TEEMA-ARTIKKELI

DIGITALIZATION AND ADMINISTRATIVE BURDEN: CHALLENGES OF IMMIGRANT WOMEN IN DIGITALIZED FINNISH PUBLIC SERVICES

Migration, digitalization, and administrative burden shape access to public services. The situation becomes more challenging for immigrants who struggle to relocate to a new country of residence. This article examines the challenges immigrant women face in navigating digitalized public services, their coping mechanisms and available informal support, and the strategies that can help them overcome bureaucratic barriers. Based on 30 interviews with non-EU/EEA women in Helsinki and Turku, the findings indicate that lack of clear guidelines and language skills challenge immigrant women in navigating digitalized public services, making support groups an essential safety net in accessing these services.

Keywords: Digitalization; Administrative burden; immigrant women; Public Services; Finland

EVY SAPUTRI
Doctoral Researcher | University of Vaasa

DANYIL TRUS
College of Europe

Kuva: Adobestock.com.

Migration, digitalization, and administrative burden are the binding key factors in determining the availability of access to public services. The complex bureaucratic system often causes onerous experiences for individual citizens whenever they are dealing with public authorities. Financial costs, knowledge of the local language, and psychological burdens are the primary issues associated with migration and digitalization. The situation becomes more challenging for immigrants who struggle to relocate to a new country of residence. Although both immigrant men and women experienced challenges in integration in Finland, immigrant women are more prone to disadvantages (Finnish Institute of health and welfare 2024). The article addresses questions such as: What are the challenges to navigating the digitalized public services for immigrant women? Are there any coping mechanisms and informal support to overcome these issues? What are the strategies that can help immigrant women overcome the impact of bureaucratic interactions and costly interactions with the state whilst encouraging them to navigate administrative processes more effectively? We conducted 30 in-depth interviews, with non-EU / EEA migrant women with study or working permit based in Helsinki (n=15) and Turku (n=15) to examine their experiences of dealing with digitalized public services. Our findings indicate that two aspects challenge immigrant women in navigating digitalized public services, which are (1) the lack of clear guidelines and (2) language skills. Therefore, reliance on the support group has been a safety net during the application of public services.

Introduction

Digitalization of public service delivery is the response of an effort to improve the efficiency and quality of public services in addition to improving its cost-effectiveness for modern Western societies (Schou & Hjelholt 2018, 2019 as cited in Tangi et al. 2021). The public service frames digitalization as a set of enigmatic processes that are connected to the broader welfare state approach and citizens' social rights of the state (James & Whelan 2021). Correspondingly, emphasizing the importance of using information systems, ICT and digital data management is the government strategy to accelerate digitalizing public health and social welfare services (Hyppönen et al. 2018 as cited in Buchert et al. 2023).

In a recent digital performance comparison, Finland ranked first, followed by Denmark, the Netherlands, and Sweden (The European Commission's annual Digital Economy and Society Index 2022). Despite the government's efforts to promote the significance of digitalization on active citizens' participation in the procurement of services within the Social and Health Services Strategy 2020 and Strategy 2030 (STM 2014 as cited in Safarov 2023), the latest report by the Finnish Institute for Health and Welfare showed that 83 percent of the population reported using online public services on their own, but 79 percent argued that they had encountered some challenges when using them.

Finland maintains comprehensive legislation-based social rights, an extensive tax-financed public health system, as well as a social welfare service sector in the context of a Nordic welfare state (Christiansen & Markkola 2006). Since 2010, the Finnish government has underlined digitalization as an overarching goal across all policy sectors (Ministry of Finance 2020) and put into practice extensive digitalization projects in the public sector, including public health and social welfare services (Hyppönen et al. 2018 as cited in Buchert et al. 2023). Immigrant women in Finland, typically aged 25–66, represent a diverse group with varying education levels and migration histories (Kemppainen et al. 2023). A notable number of migrant women, who are highly skilled professionals despite having a high level of education, are outside working life (Larja 2020 as cited in Saastamoinen & Bärlund 2022). Meanwhile, some arrive with limited formal education and primarily engage in domestic or caregiving roles (Kemppainen et al 2023).

The lack of knowledge and ability to use digital services of an individual in a marginalized group does not support significant investments in user-friendliness (Gillingham 2015 as cited in Safarov 2023). Based on numerous scholarly investigations, non-citizen immigrants with limited legal status are excluded from the social protection framework as non-citizens' rights are apportioned according to their residency statuses (Könönen 2017 as cited in Safarov 2023). Furthermore, the impact of discriminatory actions by street-level bureaucrats can cause immigrants to presume the notion that they are not entitled to public services (Ratzmann 2021 as cited in Safarov 2023). Other significant factors that contribute to a negative influence on immigrants' ability to reach public services are inadequate language proficiency and welfare system knowledge (Holzinger 2019; Safarov 2021, 2023). The importance of our study lies in the growing intersection of challenges related to the specific needs of immigrant women especially in public services, where digitalization is hindered

by the limited ability of a marginalized group to utilize the digitalized administrative framework. When welfare state bureaucrats try to improve the efficiency and accessibility of their services, this may have the contrary effect if there is no tailored support. Thus, services can become less accessible to immigrant women. The article aims to tackle the following questions: What are the challenges to navigating the digitalized public services for immigrant women? Are there any coping mechanisms and informal support to overcome these issues? What are the strategies that can help immigrant women overcome the impact of bureaucratic interactions and costly interactions with the state whilst encouraging them to navigate administrative processes more effectively?

In our conceptual and theoretical framework, we outline the key concepts and theories guiding our study based on literature. The following sections are our research design and methodology, and findings on the type of challenges that immigrant women in Finland encounter when using digitalized public services and discuss coping mechanisms used to overcome bureaucratic challenges. In the closing section, we suggested strategies that can help immigrant women mitigate the negative impact of these interactions and summarize the key findings of this research, identifying future directions, and discussing some limitations.

Conceptual and Theoretical Framework

Recent efforts have refined the understanding of administrative burden, emphasizing learning costs, compliance cost, and psychological tolls associated with benefit systems. Waiting in lines, communication failures, and administrative errors contribute to this burden, impacting both material and psychological well-being (Herd & Moynihan 2018). Administrative burdens further complicate access to services for immigrants, necessitating proficiency in language, computer skills, bureaucratic literacy, and understanding of public organizations and welfare systems (Finn & Goodship 2014 as cited in Heinrich 2016). Administrative burdens are a common feature of public service systems. They exist because public service systems are often designed around institutional needs and regulatory goals rather than user accessibility. In many cases, governments implement detailed rules and procedures to maintain control, manage risk, or ensure that only eligible individuals receive services. These systems may prioritize efficiency, legal accountability, or cost-saving measures over individual experience. As a result, complexity becomes built into the process, and individuals, especially those unfamiliar with the system, are expected to take responsibility for understanding and navigating it on their own. Administrative burdens then are not always accidental; they can also be the result of choices made during policy design that unintentionally or sometimes deliberately make access more difficult for certain groups (Herd & Moynihan 2018).

Administrative burdens pose a significant barrier for immigrants navigating access to public services, as they must navigate challenges from resources that were needed yet often lacking. The requirement of language proficiency, computer skills, bureaucratic literacy, structural understanding of public organizations, and welfare system navigation are mandatory prerequisites. In the non-profit sector, access to digital public services is predominantly facilitated through social networks and organizations. However, users' service needs often remain unmet, even after receiving assistance. Consequently, this situation highlights the need for further studies in third-sector organizations and other approaches to provide support for digital services (Safarov 2023).

Although the causes and consequences of administrative burden are well understood, little effort has been made to pay attention to how targeted policy beneficiaries react to or manage onerous policies and practices (Masood & Nisar 2021). State-led interventions in digital skills training are insufficient to bridge the access gap; instead, individualized support and assistance in native languages are needed to ensure equal access for all (Moynihan et al. 2015 as cited in Baekgaard & Tankink 2023). In addition, as the digital public service demands reflected the diversity of consumers, therefore when delivering public services online, the prerequisite of immigrant communities must be considered (Safarov 2023).

The Lack of Administrative Literacy

Studies show that although migrant women may have prior digital exposure, many encounter technology only upon arrival in Finland (Valonen 2021 as cited in Kemppainen et al. 2023). The issue of employing new technologies in the realm of public services extends to broader scopes of social adaptability. Often, the assumption is that with the implementation and continual utilization of new technologies, individuals will simply acquiesce and become accustomed to a new paradigm of daily life, in which previous tools either cease to exist or are greatly minimized (Berker et al 2006). However, research has demonstrated the selectivity of educated urban women in their approach to utilizing new technologies, which is based simply on an individual's preference for a particular function or technology (Matassi et al. 2019).

From applying for social benefits to managing health records, digital infrastructures often assume a level of familiarity with country-specific knowledge. This structural disadvantage further marginalizes immigrant women, who may already be navigating complex bureaucratic systems and face administrative errors.

From applying for social benefits to managing health records, digital infrastructures often assume a level of familiarity with country-specific knowledge. This structural disadvantage further marginalizes immigrant women, who may already be navigating complex bureaucratic systems and face administrative errors (Breit & Salomon 2015). Beyond language and technological barriers, immigrant women face institutional complexities when accessing digital services (Valonen 2021 as cited in Kemppainen et al. 2023).

Compliance Cost of E-Bureaucracy

Female immigrants face multifaceted challenges within e-bureaucracy in Finland, such as bureaucratic barriers, identity verification challenges, stringent requirements imposed by financial institutions, and the ensuing social and economic implications. The first significant impediment arises in the form of E-IDs (electronic identification), essential for accessing services like creating bank accounts (Eaton et al. 2018). The process of obtaining an online banking ID further underscores the complexity of identity verification. The requirement for a Finnish personal identity number (PIN), issued upon registration in the Population Information System or upon receiving a residence permit, poses challenges for immigrants without ID cards or passports. Asylum seekers face additional hurdles, as the absence of a travel document can lead to the denial of a Finnish PIN, exacerbating their already precarious situation (Ustek-Spilda & Alastalo 2020). Banks compound these challenges by imposing stringent criteria for granting online banking details. Proof of regular income, social benefits reception are prerequisites that, as highlighted in reports, disproportionately affect refugees, particularly women. These requirements not only hinder the integration of immigrants into society but also maintain a lower socio-economic position, increasing the risk of social exclusion, especially for women. The intertwined nature of these challenges creates a socio-technical problem in terms of immigrant integration (Digi arkeen -neuvottelukunta 2019).

Prioritizing the empowerment of immigrant women through comprehensive support systems is paramount in this endeavor. This entails implementing targeted language education programs, culturally sensitive digital literacy initiatives, and facilitating streamlined access to digital services. Additionally, efforts to alleviate administrative burdens and simplify processes can significantly alleviate the strain experienced by vulnerable populations (Leguina & Downey 2021). In achieving this goal, community-based organizations and non-governmental entities emerge as pivotal actors (Thomas & Parayil 2008). Through their concerted efforts, targeted language education programs, and culturally sensitive digital literacy initiatives can be effectively implemented. By nurturing confidence and agency among immigrant women, these initiatives empower them to navigate the digital landscape with resilience and efficacy, thereby facilitating their integration journey (van Deursen et al. 2021).

Research Design and Methodology

The primary data collection of this study was done by conducting semi-structured interviews

with immigrant women non-EU/EEA with study or working permit based in Helsinki and Turku. To ensure a thorough grasp of the topic matter and to reach saturation, 30 interviews with immigrant women were conducted in Helsinki (n=15) and in Turku (n=15). The reason we chose Helsinki and Turku were based on several considerations. First, they are among the largest cities in Finland based on the number of inhabitants. Second, they have diverse immigrant populations. Third, both cities have a higher permit approval (Finnish Immigration Service 2024), therefore offering a unique opportunity to evaluate immigrant women's experiences of applying for residence permits.

We interviewed non-EU/EEA immigrant women as bureaucratic requirements tend to be higher for non-Western citizens with study and working permit, and who have lived in Finland for at least one year. We examine their experiences of dealing with digitalized public services, focusing on Immigration services, and public healthcare. Thus, the questions that we address are related to their experience utilizing those services. The interviews were conducted in English via Zoom with open-ended questions lasting about 30 minutes per session. Furthermore, we ensured that participants were well-informed about data privacy by providing them with a consent form and a privacy notice prior to the interviews.

Limitations and Future Directions

Our research interviews focus only on non-EU/EEA immigrants with study or working permit as it is challenging to arrange encounters with other immigrant groups, therefore they do not represent immigrant women in Finland as a whole. Our variable reflects only the perspective of these groups of immigrant women and thus captures specific socio-demographic profiles such as education levels, and migration pathways. Future studies should consider a mixed-methods approach, utilizing quantitative data as well as qualitative approaches of various marginalized groups with challenges related to digitalization in public services.

Findings

Our findings suggest that two aspects challenge immigrant women in navigating digitalized immigration and public healthcare services. These are (1) the lack of clear guidelines and (2) language skills. At the same time, coping mechanisms and informal support systems exist and provide support in the process of applying for public services.

These statements suggest a systemic lack of user-centered design in digital platforms for public services, where essential procedures and resources are not clearly outlined for newcomers.

Immigrant women rely on their support group whenever they encounter difficulties.

Lack of Clear Guidelines

Many respondents emphasized the absence of coherent instructions or structured guidance when accessing digitalized public services for the first time upon arrival in Finland. This lack of transparency and step-by-step support caused confusion and heightened anxiety as the following statements show.

> Where should I search for information and everything? I have been doing it by myself. So, the challenge was, where should I start? I didn't know about any websites or anything. (Respondent 1)

> If they had some kind of clear guideline, that would be helpful. But I did everything based on what others told me. There's no central place to get this kind of information. It was very challenging. (Respondent 2)

> Nobody prepares you or gives you a list of steps you need to take. You only find out about things when you encounter a problem. (Respondent 3)

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Language Barriers

Language was consistently identified as a major barrier. Even after years of residence in Finland, many participants struggled with the limited availability of English-language resources on official platforms, especially when dealing with complex bureaucratic documents:

> There is limited information in English when it comes to public services. You must use Google Translate and guess. (Respondent 4)

> Even when I go to the office, I use my phone to translate everything and try to understand what is going on. (Respondent 5)

> Tax and Migri [Finnish Immigration Services] decisions come in Finnish. It's difficult to translate those accurately. I always must ask someone to help me. (Respondent 6)

> The language can be a huge problem because many of us don't understand Finnish. (Respondent 7)

The dependency on unofficial tools such as Google Translate and peer assistance increases the risk of misinterpretation and administrative errors, reinforcing structural vulnerability.

Peer Networks and Social Media Support

Faced with these structural barriers, immigrant women have developed a range of informal coping strategies. The most significant of these is reliance on personal and community-based social networks, both offline and online. Participants frequently mentioned turning to friends, family, colleagues, or online communities for advice and step-by-step guidance through administrative processes:

> Most of the time, I'm not aware of how processes work. I learned from other immigrants or friends. (Respondent 8)

> To understand administrative processes like taxes, I had to consult a colleague from my workplace. (Respondent 9)

> Sometimes you ask people who've already done it before. Just to confirm you're doing it right. (Respondent 10)

> There is a social media group created by our community where we exchange information and help each other. (Respondent 11)

> When I came to university, they gave us all the information we needed in orientation. That helped a lot. (Respondent 12)

The analysis of these quotations reveals several crucial patterns. First, immigrant women actively seek guidance from peers who have previously navigated similar challenges, indicating that experiential knowledge is highly valued and, in many cases, perceived as more reliable than official instructions. Second, both in-person networks and digital networks play a pivotal role in providing practical, step-by-step guidance through complex administrative processes. Third, the reliance on informal networks highlights significant gaps in formal public services: official information and

digital platforms are often insufficient, unclear, or difficult to access, thereby necessitating recourse to personal networks for support. Moreover, these informal networks offer not only practical assistance but also emotional reassurance and a sense of community, fostering greater confidence among women in navigating bureaucratic procedures.

Discussion & Conclusion

Previous studies show that while immigrant women could utilize interpreters in face-to-face interactions, there was no digital or phone-based language support available in languages other than Finnish and Swedish. Consequently, participants often relied on their social networks to surmount service-related challenges. These networks served as invaluable reservoirs of information regarding digital healthcare services and assistance with online form completion. Additionally, relatives and friends played pivotal roles in facilitating translation or interpretation during public interactions, thereby mediating access to public services (Valonen 2021 as cited in Kemppainen et al. 2023).

Digitalization can lead to the rise of people's dependency on others, rather than removing barriers (Buchert et al. 2023). Immigrant women actively developed informal coping strategies, often outside of institutional structures. These included turning to family, friends, and members of their ethnic or cultural communities for guidance and assistance with form-filling, translations, or explanations of procedures. Social media platforms and online community groups also served as key resources for shared learning and troubleshooting. Furthermore, some participants received help through structured programs in workplaces or academic institutions, particularly universities that offered orientation sessions or multilingual materials. This reliance on co-ethnic and social networks is not unique to our participants but reflects a broader pattern found in migration research globally. Studies consistently highlight how migrants turn to their own communities for social, linguistic, and bureaucratic support, particularly when institutional assistance is limited (Ryan 2011). Such practices are widely observed among diverse immigrant groups and even among Finns living abroad. Our findings therefore confirm this broader phenomenon while showing how it manifests in migration and public healthcare services in Finland. However, while these forms of peer-to-peer and grassroots support helped bridge immediate gaps, they also underscore the failures of institutional design. Relying on informal networks is not a long-term or equitable solution. It shifts responsibility from public institutions to individuals and communities, reinforcing inequality and dependence rather than fostering autonomy and inclusion.

In moving towards solutions, a holistic approach is imperative. Policymakers and stakeholders must consider implementing measures to streamline bureaucratic processes, relaxing stringent requirements that disproportionately affect vulnerable populations. Additionally, targeted language acquisition and employment programs, coupled with anti-discrimination initiatives, can address the socio-economic barriers, fostering a more inclusive environment. By understanding and addressing each layer of this complex issue, a smoother integration process can be realized, ultimately benefiting both immigrants and the host society.

Administrative burden is an onerous experience of individuals when interacting with the state which then leads to three types of costs: learning cost, psychological cost, and compliance cost (Moynihan et al. 2015). Immigrant women experienced multiple, interconnected barriers when interacting with digital public services. The lack of clear, step-by-step instructions emerged as a major source of confusion. Many participants reported feeling lost, uncertain about procedures, and unaware of where to begin when trying to access basic services. Additionally, language barriers remain a central issue. Despite living in Finland for several years, many women still lacked the Finnish or Swedish proficiency which are required to understand official documents or websites (learning cost). English resources were often limited or missing, forcing women to rely on Google Translate or informal help. The Finnish digital public service infrastructure often assumes prior knowledge of how state systems work, knowledge that immigrants frequently do not have. This increased the risk of errors and deepened feelings of insecurity (psychological cost). Even when women possessed digital skills, structural and bureaucratic challenges related to system design, service navigation, and rigid institutional requirements complicated their access (compliance cost).

Coping mechanisms which rely on personal and community-based social networks, both offline and online, have been a strategy in overcoming the challenge of bureaucracy requirement. In practice, the digitalization process tends to favor native users while marginalizing those who are unfamiliar with the system's norms, languages, or expectations.

References

Airola, Aino & Rasi, Pauliina (2020). Domestication of a robotic medication-dispensing service among older people in Finnish Lapland. *Human Technology*, 16 (2), 117–138. https://doi.org/10.17011/ht/urn.202008245639

Anderson, Sasha & Daniel, Marguerite (2020). Refugees and social media in a digital society: How young refugees are using social media and the capabilities it offers in their lives in Norway. *The Journal of Community Informatics*, 16, 26–44. https://doi.org/10.15353/joci.v16i0.3473

Bækgaard, Martin & Tankink, Tara (2023). Administrative burden: Untangling a bowl of conceptual spaghetti. *SSRN*. https://doi.org/10.2139/ssrn.4318568

Breit, Eric & Salomon, Robert (2015). Making the technological transition – citizen's encounters with digital pension services. *Social Policy & Administration,* 49 (3), 299–315. https://doi.org/10.1111/spol.12093

Berker, Thomas, Hartmann, Maren, Punie, Yves & Ward, Katie. J. (eds.) (2006). *Domestication of media and technology.* Maidenhead: Open University Press.

Buchert, Ulla, Kemppainen, Laura, Olakivi, Antero, Wrede, Sirpa & Kouvonen, Anne (2023). Is digitalisation of public health and social welfare services reinforcing social exclusion? The case of Russian-speaking older immigrants in Finland. *Critical Social Policy,* 43 (3), 375–400. https://doi.org/10.1177/02610183221105035

Digi arkeen -neuvottelukunta (2019). *Digitaalinen Suomi – Yhdenvertainen kaikille: Digi arkeen -neuvottelunnan toimintakertomus*. Publications of the Ministry of Finance 2019:23.

Eaton, Ben, Hedman, Jonas & Medaglia, Rony (2018). Three different ways to skin a cat: financialization in the emergence of national e-ID solutions. *Journal of Information Technology,* 33 (1), 70–83. https://doi.org/10.1057/s41265-017-0036-8

European Commission. (2022). *Digital economy and society index (DESI)* 2022. Publications Office of the European Union. https://digital-strategy.ec.europa.eu/en/library/digital-economy-and-society-index-desi-2022

Finnish Institute for Health and Welfare. (2024). Gender equality. Finnish Institute for Health and Welfare. https://thl.fi/en/topics/migration-and-cultural-diversity/integration-and-inclusion/gender-equality

Herd, Pamela & Moynihan, Donald P. (2018). *Administrative Burden: Policymaking by Other Means*. New York, NY: Russell Sage Foundation. https://doi.org/10.7758/9781610448789

Heinrich, Carolyn J. (2016). The bite of administrative burden: A theoretical and empirical investigation. J*ournal of Public Administration Research and Theory*, 26 (3), 403–420. https://doi.org/10.1093/jopart/muv034

Holler, Roni & Tarshish, Noam (2022). Administrative Burden in Citizen-State Encounters: The Role of Waiting, Communication Breakdowns and Administrative Errors. *Social Policy and Society*, 23 (3), 593–610. https://doi.org/10.1017/S1474746422000355

James, Alexandra & Whelan, Andrew (2021). 'Ethical' artificial intelligence in the welfare state: Discourse and discrepancy in Australian social services. *Critical Social Policy*, 42 (1), 22–42. https://doi.org/10.1177/0261018320985463

Kemppainen, Laura, Kemppainen, Teemu, Kouvonen, Anne, Shin, Young-Kyu, Lilja, Eero, Vehko, Tuulikki & Kuusio, Hannamaria (2023). Electronic identification (e-ID) as a socio-technical system moderating migrants' access to essential public services: The case of Finland. *Government Information Quarterly*, 40 (4), Article 101839. https://doi.org/10.1016/j.giq.2023.101839

Leguina, Adrain & Downey, John (2021). Getting things done: Inequalities, internet use and everyday life. *New Media & Society*, 23 (7), 1824–1849. https://doi.org/10.1177/14614448211015979

Markkola, P., & Christiansen, N. F. (2006). Introduction. In N. F. Christiansen (Ed.), *The Nordic Model of Welfare. A Historical Reappraisal* (1 ed., pp. 9-29). Museum Tusculanum Press.

Masood, Ayesha & Nisar, Muhammad A. (2021). Administrative capital and citizens' responses to administrative burden. *Journal of Public Administration Research and Theory*, 31 (1), 56–72. https://doi.org/10.1093/jopart/muaa031

Matassi, Mora, Boczkowski, Pablo J. & Mitchelstein, Eugenia (2019). Domesticating WhatsApp: Family, friends, work, and study in everyday communication. *New Media & Society*, 21 (10), 2183– 2200. https://doi.org/10.1177/1461444819841890

Moynihan, Donald, Herd, Pamela & Harvey, Hope (2015). Administrative burden: Learning, psychological, and compliance costs in citizen-state interactions. *Journal of Public Administration Research and Theory*, 25 (1), 43–69. https://doi.org/10.1093/jopart/muu009

Ministry of Finance. (2020, February 25). *Programme for the promotion of digitalisation. Finnish Government*. https://vm.fi/etusivu

Pittaway, Eileen & Van Genderen Stort, Astrid (2011). *Protectors, providers, survivors: A dialogue with refugee women in Finland*. United Nations High Commissioner for Refugees. Available at: https://www.unhcr.org/4ec3d7606.pdf. Accessed 18.9.2025.

Ryan, Louise (2011). Migrants' social networks and weak ties: Accessing resources and constructing relationships post migration. *The Sociological Review*, 59 (4), 707–724. https://doi.org/10.1111/j.1467-954X.2011.02030.x

Safarov, Nuriiar (2023). Administrative Literacy in the Digital Welfare State: Immigrants Navigating Access to Public Services in Finland. *Social Policy and Society*, 23 (4), 908–921. doi:10.1017/S1474746422000719

Saastamoinen, Jutta & Bärlund, Rafael. (2022). I*ntegration of migrant women: National report of Finland* [Maahanmuuttajanaisten kotoutuminen: Suomen kansallinen raportti]. EMN Study 2022. Helsinki: EMN Finland.

Tangi, Luca, Janssen, Marijn, Benedetti, Michele & Noci, Giuliano (2021). Digital government transformation: A structural equation modelling analysis of driving and impeding factors. International *Journal of Information Management,* 60, Article 102356. https://doi.org/10.1016/j.ijinfomgt.2021.102356

Thomas, Jayan. J. & Parayil, Govindan (2008). Bridging the social and digital divides in Andhra Pradesh and Kerala: A capabilities approach. Development and Change, 39 (3), 409–435. https://doi.org/10.1111/j.1467-7660.2008.00486.x

Ustek-Spilda, Funda & Alastalo, Marja (2020). Software-sorted exclusion of asylum seekers in Norway and Finland. *Global Perspectives*, 1(1), 12978. https://doi.org/10.1525/gp.2020.12978

van Deursen, Alexander. J. A. M., Van der Zeeuw, Alex, de Boer, Pia, Jansen, Giedo & van Rompay, Thomas (2021). Digital inequalities in the internet of things: Differences in attitudes, material access, skills, and usage. *Information, Communication & Society,* 24 (2), 258–276. https://doi.org/10.1080/1369118X.2019.1646777