## Chapter 5 Digital Migration Infrastructures



**Carlotta Preiss** 

## 5.1 Introduction

Digitalisation has fundamentally shaped the way people migrate over the last years. On the one hand, refugees use their mobile phones for navigation, to contact smugglers and other refugees, for communication with their loved ones back home or in countries of destination. Facebook groups provide invaluable information for people on the move, while mobile money transfers from relatives abroad are often crucial to finance journeys. Sometimes, mobile phones even serve as lifelines between boats and rescue vessels in the Mediterranean, thereby preventing people from drowning. Thus, Gillespie et al. (2016) argue that for refugees seeking to reach Europe, digital infrastructures are as important as physical ones.

On the other hand, Information and Communication Technology (ICT) has influenced regular migration processes. Dating platforms facilitate marriage migration, companies and work agencies recruit workers online, and student mobility is often advertised and mediated through social media and online platforms.

Today, a whole digital ensemble of smaller and bigger actors, services and objects facilitates and supports migration processes. In this chapter, this digital ensemble will be conceptualised as *Digital Migration Infrastructures*, related to the Migration Infrastructures presented in the previous chapter. This chapter first introduces the concept of Digital Migration Infrastructures while exploring related approaches. Second, it provides an overview over the existing literature. Third, it identifies the remaining research gaps with regards to Digital Migration Infrastructures, before drawing a conclusion.

C. Preiss (🖂)

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German Federal Ministry for Economic Cooperation and Development, Berlin, Germany

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## 5.2 Conceptualisation

As elaborated in the previous chapter, studies in Migration Infrastructures in general seek to shed light on the often-overlooked processes between migrants' departure and their arrival asking *how* people migrate. Migration Infrastructures are defined as the physical, digital, commercial, governmental, and humanitarian infrastructures which support and mediate migration on a meso-level, sometimes provided by macro-level actors and influencing migration trajectories of individuals on the micro-level (also see Xiang & Lindquist, 2014). These include regular and irregular *actors* (such as agencies, smugglers, intermediaries and brokers) or *material infrastructures* (including airplanes, roads, trains, transit hubs and routes). One crucial part of the Migration Infrastructures are the Digital Migration Infrastructures. Digital Migration Infrastructures which facilitate migration processes. The key research question is: *How do digital technologies support and facilitate migration processes?* 

This digital ensemble includes actors, hardware, and software that facilitate or mediate migration. The list entails but is not limited to smart and basic mobile phones, battery charging stations, cyber cafés, shops that sell SIM cards along migration routes, social media, communication and navigation apps, informative webpages, blogs and vlogs, online information campaigns, telecommunication and money transfer companies, online travel agencies or online portals for flight, train and bus tickets as well as marriage migration platforms, online mediation of workers by recruitment agencies and online facilitation of student mobility. In short, Digital Migration Infrastructures play a crucial role in mediating regular and irregular forms of migration and facilitating forced displacement.

#### Digital Migration Infrastructures : How do digital technologies support and facilitate migration processes?

#### Hardware

- smart and basic mobile phones
- charging stations
- SIM cards
- computers and tablets
- computer rooms in refugee accommodations or camps
- cyber cafés
- shops selling
- hardware

#### Software

- social media, blogs, vlogs, websites, emails, SMS services, apps for communication and navigation
- marriage or dating platforms
- visa application platforms
- resettlement platforms
- work recruitment platforms
- online travel agencies
- · money transfer services
- WIFI hotspots

#### Actors

- telecommunication companies
- money transfer companies
- humanitarian actors
- advice agencies
- governments
- shop owners / hard ware providers
- cyber café owners etc.

Migration infrastructures are understood as infrastructures facilitating migration and enabling persons to move. It does not take those structures into account that prevent migration. Thus, digital surveillance and digitalised border control are not considered in this concept (see Dijstelbloem et al., 2011; Leurs, 2019). However, those apps and advertisements facilitating the return to one's home country can be part of the Migration Infrastructures. In this case, repatriation is understood as one form of (return) migration, although returning might not be voluntary or initially planned. As Migration Infrastructures are defined as organised structures, Digital Migration Infrastructures primarily encompass the overarching structure which enables virtual communication, and not the personal networks within these.

#### 5.3 Related Concepts

#### 5.3.1 Digital Migration Studies

Digital Migration Infrastructures are related to the Digital Migration Studies which seek to "understand the relation between migration and digital media technologies" (Leurs & Smets, 2018). Some authors have criticised that migration related issues are often not thought together with discourses on digital technologies although migrants and refugees are "'digital natives', early adopters and heavy users of digital technologies, not unlike their peers if not more as a result of their transnational connections" (Pozanesi & Leurs 2014, p. 4). Related to the Digital Migration Studies is Diminescu's concept of the Connected Migrant (2008), defined as "a migrant on the move who relies on alliances outside his own group of belonging without cutting his ties with the social network at home", using digital technologies to do so (ibid., p. 567). On the one hand, Digital Migration Studies analyse digitalisation related to governmental border control and migration management (Broeders, 2007; Dijstelbloem & Broeders, 2015; Vukov & Sheller, 2013). On the other hand, they explore the use of online information campaigns warning people not to leave their countries of origin (Brekke & Thorbjørnsrud, 2017; Oeppen, 2016; Schans & Optekamp, 2016). However, they also look at the use of digital technologies by refugees. While some of the literature is about the use of technologies after the arrival at the country of destination (see Alam & Imram, 2015; Gordano Peile 2014; Hiller & Franz, 2004; Kaufmann, 2018; Komito, 2011; Kutcher & Kress, 2018; Witteborn, 2015), another strand is concerned with what is here defined as Digital Migration Infrastructures, i.e. the use of digital technologies *during* migration processes, mostly en route or in transit. This branch of literature will be explored below.

### 5.3.2 Digital Passages

Another related concept is that of "digital passages" (Latonero & Kift, 2018) which focuses on digital technologies in forced migration. Digital passages consist of "infrastructures" (digital technologies used by corporations and governments) and "artefacts" (digital technologies used by refugees, human traffickers, and smugglers). Latonero and Kift argue that "the reliance on both infrastructure and artefacts affects the interplay of some of the major protagonists in this sociotechnical space: refugees, smugglers, corporations, and governments." (ibid., p. 3). Latonero and Kift's digital passages consist of social media services, free Wi-Fi spots in transit, SIM Cards, SIM card contractors, charging stations, GPS etc. The authors show how "accessing crucial information on the Internet depends on an entire infrastructure and economy of Wi-Fi hotspots, shops that sell SIM cards, or the physical offices of wire transfer services" (ibid., p. 3).

#### 5.3.3 Critical Approaches

Leurs and Smets (2018) add some warnings to the discourse and argue that digital "technologies can never be considered as inseparable from offline material, historical, socio-political contextual dynamics; there is a need to avoid the sensationalist exceptionalism surrounding the technological fetishisation of the smartphone carrying and selfie-taking refugees" (ibid., p. 8). Furthermore, they opt to move "beyond technophilia", for a "non-digital-media-centricness", arguing that researchers should still focus on social problems first before turning to digital technologies (ibid., p. 8). Twigt (2018) argues that digital technologies can help refugees in precarious situations to not give up—however, they cannot be the answer to prolonged legal and social insecurity (ibid, p. 9).

Besides this, some scholars stress the risks inherent to the use of digital technologies in relation to migration (see Ponzanesi & Leurs, 2014). On the one hand, digital divides play an important role, i.e. some migrants and refugees are unable to use ICT due to a lack of access and digital literacy. On the other hand, governments and private companies use digital technologies in order to control and track migrants and refugees. As Pozanesi and Leurs (2014) argue "digital connectedness does not come as a utopian alternative to histories of dislocation, rejection and expulsion". Thus, its advantages and disadvantages need to be thoroughly analysed without romanticising it.

#### 5.4 State of Knowledge

So far, literature related to Digital Migration Infrastructures remains rather fragmented. However, especially with regards to forced displacement it is rapidly growing. In the following, an overview of the state-of-the-art of research on Digital

Migration Infrastructures in forced displacement and some forms of regular migration will be given.

## 5.4.1 Digital Migration Infrastructures and Forced Displacement

The use of digital technologies during forced displacement has received relatively much attention with regards to movements from the Middle East to Europe. Studies reveal that the vast majority of people fleeing from the Middle East rely on digital technologies and that ICT fundamentally shape their trajectories (Alencar et al., 2018; Borkert et al., 2018; Dekker et al., 2018; Frouws et al., 2016; Gillespie et al., 2018). These publications show how digital technologies fulfil various needs during the journey, for instance, staying in touch with fellow travellers, with relatives and friends in countries of destination or with family and friends back home. Many contact smugglers or receive information on countries of destination, routes, and border crossings via smartphones. Generally, the smartphone represents an important device for planning and navigation, but also for documenting the journey or storing important documents. Sometimes, it is a useful tool for entertainment which relieves boredom and anxieties in the camps or during waiting periods during the journey. Some authors underline that ICT potentially give refugees more autonomy in organising their journeys and enable them to travel without depending on smugglers (Zijlstra & Liempt, 2017).

Relatively few researchers are concerned with the use of mobile phone by displaced persons on the African continent. Schaub (2011) explores refugees' use of mobile phones in the trans-Saharan space and argues that, among other factors, the rise in connectivity has made the region more "transitable". On the one hand, the mobile phone helps to make better use of existing infrastructures such as urban transit spaces. On the other hand, it is a way to receive support and information from geographically distant contacts. Relying on Collyer (2007), Schaub argues that fragmented journeys in the trans-Saharan space would not be possible without mobile phone communication.

Other studies specifically highlight the digital divide and the risk of receiving false information. Merisalo and Jauhiainen (2019) explore the digital divide among refugees travelling from different world regions to Europe and find that country of origin, age, and level of education influence if a person uses ICT. Borkert et al. (2018) find that most individuals using ICT on the way have a high level of digital literacy. However, they underline, that during their journeys, one main difficulty is to differentiate between true and false information. Dekker et al. (2018) distinguish different strategies of refugees to verify online information including checking the respective source, validating online information with their personal experience. Wall et al. (2017) explore the situation of Syrian refugees in the Zaatari refugee camp in

Jordan where refugees have to cope with what they refer to as "information precarity" defined not only as the lack of access to relevant information and the prevalence of irrelevant or false information, but also the inability to control one's own images and potential surveillance through the government of one's home country. Similarly, Latonero and Kift (2018) show how ICT are used not only by refugees but also by traffickers, corporations, and governments. They underline that it is difficult to say if digital technologies benefit or harm refugees as it exposes them to surveillance and control.

# 5.4.2 Digital Migration Infrastructures and Regular Forms of Migration

Comparatively less research has been conducted on Digital Migration Infrastructures and forms of regular migration such as labour migration and student mobility. The only noticeable exception is the role of digital technologies facilitating marriage migration, this has received at least some attention.

#### **Marriage Migration**

Some authors analyse the impact and functioning of online marriage agencies. Zabyelina (2009) provides an overview over different types of online marriage agencies advertising women from Eastern Europe, their level of professionalisation and their (lack of) efforts to prevent exploitation. She also analyses the pictures of the women and concludes that most agencies objectify women and turn the matchmaking into an online shopping experience (ibid., p. 97). The author argues that "without the technological means to make the industry globally reachable, easily accessible for payments, fast in the rendering of services, and confidential and highly visualised, there could never have been such a grand-scale business as international matchmaking" (ibid., pp. 90–1). Luehrmann's (2004) anthropological approach focuses on an online marriage agency in provincial Russia, which not only provides matchmaking but also services such as language classes and visa procedures. Similar to Zabyelina, she explores the ways the agency functions, e.g. that men mostly pay for being able to see further pictures, contacting the women, or making use of translation services. Tyldum and Tveit (2008) examine marriage migration of Thai and Russian women and Western men, mostly in the US and Norway. They demonstrate that, mostly, internet-based matching is reserved for educated or resourceful women. However, some agencies also offer access to computers, assistance in typing and writing or translating profile contents. Constable (2003) argues that online matchmaking is different to the former matchmaking through printed catalogues and letters sent by mail in that it is much faster and forces many women to go to specific places to access computers, including cyber cafés or friends' places.

Other authors focus on the representation of women on online platforms. Dai (2019) analyses the representation of women on an Asian online marriage migration platform. She problematises the idea of the "Asian exotic other", depicts the vulnerability of women on this platform but also stresses that they have agency and pursue their own interests as well as those of their families. Sahib et al. (2006) analyse "successful" profiles on a Russian online platform. Their findings suggest that the age of women does not play a role, however those living in bigger cities where significantly more successful in finding a husband as the agency organised trips to these places. This finding underlines the importance of physical encounters in matchmaking and shows the limits of online tools.

Three papers focus on the use of internet forums and email correspondence by women in Senegal, Cameroon, or the Philippines to find a future husband which gives them the possibility to migrate to Europe or the US. Johnson-Hanks' ethnography (2007) focuses on Cameroonian women spending their time in internet cafés where they receive and send emails, sometimes dictating the content to a typist as they lack the ability to use a computer themselves. Similarly, Venable's (2008) study on Senegalese women analyses the hope to find a partner online in order to be able to leave the Casamance region through online platforms. This hope stands in contrast to the fact that most women do not know any couple which resulted from online matchmaking. Finally, del Rosario's (2005) study portrays Filipino women searching for foreign spouses in cyber cafés. She shows that the ability to choose between different spouses online promotes the agency of women and reduces their dependency on offline social networks when searching for a spouse.

#### Labour Migration and Student Mobility

Only few publications focus on the role of digitalisation during migration processes related to labour migration and student mobility. Low (2020) analyses the Malaysian government's approach to phase out intermediaries and de-commercialise the recruitment of migrant workers. Part of their strategy is a digitalisation of the whole process including application, permit renewal and repatriation which avoids costs and reduces the risk of corruption. They thus imply the potential for tension between commercial and non-commercial services. Janta and Ladkin (2013) explore the role of the internet as a transnational platform for job searching and job advertising among Poles seeking to work in the UK's hospitality sector. Internet fora provide knowledge exchange where Polish employees act as recruitment agents for their employers. However, employees can also post their experiences regarding employers' failures to pay wages or cases of abuse. Thus, depending on how they are used, internet platforms can both attract or warn aspiring labour migrants working in favour or against the respective employer.

Relatively few authors look at the use of ICT for student mobility. Often, universities use the internet to give information, attract students, and help them organise their stay abroad. Gomes and Murphy (2003) and Bélanger et al. (2014) look at the online marketing of universities through websites, email, and social

media. Zinn and Johannsson (2015) explore different stages of mobile marketing for Higher Education including the introduction of an admitted student app with information about immigration, residence permits etc. during the applicant stage. Finally, Papagiannidis (2013) explores online taster courses for international students and argues that it can establish strong relationships between universities and applicants already during the recruitment process.

#### 5.5 Research Gaps and Conclusion

While much of the literature on Digital Migration Infrastructures and forced displacement focuses on movements from the Middle East to Europe, less is concerned with Latin America, Africa and Asia. Besides this, there are only few studies on ICT use in regular migration such as online recruitment of workers, spouses, or international students. Further research could explore how regular and irregular migration and forced displacement have actually changed in form and number due to the use of digital technologies. Another interesting question is if migration has become easier or more cumbersome with the increased digitalisation of migration processes, digitised border control, and the individual use of mobile phones and computers.

Migration processes are already today strongly influenced by digitalisation. Most likely, the impact will increase in coming years, as connectivity and hardware are becoming more affordable and widespread, and there are more and more potential clients being part of a growing middle class in many regions of the world. To keep pace with current developments of a digitised world and genuinely understand migration in the twenty-first century, it is crucial to explore the role digital connectivity plays in migration. This chapter has introduced Digital Migration Infrastructures and provided an overview over existing literature. By doing so, it sought to raise awareness for the strong impact of digital technologies on migration giving a point of departure for further research in the field.

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#### 5 Digital Migration Infrastructures

**Carlotta Preiss** is a senior policy advisor at the German Federal Ministry for Economic Cooperation and Development (BMZ). Previously, she worked as a researcher at the German Centre for Integration and Migration Research (DeZIM). She holds a Master of International Political Theory from the University of St Andrews, UK.

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