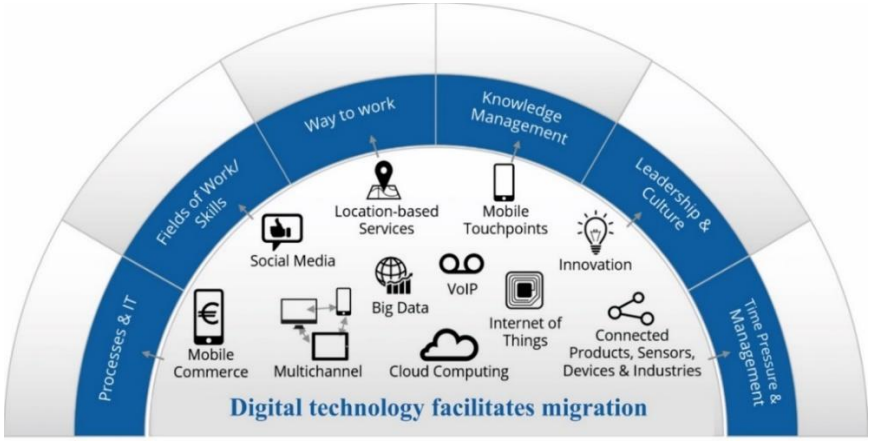


Source:https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/nternationalmigration/bulletins/migrationstatisticsquarterlyreport/february2019

Experts agreed on the need to accelerate the further introduction of digital technologies in the field of labor migration. They supported the idea of creating a single document with an electronic information carrier (patent) containing biometric data of a foreign citizen, proposed for implementation in St. Petersburg as a pilot project. In this case, special attention during the implementation of the project should be paid to the issue of ensuring the safety of personal data.

Scholars argue that the development of a coordinated approach to labor migration in the Commonwealth countries, ensuring the transparency of financial flows in this area, protecting the rights of migrant workers, require constant attention from all state bodies involved in the implementation of migration policy.

Picture 6. Digitalization process of the migration policy [32]

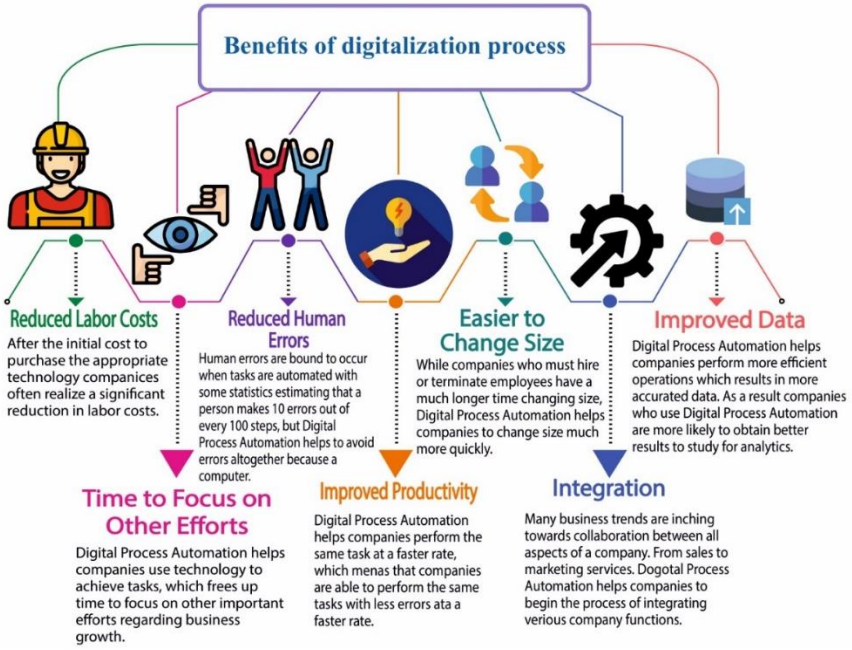


Source: https://new.abb.com/metals/digital

Current process provides clear and transparency policy for sustainable economic growth of the world economy by implementing digital technology into international human migration. It can be fulfilled following systematic ways:

- Migrants exchange identity data for resources without meaningful consent.
- Privacy, informed consent, and data protection are compromised throughout the process of migrant and refugee identification.
- Systemic bureaucratic biases present obstacles that would likely impede the fair development and integration of digital identity systems [33].
- Trust is lacking in the sociotechnical systems that are intertwined with identity. Cultural mediators can be uniquely positioned in the system to build trust and literacy around privacy rights and informed consent.

Picture 7. Benefits of usage digital technology into the process of migration globally



Additionally, we identify three major thematic areas of concern involved with the data collection from and processing of migrants and refugees:

• Bureaucratic bias in identity systems—this includes concerns about the classification of vulnerable communities and the inconsistent collection of migrants' identity information.

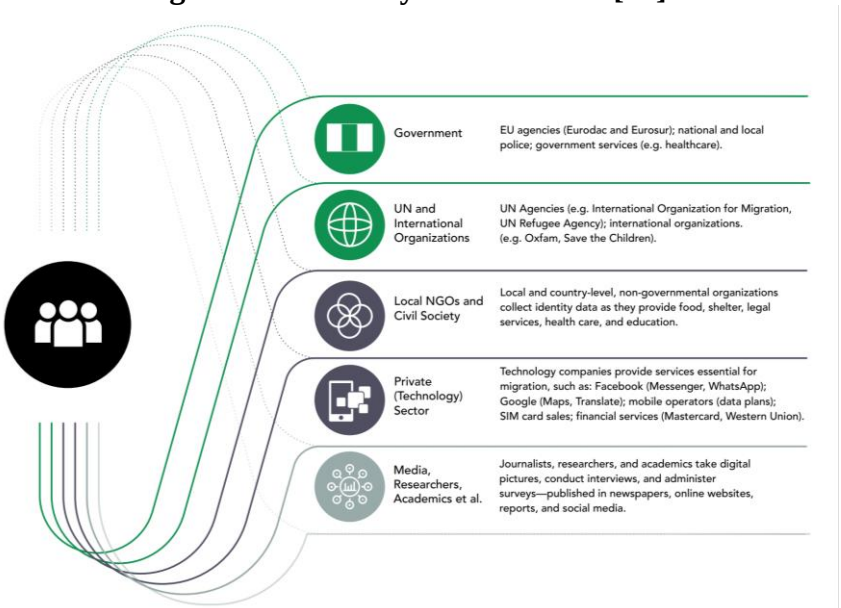
• Privacy and mistrusted systems—this includes the difficulties in getting informed consent when collecting migrants' data, as well as migrants' understanding of privacy, the consequences of system avoidance, and the role of trusted intermediaries, such as cultural mediators [34].

• Organizational data responsibility—including how different organizations navigate their own understanding of privacy rights and data security practices.

Traditionally, companies used digital process management to build business processes from their data and human decisions. However, the advent of digital technology allowed companies to replace the human elements that comprised the backbone of these processes. Digital process automation refers to the use of digital technology to perform a process to achieve a company's workflow or business goals. There are numerous business operations that can be automated including efforts related to sales,

marketing, production, and supply chains. The chart below illustrates the growth that companies who use DPA frequently realize.

Picture 8. Framework of digitalization process in global community collaboration [35]



Source: Mark Latonero, PhD (Principal Investigator), Keith Hiatt, Antonella Napolitano, Giulia Clericetti, Melanie Penagos. Digital Identity in the Migration & Refugee Context: Italy Case Study, www.datasociety.net Page 13.

Current picture states strongly relationship with international practical unions like UN, ILO, ISSA, and UNDP projects for further development of the migration policy around the world.

Discussion

In this paper we propose new network principles for digital organizations Most organizations now use outdated infrastructure created at a time when the main network traffic was of low priority. The paper presents presented several solutions to traditional networks must evolve, as they have a number of limitations essential to digital organization.

This paper is a modest contribution to the ongoing discussions about lack of opportunities automation. Traditional networks are practically do not have automation capabilities network operations. Usually selection resources for new services and changes in the configuration you have to do it manually on each device, spending a lot of time. It was the main purpose of the paper to draw attention to the digital age, the time of network engineers is expensive resource, and spending it is worth solving strategic objectives.

The main concern of the paper was to the heterogeneity of the network. One more lack of manual changes to the network lies in the fact that the process of checking new services and features on numerous network devices takes a long time. Particular attention is paid to functions are not uniformly implemented in the network, leading to an additional security risk and reduced application performance.

The author´s attention was focused high operating costs. We have addressed not only network growth and the number of connected devices is

significantly complicating network management but also estimated by current search, over the past decade spending on network operation tripled.

We have also considered the consequences of security questions. Legacy Protection networking is usually done by adding another level of additional physical devices to provide the necessary functionality. Our paper presents an innovative a similar approach involving multiple devices can optionally complicate the network.

The originality of our solution lies in the fact that difficulties in optimizing performance users. Traffic optimization applications is not an easy task. Administrators often try to do this with change QoS settings or other network settings. Such a "tuning" of the network is usually performed depending on the situation, in response to user complaints, therefore the main reason network outages today are human errors (according to a ZK study Research in the field of online shopping motivation equipment held.

To improve quality user service requires full application control, identification optimal paths as well as automation continuously changing QoS and other settings factors. To our knowledge, this is the first study to deal with all of the above factors have led to maximize network complexity. Companies who want to become digital, you need to develop networks and do their deployment and operation as simple as possible.

Only one other study, to our knowledge, has come up with top networking principles to make the network a digitalization platform as followings:

The architectural approach. Most networks deployed one device at a time and are managed in the same way. This process takes a lot of time. Within the architectural network approach is considered as a whole.

Labour migration

- Quotas for labour
- Age limits
- Young age beneficial
- Specific income per month
- Specific financial funds
- Language skills
- Application fee
- Job offers

Asylum and refugees

- Existence of Subsidiary/humanitarian protection
- Nationality
- Quotas asylum
- Safe third country
- Safe countries of origin
- Resettlement agreements
- Place of origin

Control mechanisms

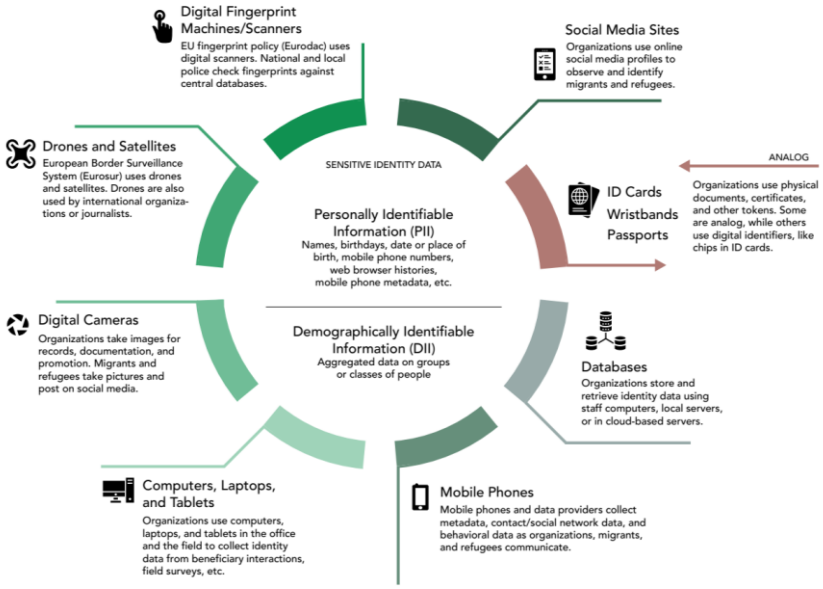
- Illegal residence
- Carriers sanction
- Alien's register
- Information sharing/international al cooperation
- Biometric information
- Forged/expired documents

Comparing the level of human rights with help of technology

- Migrants in different countries of transit and destination, for better understanding of the impact of public policies on migrants' living conditions
- Migrants and native-born nationals who live in the same country
- Different groups of migrants, according to their sex, age, ethnic origin,
- national origin, status, or other social conditions.

This approach provides quick adaptation. networks for future changes and new technologies, which is of great importance in the digital age, when changes need to be made quickly and simultaneously throughout the network. Network architecture should be distributed across enterprise and cover a complex of buildings, branches, perimeter and data center access. Open standards-based interfaces. Digitalization requires extensive ecosystem of solution providers. Network, based on proprietary technology may be incompatible with necessary solutions from other suppliers. On the contrary open standards-based solutions guarantee the widest choice for customers and support for new business opportunities.

Picture 9. Digital technology facilities for migration process of Uzbekistan



As a main outcome we come to discussion as followings**:**

1. Digital scanning process implementation;
2. Diversification of social media transmit area;
3. Electronic identification optimization;
4. Central database and dataset functioning;
5.Mobile applications with common purposes;
6.Electronic devices for distance using;
7. Digital photo capturing appliance for prof of ID;
8. Drones with distance controlling for security and safety purposes.

By launching above criteria's and instruments can only promote digitalization process in transition economies and low-income countries in the world. Human development today is largely dependent on the pace of development of information technology. At the end of the twentieth century, with the penetration of the Internet into various spheres of society, terms such as "e-government", "e-commerce", "digital economy" appeared. The term "digital economy" was first coined in 1995 economy based on modern information and communication technologies over the old economy. But

modern era digital migration process will provide greate contribution among all societies.

In recent years, a number of measures have been taken in our country to digitize the migration policy. Practical work has already begun to create conditions for the rapid development of modern information technologies, to ensure information security and identity of the all migrants in future.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper work.

Acknowledgements

The authors would like to gratefully acknowledge the support extended recommendations and instructions by Research Architecture Expert Group.

Conclusion

Based on the results, it can be concluded that the research into digitalization of the international migration process has been very relevant issue all nations. Successfully launching software with ID detection and various documentary process will be past history very soon implementation of free visa policy in major economies. From the outcome of our investigation it is possible to conclude that whether developed or developing countries all together support international community with their best practical approaches and methodologies. The findings of our research are quite convincing, and thus best chance for visibility of international regions high level of communication systems and services. Conclusions can be drawn internationally recognized protocols and standards will be promoted in conferences, seminars and congress in all regions of the world countries. Summing up the results, it can be concluded that more digital technology more economic efficiency and economic growth. Sometimes it will help time and objective factors like corruption and transparency visa controlling system.

References

Finaccord. (2014). Global expatriates. Size, segmentation and forecast for the worldwide market. http://finaccord.com/documents/rp_2013/report_prospectus_global_expatriates_size_segmentation_forecasts_worldwide_market.pdf.

Madianou, M., & Miller, D. (2012). Migration and new media: Transnational families and polymedia. New York: Routledge.Google Scholar

Miller, D., & Horst, H. (2012). The digital and the human. A prospectus for digital anthropology. In H. Horst & D. Miller (Eds.), Digital anthropology (pp. 3–38). London: Berg.Google Scholar

Georgiou, M. (2006). Diaspora, identity and the media. Creskill: Hampton Press.Google Scholar

Leurs, K. (2017). Feminist data analysis. Using digital methods for ethical, reflexive and situated socio-cultural research. Feminist Research, 115(1), 130–154.CrossRefGoogle Scholar

Diminescu, D. (2008). The connected migrant: An epistemological manifesto. Social Science Information, 47(4), 565–579.CrossRefGoogle Scholar

Hepp, A., Bozdag, C., & Suna, L. (2011). Mediale migranten [Mediatized migrants]. Wiesbaden: VS Verlag.CrossRefGoogle Scholar

Wall, M., Campbell, M., & Janbek, D. (2015). Syrian refugees and information precarity. New Media & Society, Early view online.Google Scholar

Everett, A. (2009). Digital diaspora. A race for cyberspace. Albany: State University of New York Press.Google Scholar

Dekker, R., Engbersen, G., Klaver, J., & Vonk, H. (2018, Forthcoming). Smart refugees. How Syrian asylum migrants use social media information in migration decision making. In K. Leurs & K. Smets (Eds.), Social media + society. Special issue on Forced migration and connectivity in(to) Europe.Google Scholar

Trimikliniotis, N., Parsanouglu, D., & Tsianos, V. S. (2015). Mobile commons, migrant digitalities and the right to the city. Hampshire: Palgrave MacMillan.CrossRef Google Scholar

McGregor, E., & Siegel, M. (2013). Social media and migration research. United Nations University UNU-MERIT Working Papers 2013-068. www.merit.unu.edu/publications/wppdf/2013/wp2013-068.pdf.

Oiarzabal, P., & Reips, U. D. (2012). Migration and diaspora in the age of information and communication technologies. Journal of Ethnic and Migration Studies, 38(9), 1333–1338.CrossRef Google Scholar

Ponzanesi, S., & Leurs, K. (2014). On digital crossings in Europe. Crossings: Journal of Migration and Culture, 5(1),https://doi.org/10.1386/cjmc.5.1.3_1.CrossRefGoogle Scholar

Borkert, M., Fisher, K., & Yafi, E. (2018, Forthcoming). The best, the worst and the hardest to find: How people, mobiles and social media connect migrants in(to) Europe. In K. Leurs, & K. Smets (Eds.), Social Media + Society Society. Special issue on Forced migration and connectivity in(to) Europe).

Leurs, K. & Smets, K. (2018). Five questions for digital migration studies: Learning from digital connectivity and forced migration in(to) Europe. Social Media + Society, 1-16. Advance Online Publication. https://doi.org/10.1177/2056305118764425.CrossRef Google Scholar

Smets, K. (2018, Forthcoming). Doing diasporic media research: methodological challenges and innovations In R. Tsagarousianou & J. Retis (Eds.), The handbook of diasporas, media, and culture. New Jersey: Wiley-Blackwell.Google Scholar

Borkert, M., Congolani, P., & Premazzi, V. (2009). IMISCOE Working Paper, 27. https://ec.europa.eu/migrantintegration/index.cfm?action=medi

a.download&uuid=2AA0153F-BA25-73AF-7C45D08C5FDBD891.

O'Malley, (2015, September 7). Surprised that Syrian refugees have smartphones?http://www.independent.co.uk/voices/comment/surprised-that-syrian-refugees-have-smartphones-wellsorry-to-break-this-to-you-but-youre-anidiot-10489719.html

Candidatu, L., Leurs, K., & Ponzanesi, S. (2018, Forthcoming). Digital diasporas: Beyond the buzzword. Towards a relational understanding of mobility and connectivity. In R. Tsagarousianou & J. Retis (Eds.), The handbook of diasporas, media, and culture. New Jersey: Wiley-Blackwell.Google Scholar

Markham, A. (1998). Life online. Researching real experiences in virtual space. Walnut Creek: AltaMira Press.Google Scholar

Broeders, D., & Dijstelbloem, H. (2013). Dreaming of seamless borders: ICTs and the pre-emptive governance of mobility in Europe. Journal of Ethnic and Migration Studies, 39(8), 1201–1218.CrossRefGoogle Scholar

Roger s, R. (2013). Digital methods. Cambridge: MIT Press.

Diminescu, D. (2008). The connected migrant: An epistemological manifesto. Social Science Information, 47(4), 565–579.CrossRef Google Scholar

Losh, E. (2015, June 22). The MOOC moment: Experiments in scale and access in higher education (#FutureU workshop). Leuphana University Luneberg. http://de.slideshare.net/leuphanadigital/losh-leuphana.

https://www.ilo.org/asia/media-centre/statements-and-speeches/WCMS_648541/lang--en/index.htm

https://www.lowyinstitute.org/the-interpreter/digitalisation-migration-and-future-work

https://www.weforum.org/agenda/2018/12/social-media-is-casting-a-dark-shadow-over-migration/

https://blogrecherche.wp.imt.fr/en/2018/12/20/digital-technology-migrants-lives/

http://www.emersonkent.com/map_archive/world_map_2005_globaltion

https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/nternationalmigrationbulletins/migrationstatisticsquarterlyreport/february2019

https://new.abb.com/metals/digital

https://www.vardhamaninfotech.com/blog/business-digitization-tips/

https://www.cetrixcloudservices.com/blog/7-benefits-realized-through-digital-process-automation

Mark Latonero, PhD (Principal Investigator), Keith Hiatt, Antonella Napolitano, Giulia Clericetti, Melanie Penagos. Digital Identity in the Migration & Refugee Context: Italy Case Study, www.datasociety.net Page 13.