Radboud Universiteit Nijmegen

Between Digital Lifelines and Structural Barriers: Filipina Migrants' Social Networks and Socioeconomic Integration in the Netherlands

Master's Thesis: Global Communication and Diversity (LET-CnIWM402)

Student: Arlene Obmerga

Student Number: s1122209

Email: arlene.obmerga@ru.nl

Thesis Supervisor: Dr. Noemi Mena Montes

Second Assessor: Dr. Marianne Starren

Date submitted: 15 August 2025

Word count: 11,920

Acknowledgements

I wish to express my heartfelt gratitude to all my participants, the Filipina migrants; NGOs such as MIGRANTE-Amsterdam, Filipino Migrants in Solidarity (FILMIS), *Stichting* Mano, The Door Project; and municipal and government-affiliated representatives, such as Alia Achour, Anouk van Rooijen, and other participants who wished to remain anonymous, for generously sharing their time, experiences, and invaluable insights, which have provided the foundation and strength for this study. I am also grateful to my thesis supervisor for her support, guidance, and assistance throughout this research.

Abstract

This study examines how Filipina migrants in the Netherlands, across varying legal statuses and digital literacy levels, navigate digital tools and social media platforms to access employment opportunities. The research applies an intersectional framework grounded in digital inequality, legal precarity, and gendered labor, drawn from 20 semi-structured interviews with migrant women and institutional representatives. Thematic analysis reveals that while platforms like Facebook and WhatsApp play a central role in job searching and informal economic participation, unfamiliarity with institutional digital literacy programs, language barriers, and structural conditions (i.e., Dutch Linking Act) that reinforce legal and information precarity hinder access to formal services. Institutional digital literacy programs do not align with the lived realities of migrant women. The study finds that both digital resilience tactics and information precarity shape these women's experiences. It concludes by highlighting the need for culturally responsive, legally inclusive digital literacy programs that address migrants' specific socioeconomic challenges in highly digitalized societies like the Netherlands.

Introduction

Global migration has become an integral part of the modern world, with an increasing number of individuals crossing international borders (Cerrutti, 2009; Chimienti & Solomos, 2011; Encinas et al., 2023; Franck & Spehar, 2010; IOM, 2013). Migration plays a significant role in shaping the social, economic, and political dynamics of both the migrants' home countries and their host countries. In recent years, there has been a marked increase in international migration of women or the feminization of migration, signifying their growing autonomy as workers and significant contributors to household incomes (Encinas et al., 2023; IOM, 2013; UN-Women, 2015).

Women on the Move: Feminization of Labor Migration

The Philippines stands out as a major country exporting labor, with a substantial portion of its population seeking employment opportunities abroad (UN-Women, 2015). For decades, overseas employment has served as a crucial avenue for many Filipinos to improve their socioeconomic circumstances (IOM, 2013). Several factors, such as persistent unemployment and the prospect of better economic opportunities in foreign labor markets, contribute to this trend (Encinas et al., 2023; Franck & Spehar, 2010; IOM, 2013; UN-Women, 2015). From April to September 2023 alone, the Philippines recorded an estimated 2.16 million Filipinos working overseas, nearly 56 percent of whom were women (Philippine Statistics Authority, 2024). Experts believe that Filipino women (or Filipinas) actively participate in international labor migration because of a need to support their families and escape economic hardship at home (Encinas et al., 2023; Mohyuddin, 2017). A well-established system of overseas employment facilitates this migration and presents various challenges and complexities (IOM, 2013; UN-Women, 2015). The increasing autonomy of these women migrants marks a shift from earlier patterns when women primarily migrated as dependents (Encinas et al., 2023). Their remittances have become a vital component of the Philippine economy, highlighting their crucial role as economic providers (Encinas et al., 2023; UN-Women, 2015). However, this pursuit of economic betterment is often interconnected to social costs and vulnerabilities that need careful examination (IOM, 2013).

Rise of Digital Technologies and the Digital Divide

Alongside the changing dynamics of global migration over the past few decades, the rapid advancement of digital technologies and the internet have transformed many aspects of human interaction and social structures. Digital tools have become increasingly integrated

into the lives of migrants, influencing how they maintain connections with their home countries, access information about their destinations, and manage various aspects of their settlement and integration processes (Alencar, 2017).

Digital literacy has become an essential skill for economic and social participation in many societies. The ability to effectively use digital technologies is often a prerequisite for accessing employment opportunities, essential services, and crucial information. This scenario is particularly true in highly digitalized host countries where online platforms are frequently used for job searching, accessing government resources, and engaging in social interactions.

However, access to and proficiency in digital technologies are not evenly distributed across populations, leading to a digital divide (Antonio & Tuffley, 2014; Lythreatis et al., 2022; Schroeder, 2017; van Dijk, 2002; van Deursen & van Dijk, 2019). This divide can exacerbate existing social and economic inequalities, potentially marginalizing individuals and groups with limited digital access or skills. Factors such as socioeconomic status, educational attainment, age, and geographical location can significantly influence an individual's position within this digital divide. For migrants, particularly those in precarious or difficult situations, this divide can create additional barriers to integration and economic advancement (Albrecht et al., 2021; Alencar, 2017; Hennebry & Petrozziello, 2019). For these reasons, understanding and addressing the digital divide is crucial for ensuring equitable opportunities. The impact of this divide extends to cultural integration, as seen in the process of acculturation.

The process of adapting to a new culture, known as acculturation, involves individuals changing their cultural behaviors, values, and identities through prolonged contact with a different culture (Ward & Geeraert, 2016). This adaptation, according to experts, influences the individuals' mental and social well-being. They manage the stresses of acculturation by developing coping strategies and adopting, maintaining, or modifying their cultural behaviors in relation to both their home and host cultures. The surrounding environment, including the degree of cultural similarity, plays a significant role in this process. Personal strengths, such as the ability to understand and adapt to different cultures, are also crucial. In this context, digital literacy becomes key for acculturating individuals to engage with their host culture, enabling them to learn about the new culture and language through online resources, access

essential information and services in their new environment, and stay connected with their home culture.

In addition, the concept of social capital highlights the benefits individuals gain from their social connections, including access to information, support, and opportunities (Warschauer, 2003). Social capital, according to Warschauer (2003), differentiates between strong connections within close groups, which provide emotional support, and weaker connections across diverse groups, which offer access to new resources. These social networks serve as channels through which these resources flow, enabling individuals to access support and information necessary for adapting to new environments and integrating into society. Digital literacy is essential in this context, as it allows migrants to create and maintain important online social networks, influencing their access to the social capital needed for acculturation and social inclusion. Understanding the role of digital literacy in facilitating acculturation and building social capital is particularly important when examining the experiences of migrants, especially those with irregular status, whose legal and social constraints can significantly shape the ways they access and navigate digital resources.

Irregular Migration and Digital Navigation

Irregular migration, characterized by the lack of authorization to enter or remain in a host country, presents a distinct set of challenges for migrants (Franck & Spehar, 2010; IOM, 2013; Siruno et al., 2024; UN Women, 2015). Irregular migrants often face limited access to formal employment, social services, and legal protections because of their undocumented status (Cerrutti, 2009; Franck & Spehar, 2010; IOM, 2013; Marchetti, 2016; Siruno et al., 2024; Siruno & Siegel, 2023; UN-Women, 2015). These fragile conditions can lead to job insecurity, potential exploitation, and increased reliance on informal networks and resources (Franck & Spehar, 2010; Siruno et al., 2024). In such circumstances, digital tools can offer crucial avenues for irregular migrants to access information, maintain social support networks, and potentially seek employment opportunities within the informal economy (Alencar, 2017; Alencar et al., 2019; Bilecen & Seibel, 2021; IOM, 2013; Schroeder, 2017).

While some studies have examined the use of digital technologies by migrants in general or specific migrant groups like refugees, a notable research gap exists concerning the specific ways Filipina migrants access and use digital technologies, particularly in the employment-seeking context. Existing literature often lacks detailed insights into their digital

practices, the platforms they use, and the challenges and opportunities they encounter in this process.

This study recognizes the importance of an intersectional approach, considering how gender, migration status, and digital literacy intersect to shape the experiences of Filipina migrants. Their experiences could be influenced by gendered norms and expectations, the constraints of their legal or irregular status, and their varying levels of digital skills. Understanding these intersecting factors is essential to gaining insights into their strategies in using digital tools and their efforts to secure livelihoods in their host country. Investigating their use of digital tools can provide insights into their resilience and agency despite legal or social challenges (Alencar, 2017; Alencar et al., 2019; Schroeder, 2017). Also, examining their reliance on digital networks can reveal important aspects of their social capital and support systems in the absence of formal channels, particularly among irregular migrants (Alencar, 2017; Alencar et al., 2019; Schroeder, 2017; Warschauer, 2003). With these considerations, social media shows potential as a critical digital space where Filipina migrants seek employment opportunities, maintain networks, and manage the risks associated with informal labor markets for irregular migrants.

Social Media and Employment Access for Migrants

Social media platforms have become increasingly significant tools for migrants, serving as vital channels for networking, maintaining transnational ties, and seeking employment (Alencar, 2017; Alencar et al., 2019; Bilecen & Seibel, 2021; IOM, 2013; Re-Starter & Erasmus University Rotterdam, 2025; Schroeder, 2017). These platforms offer various affordances, including relative anonymity, ease of information sharing, job searching features, and the ability to connect with diverse communities and individuals. For irregular migrants who may face barriers to accessing formal job markets, social media can provide access to information about informal job openings and connections with potential employers or intermediaries operating within the informal economy (Bilecen & Seibel, 2021).

The nature of social media allows for the creation and maintenance of both strong ties (family and close friends) and weak ties (acquaintances and more distant connections) (Bilecen & Seibel, 2021). Weak ties can be valuable sources of novel information, including job leads, which might not be accessible through closer networks. For migrants, these online networks can extend beyond geographical boundaries, connecting them with members of their diaspora community who may have information about available work or support

systems in the host country (Bilecen & Seibel, 2021; Kindler et al., 2015; Siruno & Siegel, 2023; Warschauer, 2003).

However, the broader use of social media for employment may also have risks. The informal nature of many online job postings can expose individuals to potential exploitation and precarious working conditions. Furthermore, concerns about privacy and data security are particularly critical for those with irregular status (Hennebry & Petrozziello, 2019; Re-Starter & Erasmus University Rotterdam, 2025; UN-Women, 2015). Understanding how Filipina migrants manage these opportunities and risks within the digital environment is a key focus of this research. These dynamics highlight the importance of examining how such digital practices are shaped by specific national contexts, in this case, the Netherlands, explored in the following subsection.

Contextualizing the Study in the Netherlands

The Netherlands provides a pertinent context for this study, as Filipinos constitute one of the largest groups of irregular migrants residing in the country (Siruno et al., 2024; Siruno & Siegel, 2023). These individuals often find employment in sectors like domestic work, caused by demand and existing social networks. The Dutch labor market, while offering opportunities, also presents barriers to employment for irregular migrants because of their legal status (Marchetti, 2016; Siruno et al., 2024; Siruno & Siegel, 2023). They often face competition for low-skilled jobs and may be excluded from sectors requiring formal documentation or specific qualifications.

The Netherlands, being a digitally advanced society, values digital literacy for social and economic inclusion (Alencar, 2017; Bilecen & Seibel, 2021; European Commission, 2024; van Deursen & van Dijk, 2019; van Dijk, 2002). The increasing reliance on digital platforms for various aspects of life requires a certain level of digital engagement for all residents, including migrants (Alencar, 2017; Bilecen & Seibel, 2021; Governance of Migrant Integration in the Netherlands | European Website on Integration, 2023). Understanding how Filipina migrants use digital tools to overcome employment barriers and navigate the labor market is, therefore, a crucial area of investigation. Their strategies and experiences, especially as shaped by their legal status, can offer valuable insights into the role of technology in the lives of migrant populations within a developed, digitally advanced nation.

Research Gap and Research Question

As highlighted above, there is a significant research gap concerning the specific digital employment strategies of Filipina migrants in countries like the Netherlands. While broader studies exist on migration, gender, and digital technology, the intersection of these factors within the context of Filipina migrants with different legal statuses remains largely under-researched. Understanding how this group uses digital tools and social media networks to access employment opportunities is crucial, considering their differing legal circumstances and potential vulnerabilities. This research aims to address this gap by focusing specifically on their lived experiences and digital practices in the Dutch context.

To fill this gap in the existing literature, this study poses the following research question:

How do Filipina migrants in the Netherlands navigate digital tools to access employment opportunities, and what role do social media networks play in this process?

This overarching question is addressed through the following sub-questions (SQ) to examine the different facets of their digital engagement and employment-seeking activities:

1. *How do Filipina migrants with varying digital literacy levels use social media to overcome socioeconomic challenges (i.e., job searching, achieving financial independence)?*
2. *What barriers do they face in accessing and using digital tools provided by Dutch municipalities and non-government organizations (NGOs)?*
3. *How do digital literacy programs by NGOs and municipalities in the Netherlands address (or fail to address) women migrants' specific socioeconomic needs?*

Theoretical Framework

This study is situated at the intersection of migration studies and gendered labor. It advances conceptual frameworks and empirical literature that examine how legal status, digital inequality, and gender intersect to shape migrants' digital practices. Legal status influences the opportunities and risks migrants face. Gender shapes the types of labor they perform and the expectations placed on them. Digital inequality determines the extent to which they can use technology to access work and resources. Together, these forces produce distinct patterns of digital engagement for different migrant groups. By reviewing the relevant theoretical and empirical work on these topics, this section provides a foundation for analyzing how Filipina migrants in the Netherlands with different legal statuses use digital

technologies to access employment opportunities and manage their everyday lives. It also identifies relevant gaps in the literature and outlines the intersectional framework guiding this study.

Legal Status as a Structuring Force

Legal status is a central factor in shaping the experiences and opportunities of migrants. It is not a fixed attribute, but a complex and dynamic legal and social construct (De Genova, 2002; Menjívar, 2008). De Genova (2002) emphasizes that undocumented status is not merely the absence of legality, but an active political condition produced by the migration policy system, while Anderson (2013, as cited in Fabini, 2015) conceptualizes immigration controls as producing "migrant illegality" through processes of filtering and bordering. Migrants with irregular status often face legal precarity, which extends into various aspects of their lives, including work, housing, healthcare, and mobility. As Menjívar (2008) argues, "liminal legality" characterizes the experiences of many migrants who live in a grey zone of conditional and unstable rights.

From this perspective, legal status is not only a juridical category but a key dimension of social stratification that determines access to opportunities, including employment and digital resources. Irregular migrants are excluded from formal employment opportunities and may rely on informal or precarious work, which in turn affects how they use digital tools to seek jobs and manage their livelihoods. The distinction between regular and irregular migrants is both legal and social, affecting their access to rights, labor, and public services (Anderson, 2013). This study builds on these insights by exploring how Filipina migrants with different legal statuses navigate the Dutch labor market and how digital technologies mediate their efforts to find work under these conditions. Given that legal status profoundly structures migrants' access to work, rights, and services, it also intersects with and shapes their digital opportunities and constraints, making the framework of digital inequality critical for the present study. These dynamics are also deeply gendered, as women's concentration in specific labor sectors and their roles in transnational care work influence their exposure to certain forms of legal precarity and the ways they can engage with and benefit from digital tools.

Digital Inequality and Digital Practices

Because legal status shapes the resources, rights, and risks migrants face, it also directly affects their position within structures of digital inequality. The concept of digital

inequality is useful for analyzing how these legal and social hierarchies translate into disparities in digital access, skills, and outcomes. Digital inequality refers to disparities in access to the internet and digital devices as well as differences in digital skills, usage patterns, and the benefits people derive from digital engagement (van Deursen & van Dijk, 2019). Van Dijk (2005, as cited in van Deursen & van Dijk, 2019) distinguishes between four types of access: motivational, physical and material, internet skills, and internet usage, all of which can influence migrants' capacity to use digital tools effectively. Importantly, van Deursen and van Dijk (2019) argue that digital inequality is closely linked to broader forms of social inequality, such as education, income, and legal status.

Beyond access, digital inequality encompasses disparities in usage patterns and outcomes. While both regular and irregular migrants may access smartphones and social media, irregular migrants may use these tools more for survival and connection, whereas regular migrants can use them for upward mobility, illustrating what experts call the "third-level digital divide" (Scheerder et al., 2017; van Deursen & Helsper, 2015).

Recent research on digital migration (Alencar, 2017; Leurs & Smets, 2018) highlights how digital technologies are used by migrants to access information, maintain transnational ties, and manage life in host societies. Migrants' digital practices, however, are shaped by the intersecting effects of legal status, gender, socioeconomic position, and cultural background. For example, women with irregular status in feminized sectors such as domestic work may have access to smartphones but face distinct barriers such as heightened surveillance risks, dependence on informal hiring networks, and caregiving obligations that shape how, when, and for what purposes they can use digital technologies. Studies show that irregular migrants face specific challenges in accessing and using digital technologies, such as fear of surveillance, lack of identification documents, and exclusion from formal online services (Gillespie et al., 2018). These constraints intersect with digital inequality, leading to distinctive patterns of use among different migrant groups.

The literature also debates whether digital technologies empower or entrap migrants. While digital tools can enhance agency by providing access to job information, legal resources, and community support, they can also expose migrants to surveillance and exploitation (Madianou, 2019). In this regard, the concept of "digital bordering" (Leurs & Smets, 2018) captures the ambivalent role of technology in the lives of migrants, especially irregular migrants.

Gender, Migration, and Labor

Gender is another critical dimension that intersects legal status and digital inequality to shape migration experience. These intersections are visible for labor migrants in feminized sectors such as domestic and care work, where legal precarity and limited digital opportunities compound existing vulnerabilities. Research on gendered migration (Avila & Parreñas, 2002; Guevarra, 2009) shows that female migrants are often funneled into low-paid, informal, and precarious jobs, where they are vulnerable to exploitation and abuse. Digital technologies have become an important tool for these migrants to find work, negotiate working conditions, and build support networks. However, these technologies also mediate the conditions of labor and care work in ways that may reinforce existing inequalities (Madianou, 2016; Madianou, 2019).

Madianou (2016) argues that migrant women extensively use digital communication technologies to maintain transnational family relationships and engage in distant caregiving. This critical reliance leads to the mediation of the emotional dimensions of their relationships through "ambient co-presence," where a peripheral, yet intense, awareness of distant others can provide low-level emotional reassurance or, conversely, contribute to heightened conflict. Although digital tools enable ongoing emotional caregiving, such as monitoring, reassurance, and guidance, they may also extend and maintain existing care responsibilities (Cabalquinto, 2019). These technologies, rather than reducing the burden, often reinforce the expectations of continuous availability and emotional labor, particularly among women.

Although social capital is often framed as beneficial, some scholars have drawn attention to its limitations. Portes (1998), for instance, cautions that strong bonding ties, such as those based on ethnicity, shared migration experiences, or family, may entrench individuals within tightly knit but insular networks. While these networks offer emotional and practical support, they may also constrain access to broader socioeconomic opportunities by reinforcing dependence on limited, often precarious, informal resources.

To distinguish further, Putnam (2000) categorizes social capital into two forms: bonding and bridging social capital. Bonding capital, according to Putnam (2000), refers to close, emotionally supportive relationships within homogenous groups, while bridging capital connects individuals to more diverse and heterogeneous networks. This latter form is particularly valuable in exposing migrants to new information, employment opportunities,

and institutional pathways for integration. Migrants' reliance on either form may vary depending on their legal status and access to broader social institutions.

Lin (2001), on the other hand, emphasizes that social capital must be understood not just in terms of social network structure, but also in terms of the access to and mobilization of resources within these networks. For migrants, especially those with irregular status, this access is not guaranteed. Legal precarity and limited institutional trust can inhibit their ability to harness bridging capital or activate social resources effectively. Add these to information precarity, which highlights the unstable, often insecure conditions under which migrants access, evaluate, and control information (Wall et al., 2017). This concept emphasizes how limited digital access, surveillance fears, and misinformation compound migrants' legal and social vulnerabilities, shaping their ability to build social capital, maintain support networks, and navigate labor markets and institutional systems. Thus, social capital must be examined not only as a source of support but also as a mechanism of stratification that intersects legal status, digital access, and labor market participation. In this study, these intersections are central to understanding how Filipina migrants' employment-seeking strategies and everyday digital practices are simultaneously enabled and constrained by their position within gendered labor markets, their legal status, and the unequal distribution of digital resources.

Filipina Migrants in the Netherlands

Although there is a growing body of research on Filipino labor migration (Guevarra, 2009; Parreñas, 2001) and digital migration (Leurs & Smets, 2018), few studies have examined how Filipina migrants in the Netherlands use digital platforms to find work under conditions of legal precarity. Studies on Filipina migrants often focus on transnational families, emotional labor, and remittances, but less attention has been paid to their digital practices concerning legal status. The Netherlands presents a high-connectivity context in which digital tools are widely used, yet access and use are stratified along legal and social lines (Marchetti, 2016; Siruno et al., 2024; van Deursen & van Dijk, 2019).

While previous research (e.g., Alencar, 2017; Bilecen & Seibel, 2021) has investigated digital practices among migrant communities in Europe, these studies largely focus on refugees or generalized migrant categories. Very few explore the comparative digital strategies of regular and irregular labor migrants, and fewer still focus on gendered migrant experiences in highly digitalized societies such as the Netherlands. The present study addresses this gap by investigating how Filipina migrants with varying legal statuses in the

Netherlands use digital technologies to seek employment. It contributes to the literature by combining insights from digital inequality, migration studies, and feminist theory to develop a comprehensive understanding of the intersectional dynamics at play. In doing so, this study responds to calls for more research illustrating how legal status and gender shape digital practices and labor market outcomes among migrants.

Conceptual Framework

This study aligns with the digital migration paradigm that views migrants as active digital agents contending with multiple structural constraints (Leurs & Smets, 2018), while also drawing from critical migration studies that challenge legal status as a dynamic and performative condition (Anderson, 2013; De Genova, 2002). This approach is especially timely considering recent reports in the Netherlands revealing the exploitation of irregular migrant workers, mostly Filipinos and Indonesians, employed as cleaners (Ramdjan, 2025). Such cases reinforce the urgent need to understand how undocumented status intersects with gender and digital practices in shaping migrants' experiences and vulnerabilities within the labor market. This study also draws on the literature highlighting migrants' digital coping tactics and resilience strategies (Smit et al., 2024; Udwan et al., 2020), including autonomous, resourceful uses of translation apps, non-written communication, and social media to manage emotional support, interact with institutions, and sustain agency despite linguistic, legal, and social precarity.

Additionally, this study integrates Berry's (1997) typology of acculturation strategies to consider how cultural adaptation may shape migrants' digital engagement and employment outcomes. While Berry's (1997) framework has been influential, Rudmin (2009) argues that it insufficiently addresses structural constraints, such as legal status and gender, which this study incorporated.

The present study illustrates that while digital skills are important, their utility depends on migrants' legal and social positioning. For example, even highly digitally literate migrants may be unable to access certain online platforms due to a lack of legal documentation or fear of surveillance. In this way, technical competence alone does not translate into benefit. Legal structures and gendered norms may have a profound impact on outcomes.

Together, these insights guide the research design, data interpretation, and comparative focus of the study, emphasizing how legal status and gender shape Filipina migrants' digital employment practices within the context of the Netherlands.

Method

This study used a qualitative research approach to explore the complex experiences of Filipina migrants from different legal statuses as they navigate socioeconomic integration in the Netherlands through digital tools. Qualitative methods are particularly suited for understanding the lived realities, perspectives, and challenges faced by migrants (Zapata-Barrero & Yalaz, 2022).

Instruments

The study primarily used semi-structured online interviews because of their enhanced accessibility for geographically dispersed and hard-to-reach populations and their ability to offer a participant-controlled environment conducive to discussing sensitive narratives (Engward et al., 2022) from irregular and/or formerly irregular Filipina migrants, as well as insights from regular migrants and representatives of organizations supporting them. Semi-structured interviews allow for flexibility in exploring emergent themes while ensuring key areas related to digital tool usage and integration are addressed (Zapata-Barrero & Yalaz, 2022).

To ensure a comprehensive understanding of the research question and sub-questions, the interviews focused on several key operational definitions and related topics. Digital literacy was examined in terms of the women migrants' ability to access, understand, and use digital tools and platforms effectively. Interview questions explored participants' self-assessed digital skills, frequency of digital tool(s) use, and experiences with online resources. Socioeconomic integration pertained to the process by which women migrants achieve economic independence and social inclusion (UN-Women, 2015) in the Netherlands.

Two versions of the interview guide were developed: one for Filipina migrants and another for organizational representatives. Both were constructed based on the research question and sub-questions, the theoretical concepts of information and legal precarities, digital divide, labor stratification, and intersectionality and insights from relevant literature.

The interview guide for migrant participants focused on their employment experiences, access to social services, and social network development. Questions were about

their access to digital tools (e.g., smartphones, internet, computers); use of digital platforms (e.g., Facebook, WhatsApp, job boards) to find formal or informal work and to maintain connections with their home country; experiences navigating legal, technological, and labor market barriers as well as adapting to the digital environment in the Netherlands; strategies to overcome exclusion or precarity (for irregular migrants); and the role of community support and gender norms in shaping their digital labor practices. The questions explored how women migrants' use of digital tools created and maintained social networks and how these networks affected their access to information and opportunities.

For the organizational representatives, interview questions addressed their perspectives on migrant women's access to digital resources and employment; the design, implementation, and perceived impact of support programs; observations about how legal status or digital literacy affect employment outcomes; and reflections on institutional responses to migrant women's needs.

Open-ended questions were asked to elicit detailed narratives from participants. Probing questions were used to explore emerging themes and clarify participants' responses. As a Filipina based in the Netherlands, the researcher shares linguistic, cultural, and community ties with several participants, which facilitated rapport and trust during interviews. Likewise, the researcher consciously applied reflexive practices to minimize bias and ensure participants' voices were represented authentically.

A codebook (see Appendix A) was developed based on both inductive insights from initial transcripts and deductive categories from the theoretical framework, and in consultation with the thesis supervisor, to enhance coherence and alignment with the research questions. The coding scheme was refined iteratively throughout the coding process to ensure flexibility while maintaining consistency across transcripts.

Participants

A total of 20 participants, aged 29 to 59 years, participated in the study. Four held at least a master's degree, while the rest completed tertiary education. Only one participant was male.

The sample included both migrant women and organizational representatives, enabling a multidimensional understanding of the digital practices and employment strategies among Filipina migrants in the Netherlands. Legal status was a key differentiating factor,

with irregular and formerly irregular migrants offering distinct insights into legal and information precarities as well as informal labor and coping strategies.

A detailed breakdown of participant categories, roles, and legal status is provided in Appendix B.

Procedure

Data collection occurred from April to June 2025. The research followed a qualitative approach to prioritize participants' narratives, lived experiences, and agency in coping with structural inequalities. The focus was not on statistical generalization but on deepening understanding of the intersecting dynamics of digital access, employment, gender, and legal status.

Some participants were recruited through the researcher's and thesis supervisor's networks. The remaining participants were recruited through snowball sampling. They were selected to capture a range of lived experiences, legal statuses, and institutional perspectives related to Filipina migrants' digital labor practices in the Netherlands. All participants received either an email or a WhatsApp message, which served as an invitation, stating the study's purpose and the informed consent, which was read aloud to them right before the start of the interview. Most participants received excerpts of the guide questions in the email.

Before the start of data collection, the study received ethical clearance from the university's research ethics board. Ethical precautions were taken to minimize overexposure of vulnerable populations, particularly with irregular migration histories. Interview transcripts (see Appendix D) were anonymized. Their names were altered in the report writing.

Interviews were conducted online via WhatsApp video calls or Microsoft Teams in a conversational style, encouraging trust and allowing participants to raise concerns or topics not initially included in the guide. Conversations with the Filipino participants were in English or Filipino/Tagalog, depending on the participants' comfort level. The researcher adopted a non-hierarchical approach, informed by shared cultural background and positionality as a Filipino researcher. One participant, who was unwell on the interview date and had a busy schedule, submitted her responses in writing to ensure her inclusion in the study. Interviews with non-Filipino organizational representatives were conducted in English or a mix of Dutch and English, depending on the participants' preference.

After the interview, participants were thanked and, in some cases, asked for referrals for potential participants. All interviews, which lasted 45 minutes to an hour, were audio-recorded, including informed consent, and transcribed verbatim. As a native speaker of Filipino and fluent in English, the researcher translated the Filipino interviews into English to ensure preservation of tone and context. For the interview conducted in Dutch and English, Google Translate and consultations with a Dutch native family member were used to verify the accuracy and contextual appropriateness of the translation. This dual process ensured that meaning was retained, especially for culturally or emotionally sensitive narratives.

Following data collection, transcripts were reviewed for accuracy and completeness. Thematic analysis followed Braun and Clarke's (2006, as cited in Naeem et al., 2023) six-step approach (familiarization, initial coding, theme development, theme review, defining and naming themes, and final synthesis) and was performed using ATLAS.ti 25. Themes were cross-checked across participant groups to compare migrant experiences and institutional viewpoints.

Results

The study aimed to answer the main research question: *How do Filipina migrants in the Netherlands navigate digital tools to access employment opportunities, and what role do social media networks play in this process?* Three sub-questions guided the analysis: (SQ1) How do Filipina migrants with varying digital literacy levels use social media to overcome socioeconomic challenges (i.e., job searching and achieving financial independence)?; (SQ2) What barriers do they face in accessing and using digital tools provided by Dutch municipalities and NGOs?; (SQ3) How do digital literacy programs by NGOs and municipalities in the Netherlands address (or fail to address) women migrants' specific socioeconomic needs?

A thematic analysis was conducted using Braun and Clarke's (2006) six-phase framework, with data coded, analyzed, and organized in ATLAS.ti 25. The analysis focused on identifying cross-cutting patterns across participants' experiences rather than isolating individual accounts. Participant quotes are included to illustrate key themes and provide insight into the lived realities of the women and institutional stakeholders involved. The sample reflects a range of migration statuses, digital competencies, and roles, facilitating a multidimensional perspective on digital inclusion. The first theme addresses SQ1, which examines how Filipina migrants use social media to navigate socioeconomic challenges,

particularly relating to employment, financial independence, and accessing informal support networks.

Use of Social Media to Overcome Socioeconomic Challenges

Filipina migrants in the Netherlands actively integrate social media into their daily lives to address a range of socioeconomic challenges. Their use of digital platforms extends beyond job searching; it encompasses emotional support, social integration, and access to essential services. Across varying levels of digital literacy, participants demonstrated agency in using digital tools to manage unfamiliar systems, bridge language gaps, and maintain social connections in a digitally advanced host society.

Digital literacy, whether formally acquired, self-taught, or learned through daily necessity, emerged as a critical factor shaping how migrants capitalized on technology. Self-assessed digital literacy levels shaped their digital behavior: four participants identified as having high digital literacy (high DL), six as intermediate (intermediate DL), and one remained unclear; none self-identified as having low digital literacy. Those who self-identified as having high or intermediate digital literacy described being confident in navigating online services, adjusting privacy settings, or finding job opportunities through multiple channels.

Among the most central platforms was Facebook, particularly for community engagement and information-sharing. This insight emerged most clearly from Filipino NGO representatives, whose organizations specifically support irregular Filipina migrants in the Netherlands. While other institutional stakeholders were interviewed, the Filipino NGOs' insights were highlighted in this section because of their direct engagement with the community under study. Their experiences offer a grounded perspective on how digital tools intersect with the daily realities of Filipina migrants in precarious conditions.

Filipino NGOs described the platform as their primary communication tool. This pattern was also supported by code-frequency analysis (see Appendix C), where Facebook emerged as the most referenced platform among Filipino participants. One NGO worker emphasized, "Filipinos are very active on social media like Facebook… Almost everyone uses social media, mostly Facebook." (NGO_1). Another explained its pivotal role during the pandemic:

> "By the end of 2019, before the COVID-19 pandemic, we had already formed a Facebook chat group. Filipino migrants love using Facebook. That group grew to over 700 members... We knew what to expect and communicated this through social media." (NGO_4)

The above examples show how digital platforms functioned as lifelines, especially in moments of crisis, allowing NGOs to mobilize support and disseminate critical information quickly. Facebook Messenger was also described as key to private communication, especially with irregular migrants who preferred more informal, encrypted channels. As NGO_4 noted, "All communication occurs through digital means, Messenger and Facebook."

While Filipino NGOs heavily emphasized Facebook and Messenger, migrants, particularly those with regular status, were less vocal about these tools in interviews, which may reflect a difference in perception that could stem from the disparate needs and constraints faced by different migrant groups. NGOs, often serving highly vulnerable and irregular populations, find public social media invaluable for broad, immediate, and risk-mitigated outreach. In contrast, irregular migrants prioritize privacy and trusted private networks for sensitive activities such as job searching, while many regular migrants use formal channels for employment and social media for personal connections and passive information consumption. More frequently mentioned by all participant-migrants was WhatsApp, a platform that cuts across all migrant groups for its accessibility, informality, and integration in both personal and professional life:

> "...when I arrived here, I noticed that most people are just using WhatsApp to text people or call. So, that's what I'm using as well." (Migrant_10)

> "I just know some Filipinos in this area, too. I met them through a common friend and… social media, like I joined a WhatsApp group for Expats... And they have events… I met other internationals there, too. And I met one Filipino there who is still my friend now." (Migrant_8)

Beyond personal use, WhatsApp was also used in more complex, hybrid ways that bridged institutional and interpersonal communication. NGO_4 described conducting virtual medical consultations during the pandemic via Messenger and WhatsApp, relaying messages between migrant patients and volunteer doctors. She added that food bank support via the Red Cross was also delivered digitally, with "Albert Heijn cards sent through WhatsApp."

Platforms such as Instagram and LinkedIn were also mentioned. Instagram was used for community-building, learning the Dutch culture and language, or promoting a side

business. In contrast, LinkedIn, though less frequently used, was described as helpful in finding professional opportunities and networking. These patterns suggest that migrants with greater confidence in navigating digital platforms were more likely to diversify their use of platforms beyond the more ubiquitous ones.

While digital engagement patterns varied across digital literacy levels, a common thread across all participants was a strategic and often resourceful use of social media to manage life in the Netherlands. Rather than merely reflecting platform preferences, their choices illustrated broader processes of adaptation, negotiation, and empowerment through digital means. The key patterns of social media platform use across digital literacy levels are summarized in Table 1, highlighting both shared and distinct preferences among participants and NGO representatives.

Table 1
Patterns in Social Media Use by Digital Literacy

Pattern	High DL	Intermediate DL	Illustrative Quote
Most used platforms	Instagram, WhatsApp, Facebook, Facebook Messenger, LinkedIn	Facebook, WhatsApp, Instagram, LinkedIn, Facebook Messenger	"All communication occurs through digital means, Messenger and Facebook." (NGO_4)
Purpose of use	Marketing side businesses, job search (formal & informal), networking	Job search, informal work referrals, socializing	"We alert each other through Messenger and group chats to avoid those areas." (Migrant_2)
Additional uses	Learning Dutch culture via YouTube, promoting events/business	Maintaining diaspora ties, joining local expat groups	"We wouldn't post… that we are looking for work." (Migrant_2)

Beyond facilitating daily communication and access to services, social media also plays an essential role in how Filipina migrants seek employment opportunities and generate income, as explored in the following subsections.

Social Media as a Means for Employment and Income Generation

For many Filipina migrants in the Netherlands, social media platforms such as Google, Facebook, and WhatsApp, as well as job posting sites such as Indeed, served as crucial entry points into both formal and informal economic opportunities. Participants did not simply use these tools passively; they engaged with them strategically and creatively in ways that reflected their digital confidence and self-reliance, particularly in contexts where institutional support was limited or absent.

Several participants described how they independently used mainstream platforms to secure employment, demonstrating an ability to manage the digital aspects of job searching without external assistance. Migrant_3, for example, secured a full-time role in a pharmaceutical company through Indeed, noting, "…it was on a job posting site like Indeed. Indeed was what I used." Similarly, Migrant_4 found her current job in an international company by simply "searching for job vacancies" on Google, emphasizing the role of general search engines in facilitating access to formal employment. Migrant_9 recalled, "I used Indeed to find a job… Even my three jobs, I found them on Indeed," highlighting the platform's central role across multiple work transitions.

Social media, however, also played a more informal and communal role in employment. Several participants stressed Facebook's role in discovering job opportunities, particularly during the pandemic, or for informal roles such as caregiving or food catering. Migrant_7 recounted finding her current job in a catering business by "clicking random job offers" on Facebook, adding that "social media played a big role during the pandemic." Others used the platform to promote small-scale entrepreneurial ventures such as jewelry sales, baking, or event hosting, demonstrating how social media facilitated not only job searching but also income generation and entrepreneurial visibility.

Besides finding work, platforms such as WhatsApp and Facebook Messenger emerged as essential for sustaining employment-related communication. Migrant_2 described relying almost exclusively on WhatsApp to receive job leads and coordinate with employers in private group chats. Similarly, Migrant_5 explained how she uses the same platform to refer other Filipinas for work: "I often recommend fellow Filipinas here. When someone asks, I check my group chats and post in those spaces to see who's available… WhatsApp is especially useful for this; it's widely used." This informal referral system reflects how

migrants extend support networks into the digital space, transforming social media into a tool for collective resource-sharing and economic solidarity.

Not all participants relied heavily on social media to find employment. Migrant_8, who had secured her corporate position before arriving in the Netherlands, explained that she did not "use LinkedIn so much," suggesting that those entering through formal migration pathways may depend less on digital platforms for initial job search.

Some migrants also used social media for business. Migrant_1 reported that 90% of her online business is run through Facebook, with additional income from monetized YouTube content. Another used Instagram and Facebook to promote her event hosting and dance classes, while others had set up business accounts for baking or catering services. These practices reflect digital initiative and suggest that entrepreneurial migrants adapt social media tools for niche markets and visibility.

A few participants also discussed managing personal finances and budgeting digitally, though not always in formal ways. Migrant_5 learned about frugality and financial planning informally through observation: "I noticed how financially literate my Dutch employers and the Dutch people, in general, are." Others mentioned attending workshops or using budgeting apps, though such tools were not widely or deeply embedded in their practices.

Together, these accounts illustrate how Filipina migrants harness digital platforms as tools for individual success and as socially embedded resources that reflect their migration goals, digital skills and confidence, and informal community networks. Social media, in these cases, becomes more than a medium; it acts as a socio-technical space where economic strategies, digital agency, and community support intersect.

Overcoming Broader Socioeconomic Challenges through Social Media and Digital Tools

Beyond employment and financial independence, social media was shown to contribute to migrants' overall socioeconomic integration and well-being, from understanding Dutch society to building local support systems and maintaining transnational ties. These digital tools offered an emotional, cultural, and informational foundation that shaped participants' broader adaptation journeys.

Several participants stressed their reliance on platforms such as YouTube, Reddit, and Google to learn about Dutch customs, institutions, and societal norms independently. These tools served as informal knowledge hubs that helped supplement explanations offered

by spouses or acquaintances. As Migrant_4 noted, “When I met him, I also googled about the culture, about how people are, the weather. I think it's just wise to do it if you go to another country.” Others cited specific YouTube channels, such as *Not Just Bikes*, as valuable for understanding urban design and everyday life in the Netherlands, illustrating how even non-immigrant-focused media content can contribute to a sense of orientation and belonging.

Digital chat groups on Facebook and WhatsApp were especially vital among migrants with irregular or formerly irregular status. These chat groups provided practical information such as updates on migration rules, warnings about ID checks, or guidance on accessing healthcare via the CAK (*Centraal Administratie Kantoor*). Chat groups also provided a sense of security through shared vigilance and mutual care. As Migrant_2 noted, “We also share warnings, like if there’s random ID checking near the central station. We alert each other through Messenger and group chats to avoid those areas… It’s how we protect each other via social media.”

Social media was equally important for sustaining emotional well-being and cultivating a sense of community. All migrant participants emphasized the role of Facebook Messenger and WhatsApp in maintaining daily contact with family in the Philippines, often despite time zone differences and long working hours. These platforms enabled affective connections that helped mitigate homesickness, offering an emotional bridge to their home countries. At the same time, digital tools were used to build local social circles. Migrant_8 described joining WhatsApp groups for expats to attend events, eventually forming friendships with both Filipinos and internationals. Migrant_10 used Meetup to find hobby-based communities and local gatherings, noting, “I attended different activities there… in and around the Netherlands. I met a lot of other internationals who eventually became my friends.”

For many, digital participation extended into diaspora networks facilitated by Filipino NGOs and church communities, spaces that were often organized, at least in part, through social media. Some migrants also stressed the importance of Filipino diaspora communities to encourage a sense of belonging, cultural connection, and mutual support. Taken together, these narratives reveal how Filipina migrants engage with social media as a multifaceted resource, one that supports their economic integration and their cultural adaptation, emotional resilience, and collective empowerment. Rather than viewing digital literacy as a fixed skill

set, these findings suggest it is a relational and evolving practice, deeply tied to the migrants' everyday lives, needs, and networks.

Barriers to Institutional Digital Access

The second theme contributes to addressing SQ2. While many participants demonstrated confidence and self-reliance in using digital tools for everyday life and employment, their accounts also revealed underlying obstacles when it came to engaging with formal institutional support. These barriers were not solely rooted in digital skills, but also in systemic and relational factors that shaped how migrants perceived and interacted with institutional digital services. Besides presenting the migrants' perspective, this subsection also reports the perspectives from Filipino NGOs and Dutch institutional representatives and corresponding analyses.

Barriers to Institutional Digital Access: Migrants' Perspective

A common theme across participants' narratives was a lack of awareness about or visibility of digital literacy programs offered by Dutch municipalities and NGOs. Many expressed uncertainties about where to find support, or whether such services were even intended for them. For instance, Migrant_4 and Migrant_8 highlighted a key barrier: they "did not look for it" or "have not really heard anything about it." They only realized such opportunities "exist" when they proactively started exploring or were specifically asked. This example suggests that information about municipal or NGO services often does not reach migrants in accessible or culturally resonant ways.

Language barriers and unfamiliarity with formal Dutch bureaucratic processes also emerged as significant hindrances. Migrant_3, for instance, said she relies on her Dutch husband to understand crucial information in the Dutch language: "I'm dependent on my husband… for many things because the rules, contracts, most information are in Dutch. It's not like I would need to Google Translate all of that. Sometimes Google Translate is not very reliable either." Migrant_8, a skilled professional, also noted that information on topics like investments is "mostly in Dutch," which impeded her understanding despite digital confidence: "…I'm not that good at Dutch yet… I can do Google Translate, but… sometimes it doesn't translate 100% accurately."

For irregular migrants, the absence of a citizen service number (BSN or *burgerservicenummer*) appeared to be a fundamental barrier, which limits access to health

insurance and the formal banking system, which is highly digitalized in the Netherlands. Without a standard bank account, they reported struggles with pervasive digital payment systems, such as those used in supermarkets, online transactions, or bookings. As Migrant_ 5 shared, “When it comes to digital matters, especially banking, that’s really a big challenge for us. These days, most transactions are moving away from cash.” They resorted to workarounds such as using bank accounts in other EU countries, relying on trusted individuals for financial transactions, or risky cash savings at home.

Their irregular migration status has also prevented them from accessing a wide range of services requiring formal registration, leading to fear and reluctance to engage with government institutions. Migrant_2 lamented, “What I’ve experienced is more of systemic discrimination. We can’t make transactions because we don’t have a BSN. It starts there—no BSN, no insurance. And without insurance, you’re afraid to go to the doctor.” Consequently, many formal digital services offered by municipalities that require identification are inaccessible or avoided.

For irregular migrants engaged in informal work, formal job search platforms or digital services provided by municipalities or NGOs were often seen as irrelevant or unsafe. This perception stems from significant privacy and exploitation risks inherent in their precarious legal status, leading to surveillance risks and a fear of exposure if their activities are visible on public platforms. As Migrant_2 stated, “Because… our job is ‘black work’. We are not like those who work in white-collar jobs. We wouldn’t post on Facebook for everyone to see that we are looking for work,” highlighting the critical need for discretion in their job search.

Instead of formal channels, they rely on informal digital networks (e.g., private WhatsApp and Facebook Messenger groups) to share job leads within trusted circles. While such informal networks provide crucial support and access to jobs, the informal nature of these online postings can still expose individuals to potential exploitation and precarious working conditions. This finding suggests that any formal digital job support offered by municipalities or NGOs would not cater to their specific needs or circumstances.

Time constraints were also identified, particularly by migrants balancing demanding work schedules and family care, as a significant barrier to participating in digital literacy programs. Migrant_11 explained that her work commitments made participation impossible as the municipality-offered banking apps training was on weekday mornings. Migrant_9

recounted how study, work, and childcare obligations forced her to discontinue a course involving digital tools: "…having two children, studying, then at the same time working as a *gastouder*, it was too much. So, I was not able to finish it." Such experiences illustrate how daily responsibilities limit opportunities for formal skill development, highlighting the need for more flexible, accessible training formats.

Even when digital training programs were accessible, their relevance and depth did not always align with migrants' existing knowledge or goals. Migrant_2, for instance, attended a computer literacy course through her child's elementary school, but found it redundant: "…it was more about basic skills and those… were already familiar to me when I was in college, such as Word, Excel, PowerPoint… not like creating websites, not that level." This account highlights the logistical constraints that limit participation and a mismatch between program content and the more advanced, practical digital competencies some migrants sought, such as those related to job advancement or entrepreneurial ventures.

For some migrants, a lack of personal interest in technology can be a barrier. As Migrant_6 expressed, "I'm not really into technologies, so I do not use digital tools that much," which might have influenced her motivation not to seek out or use such training. Similarly, Migrant_7, who has an IT specialist husband, "did not see the need for seminars or courses" because she could learn digital skills at home, which illustrates how strong informal support networks can diminish the perceived necessity for formal institutional digital literacy programs.

These findings reveal a disconnect between migrants' actual needs and the structure, communication, and cultural assumptions embedded in digital literacy programs designed by municipalities and NGOs. Even when not explicitly exclusionary, these systems often implicitly marginalize women migrants by failing to account for legal precarity, language differences, and digital inequality. These institutional barriers may be shaped by how access, trust, and inclusion are (or are not) built into the digital infrastructure of support. Table 2 provides an overview of the most frequently cited barriers, showing how legal status, language, and digital access constraints intersect with broader systemic and institutional factors.

Table 2

Common Barriers to Institutional Digital Access

Barrier	Migrant Perspective	NGO Perspective	Institutional Perspective
Lack of awareness	"Have not really heard anything about it." (Migrant_8)	Outreach not reaching most irregular migrants	Some programs exist but underutilized due to low visibility
Language	Reliance on family for Dutch translation	Legal/bureaucratic terms not understood even with English version	Lack of simplified materials
Legal status (no BSN/DigiD)	Excluded from banking & formal platforms	Linking Act excludes irregulars from national digital ID	"They cannot have a bank account." (Municipal advisor)
Device limitations	Smartphone-only access limits complex tasks	Most blue-collar workers lack laptops	Laptops not a municipal priority
Time constraints	Work/family schedules clash with training	—	Programs not designed for flexibility

Barriers to Institutional Digital Access: Filipino NGOs' Perspective

Drawing from interviews with two Filipino NGO representatives, several interconnected patterns emerged. The findings highlight how systemic exclusions, linguistic and digital literacy gaps, and structural limitations within NGOs themselves combine to shape migrants' digital struggles. These participants believe that the most significant challenges for Filipina migrants in the Netherlands in accessing and using digital tools provided by Dutch municipalities and NGOs were mainly due to their undocumented legal status, compounded by language comprehension issues, and practical limitations related to digital access and literacy.

Systemic Exclusion and the Impact of Irregular Status. A pervasive theme raised by both NGO representatives was the systemic exclusion of irregular migrants from institutional digital infrastructure, primarily caused by the Dutch Linking Act (*Koppelingswet*) of 1998. This law restricts access to essential public services (i.e., housing, healthcare, employment, banking, and education) by tying eligibility to legal residency and registration (Minderhoud, 2000). NGO_4 stressed that lacking a BSN effectively shuts

undocumented migrants out of formal digital systems like DigiD, the country's national digital identification platform, which is required for nearly all public sector transactions. Without it, accessing digital services, such as online banking, tax records, municipal portals, or even vaccination apps, becomes impossible. As NGO_4 recalled irregular migrants' situation during the pandemic: "…couldn't enter restaurants, their children couldn't attend swimming lessons, and they couldn't access public spaces because they couldn't use the CoronaCheck app to show vaccination or recovery proof. They were digitally excluded from basic social infrastructure during a critical time." She added, "…they can't get a DigiD because they're not registered. The Dutch Linking Act itself was designed in a way that limits the inclusion of irregular migrants. That becomes a systemic obstacle to their participation."

These legal exclusions also carry practical consequences. The inability to open a Dutch bank account, for instance, restricts access to digital payment platforms and job search sites, such as Care.com, which require iDEAL or Dutch account verification. This limitation forces many to rely on cash transactions, which, according to NGO_4, increases the risk of theft or suspicion from authorities. Additionally, participants described their undocumented members balancing using social media to find work or promote products while concealing their real identities for fear of exposure. As NGO_1 shared, "In terms of digital transactions, they often use aliases and keep their real names and photos private." She also noted: "Many migrants are scared to show up and show their faces, which is a significant limitation."

Language and Comprehension Barriers. Despite being active digital users, many Filipina migrants still encounter significant difficulties exploring formal platforms because of language barriers, based on analysis of their interviews. According to NGO_4, even when digital tools offer English versions, understanding the legal and bureaucratic context of Dutch systems remains a challenge. A significant barrier arises from a lack of comprehension of formal Dutch forms and applications, especially for migrants who did not complete secondary education. As NGO_4 noted: "Take something simple, like being asked to input your address in the Philippines. People will still ask me, 'Should I write my address here?' even though the question is straightforward. It's not digital illiteracy; it's a matter of comprehension."

Digital Hardware and Connectivity Constraints. Filipina migrants' heavy reliance on smartphones emerged as another practical limitation. According to both NGO participants, most blue-collar migrants in their networks did not own laptops, depending instead on mobile

devices to manage online communication and daily tasks. While phones are sufficient for messaging or browsing, they are often inadequate for completing formal applications, accessing government portals, or attending digital training programs. NGO_1 remarked, "Colleagues here mostly use cell phones, especially blue-collar workers.... Some have laptops, but most access everything via mobile."

Limited NGO Capacity for Digital Literacy Programs. While both NGOs expressed awareness of the importance of digital literacy, neither offered structured training programs. Instead, digital support is often responsive to migrants' immediate needs and focused on teaching specific apps essential for rights and welfare, such as the eHealth app for managing medical records or a chatbot for healthcare access. This reactive model is shaped by limited funding, volunteer capacity, and coordination challenges, hindering their ability to provide continuous, follow-up, or in-depth training. NGO_1 reflected, "Mainly technical things. Grouping participants from five countries was difficult. There were time conflicts and issues with grouping, causing students to get lost. Even skilled secretariat members had difficulties. Synchronization between the lecturer and secretariat across countries was needed." She added that such technical glitches during online sessions and the lack of follow-up resources made sustained digital training difficult to deliver.

Barriers to Institutional Digital Access: Perspectives from Dutch Municipal and Government-Affiliated Representatives

This final subsection on barriers presents insights from Dutch municipal representatives, a COA (*Centraal Orgaan opvang asielzoekers*) volunteer, and a regional connector for status holders. Because the interviewed representatives serve a broad range of migrant populations, including asylum seekers and refugees, they reflected on how legal status, socioeconomic vulnerability, and systemic priorities shape access for all migrant women, in general. Analysis of interviews suggests that this participant group views Filipina migrants as facing many of the same challenges as other migrant groups, such as asylum seekers. However, cultural dynamics and legal status may influence the degree to which barriers impact them.

Policy and Structural Barriers to Digital Inclusion. A central concern echoed across interviews was the fundamental exclusion caused by irregular status. As Amsterdam's advisor for undocumented migrants explained, "It is very difficult for them to access and register themselves somewhere," mainly due to the absence of a BSN and DigiD. These

identifiers are essential for almost all formal transactions in the Netherlands, including banking, healthcare access, and digital platform use. Without them, migrants are locked out of the Dutch digital infrastructure. “They cannot have a bank account,” the advisor added, noting how this limitation extends even to basic services.

Beyond legal identification, institutional actors emphasized that digital skills and access are rarely treated as urgent priorities. “It is not on our priority list,” the Amsterdam advisor stated, citing more immediate concerns such as food, housing, and legal aid. Similarly, the COA volunteer clarified that the organization’s mandate is narrowly focused on “shelter and food” with “no responsibility or budget for digital needs.” A city councilor described digital literacy as a “blank spot” in municipal policy, primarily focusing instead on language acquisition and employment. These sentiments were echoed by the regional connector for status holders, who noted: “They see it not as important. There are ten things more important than digital skills.”

The lack of dedicated funding for digital access also emerged as a recurring subtheme. According to the COA volunteer, “there’s not even a computer room or its [own] facility” at many refugee shelters, and any digital assistance depends on donations and volunteer-run initiatives. The city councilor acknowledged that without national-level policy directives, “funding becomes a big issue” for local municipalities seeking to implement any digital inclusion efforts.

Material barriers also persist. Laptops are often seen as “expensive” and “not a priority,” especially for women migrants focused on remittance-sending or caregiving responsibilities. While some municipal programs allow migrants to borrow devices, for example, through schools or charitable foundations, access is not guaranteed. A municipal social support consultant explained that digital needs are typically addressed only “when they become urgent,” not as part of proactive integration planning: “Not officially yet, but we teach them the most important things bit by bit, also what they need to start with.”

Legal precarity was also seen to influence motivation. As the COA volunteer noted, women with insecure status often lack the emotional and mental bandwidth to invest in long-term skills. “They don’t even know if they are going to stay,” she said, making it harder to justify the effort of learning Dutch or improving digital literacy. For many, “the priority is basic survival” and meeting financial obligations to family members back home, which displaces attention from more abstract or long-term goals such as skills training.

Gaps in Digital Literacy, Safety, and Awareness. Institutional representatives also raised concerns about digital safety and literacy gaps, especially among women with low educational backgrounds. Some participants shared examples of migrants who were unaware of basic security protocols, such as safeguarding passwords or PINs. One participant warned that such behaviors could expose them to fraud or exploitation.

Finally, a lack of awareness around available digital resources appears to compound existing inequalities. The regional connector for status holders mentioned that some migrants were not informed about available municipal subsidies: “I think a lot of women also don't know that they have €300 to spend on a laptop... But they also sometimes give laptops for free. It’s also at our [own] initiative.” Some participants also noted that migrants can benefit from free language and computer literacy classes offered by municipal libraries and community centers. While these programs exist, they are often underutilized because of limited outreach or inaccessible communication channels.

The barriers outlined above highlight the structural, institutional, and personal factors that shape Filipina migrants’ digital access and use in the Netherlands. However, these constraints do not exist in isolation; they directly influence the design, delivery, and outcomes of digital literacy initiatives. The following subsection contributes to addressing SQ3: How digital literacy programs by NGOs and municipalities in the Netherlands address (or fail to address) women migrants’ specific socioeconomic needs.

Effectiveness and Limitations of Digital Literacy Programs

The findings show that formal digital literacy training by NGOs and municipalities reached only a small portion of women migrants, with most participants relying on self-learning, informal guidance from family or friends, and everyday digital use to build their skills. Nonetheless, existing initiatives, primarily led by NGOs, volunteers, and some municipal partners, did address certain immediate socioeconomic needs, particularly in daily digital navigation, job searching, access to information, and financial literacy.

One of the most common forms of support involves basic digital functionality for daily life. Municipal and NGO actors reported helping migrants, many of whom only own a mobile phone, to complete practical tasks such as topping up public transport cards, downloading music for community activities, or learning to use essential apps. Locally funded municipal libraries offer free lessons on smartphone use, computer basics, and DigiD

navigation, while Filipino NGOs often provide app-specific guidance, such as using eHealth for medical records.

Some programs target employment-focused skills, such as CV preparation, LinkedIn registration, professional correspondence, and basic Microsoft Office training. NGO initiatives occasionally extend into more advanced areas, such as graphic design or IT bootcamps. One Filipino NGO co-organizes a Leadership and Social Entrepreneurship program that includes modules on business models and financial literacy, with graduates starting both physical and online businesses. Other small-scale efforts teach women to market their catering business or products via Instagram or phone-based tools.

Access to information and learning opportunities is another area of strength. Municipal actors and NGOs use a range of channels, from multilingual flyers and workshops to Facebook pages, Messenger groups, and chatbots, to share updates on health, rights, and services. Some NGOs also connect migrants to free online courses, including university-level programs, and provide alerts on issues such as police checks or public safety campaigns.

Several initiatives also work to mitigate the lack of devices. While device distribution is inconsistent, some migrants can borrow laptops from schools or NGOs, receive them via the Learning Fund Foundation (*Stichting Leergeld*), or apply for a little-known €300 municipal subsidy. Companies are occasionally encouraged to donate laptops through "social return" schemes.

Finally, social support systems and networks, such as buddy programs, language cafés, and informal peer mentoring, help migrants manage both daily life and digital environments. NGOs are seen as trusted spaces where women can learn in a culturally familiar and socially supportive context. Table 3 summarizes observed strengths and limitations of existing digital literacy initiatives, as identified by migrants, NGOs, and municipal actors.

Table 3
Perceived Effectiveness of Digital Literacy Initiatives

Strengths	Limitations	Illustrative Quote
Support for basic digital navigation (apps, transport cards)	Limited reach — 8 of 11 migrants never attended formal training	"Not officially yet, but we teach them… bit by bit." (Municipal consultant)
Employment-oriented skills (CV, LinkedIn, Office)	Often too basic for some participants' needs	"…it was more about basic skills… not like creating websites." (Migrant_2)
Multilingual outreach via social media, flyers	Shortfall in awareness and visibility	"I didn't look for it… I haven't heard about it." (Migrant_4)
Device provision via NGOs, municipal subsidies	Inconsistent device access	"They also sometimes give laptops for free… it's at our own initiative." (Regional connector)
Peer/buddy networks for support	No sustained follow-up or advanced training	"We don't offer much formal digital training. We… teach them how to use specific apps that can help with their rights. …In our community, it's natural for the faster learners to help those who are slower." (NGO_4)

Despite these efforts, significant limitations remain in meeting women migrants' broader socioeconomic needs. Eight of the 11 migrants interviewed had never attended any formal training by NGOs or Dutch municipalities, emphasizing a limited reach. Even those who participated often encountered content gaps, with programs focusing on familiar basics and offering little in the way of advanced skills for complex online navigation or entrepreneurship.

Accessibility is another constraint. Work schedules, childcare responsibilities, and other obligations make in-person attendance difficult for many, and some participants expressed a preference for online workshops that could fit into their routines. Others were unaware of existing programs until actively seeking opportunities, suggesting a shortfall in outreach and visibility.

Finally, the wider systemic barriers described in the previous section, such as legal status restrictions, lack of digital IDs, and the absence of formal municipal or national prioritization for digital inclusion, limit what NGOs and municipalities can realistically achieve. Without a secure legal footing, stable internet access, and adequate devices, even

well-designed programs cannot fully address long-term digital inclusion or economic empowerment.

Conclusion and Discussion

Filipina migrants in the Netherlands strategically used digital tools, particularly Facebook, Facebook Messenger, WhatsApp, Google, and Indeed, to secure jobs, sustain small businesses, share vital information, and maintain emotional and social support networks. Regular migrants tended to diversify their platform use, engaging with both formal job sites and broader social media communities, while irregular migrants relied more on informal, trust-based digital networks to exchange job leads and manage daily life under legal and information precarity. Across both groups, legal status, language barriers, and varying digital literacy levels shape the extent to which migrants can translate online engagement into tangible socioeconomic benefits. These patterns highlight that while digital platforms provide critical lifelines, structural exclusions, especially those tied to the Dutch Linking Act, continue to limit migrants' participation in the formal digital economy.

Theoretical Integration

This study contributes to digital migration research by focusing on an under-researched group, Filipina migrants in a highly digitalized European context. Consistent with literature on digital inequality (van Deursen & van Dijk, 2019), findings show that migrants' digital engagement is stratified not only by digital literacy and device access but also by legal status. Irregular migrants faced what Wall et al. (2017) describe as "information precarity," not because of a lack of motivation or digital skills, but because systemic exclusions, such as the inability to obtain a DigiD or open a bank account, blocked their access to formal platforms. Even participants with strong digital literacy were constrained by the legal and financial infrastructures that exclude irregular migrants.

The findings support the argument by Menjívar (2008) and De Genova (2002) that legal status is both a juridical designation and a social condition that deeply influences one's ability to participate in the digital and labor markets. The production of migrant "illegality" through systemic filtering, as argued by Anderson (2013) and Fabini (2015), was evident in the way legal restrictions extended into the digital domain.

The study also advances the discussion on the "third-level digital divide" (van Deursen & Helsper, 2015), showing that while migrants may have access to digital tools,

their ability to extract tangible socioeconomic benefits from them, such as employment or integration, is uneven and often depends on informal social capital. For instance, WhatsApp chat groups and Facebook groups functioned as a form of bonding social capital (Putnam, 2000) that helped migrants secure informal work and access vital information. However, consistent with Portes (1998), these tightly knit networks may also restrict broader upward mobility by insulating migrants from formal job markets and public services.

Gendered dimensions of digital migration were also visible, affirming research by Madianou (2016) and Cabalquinto (2019). The Filipina migrants in this study used digital tools for economic and caregiving purposes, emotional connection, and maintaining transnational family roles. Platforms like Messenger and WhatsApp supported what Madianou (2016) calls "ambient co-presence," blurring the boundaries between work and care. However, this also created expectations of constant availability, particularly for women who already faced domestic and care burdens in both local and transnational contexts.

The findings also align with those of Smit et al. (2024) and Udwan et al. (2020) by showing that many migrants bypass formal digital training and instead rely on peer learning, resourceful use of smartphones, and self-teaching to overcome digital barriers. These everyday practices demonstrate agency and adaptability despite systemic barriers.

Practical Implications

At the policy level, this study highlights significant gaps in digital inclusion efforts for migrant women. While the Netherlands is a digitally advanced country, the study suggests that its digital public infrastructure remains inaccessible primarily to irregular migrants because of the Dutch Linking Act of 1998. Municipalities and NGOs, although often well-intentioned, tend to overlook the unique needs of migrant women with irregular status, often because of legal constraints, resource limitations, or a lack of tailored outreach strategies.

Digital literacy programs are often too generic or inflexible for women balancing multiple responsibilities. Migrants in this study suggested more context-sensitive interventions, such as mobile-friendly content, workshops aligned with their work schedules, and job-specific training modules. NGO initiatives such as the Leadership and Social Entrepreneurship program were highlighted as more relevant and empowering, mainly when addressing financial literacy and entrepreneurial skills.

Digital inclusion must move beyond access and focus on meaningful usage, considering factors such as legal precarity, gendered roles, language barriers, and time constraints. Efforts to close the digital divide must be situated within broader inclusion frameworks that also address housing, documentation, and financial access.

Limitations

While this study provides insights, several limitations must be acknowledged. First, the self-assessment of digital literacy levels might have introduced bias. No participants identified themselves as having "low" digital literacy, possibly because of social desirability or subjective misjudgment. Future studies may consider combining self-assessment with skill-based assessments to gain more objective data.

Second, the sample size, while sufficient for qualitative analysis, was relatively small and drawn mainly from networks linked to the Filipino community and supporting organizations. As a result, the experiences of more isolated or non-networked migrants may have been underrepresented.

Third, while the study analyzed platform use frequency, it did not include systematic digital ethnography or content analysis of participants' actual online interactions. Incorporating digital traces or activity logs might offer deeper insights into how migrants navigate online spaces.

Fourth, although the study explored perspectives from NGOs and municipalities, national-level actors and private sector platforms (e.g., Facebook, Indeed) were not included. Their involvement, or lack thereof, in shaping migrants' digital experiences could be important in future research.

Lastly, the results focus specifically on Filipina migrants in the Netherlands. While their experiences provide valuable insights, the generalizability to other migrant groups or national contexts should be approached with caution.

Suggestions for Future Research

Building on the findings, future research could take several directions: (1) To test the patterns observed here, a survey-based study with a larger and more diverse sample could explore the relationship between legal status, digital literacy, and employment outcomes in more depth. (2) Cross-national comparisons of Filipina migrants in other digitalized countries

(e.g., Singapore, Canada, or Sweden) could help identify structural differences in digital inclusion policies and migrant experiences. (3) Platform-based ethnographic studies, including Facebook job groups or WhatsApp communities, could reveal how trust, reputation, and risk are negotiated in informal labor exchanges. (4) Expanding the lens to include other intersecting identities, such as age, religion, sexual orientation, or parental status, would provide a more elaborate understanding of digital inequalities within migrant communities.

Societal Relevance

This study contributes to communication and migration research by demonstrating how digital engagement is both a strategy of empowerment and a terrain of exclusion. For Filipina migrants in the Netherlands, digital tools are lifelines connecting them to jobs, information, and their dispersed communities. Yet, these same tools are embedded within structural conditions that often reinforce precarity, particularly for those outside the legal system.

As societies become increasingly digital, migrant inclusion must no longer be viewed as optional or secondary to more visible policy concerns such as language acquisition or employment quotas. Digital literacy and equitable access to the tools that support it are central to migrants' ability to survive and thrive in their host countries.

This study offers recommendations for Dutch municipalities, NGOs, and advocacy groups to expand outreach about available digital programs, tailor workshops to the realities of migrant women's schedules, and advocate for digital inclusion policies that do not depend solely on legal status. While digital technologies hold promises for social inclusion, they must be accompanied by structural reforms to ensure that inclusion is truly universal.

References

Albrecht, C., Hofbauer Pérez, M., & Stitteneder, T. (2021). *The Integration Challenges of Female Refugees and Migrants: Where Do We Stand?* CESifo Forum, 2021(2).

Alencar, A. (2017). Refugee integration and social media: a local and experiential perspective. *Information, Communication & Society, 20*(10), 1531–1547. https://doi.org/10.1080/1369118X.2017.1340500

Alencar, A., Mena Montes, N., & Vicente-Mariño, M. (2019). From fragmentation to integration: Addressing the role of communication in refugee crises and (re)settlement processes. *International Communication Gazette*, 174804851988352. https://doi.org/10.1177/1748048519883522

Anderson, B. (2013). *Us and Them?: The Dangerous Politics of Immigration Control*. Oxford University Press.

Antonio, A., & Tuffley, D. (2014). *The Gender Digital Divide in Developing Countries. Future Internet, 6*(4), 673–687. https://doi.org/10.3390/fi6040673

Avila, E. M., & Parrenas, R. S. (2002). Servants of Globalization: Women, Migration, and Domestic Work. *Contemporary Sociology*, *31*(4), 396. https://doi.org/10.2307/3089067

Berry, J. W. (1997). Immigration, Acculturation, and Adaptation. *Applied Psychology*, *46*(1), 5–34. https://doi.org/10.1080/026999497378467

Bilecen, B., & Seibel, V. (2021). Network explanations of the gender gap in migrants' employment patterns: Use of online and offline networks in the Netherlands. *Journal of Family Research, 33*(2), 541–565. https://doi.org/10.20377/jfr-484

Cabalquinto, E. C. (2019). Elastic carework: the cost and contradictions of mobile caregiving in a transnational household. *Continuum*, *34*(1), 133–145. https://doi.org/10.1080/10304312.2019.1703903

Cerrutti, M. (2009). *Gender and intra-regional migration in South America*. United Nations Development Programme. https://mpra.ub.uni-muenchen.de/19195/

Chimienti, M., & Solomos, J. (2011). Social movements of irregular migrants, recognition, and citizenship. *Globalizations, 8*(3), 343–360. https://doi.org/10.1080/14747731.2011.576854

De Genova, N. P. (2002). Migrant "Illegality" and "Deportability" in Everyday Life. *Annual Review of Anthropology*, *31*(1), 419–447.

Encinas-Franco, J., Ang, A., Opiniano, J., & Sescon, J. (2023). *Gender, migration and development in the Philippines – A policy paper*. UN Women Regional Office for Asia and the Pacific.

Engward, H., Goldspink, S., Iancu, M., Kersey, T., & Wood, A. (2022). Togetherness in Separation: Practical Considerations for Doing Remote Qualitative Interviews Ethically. *International Journal of Qualitative Methods*, *21*(21), 160940692110732. https://doi.org/10.1177/16094069211073212

European Commission. (2024). Women in digital scoreboard 2024: *Country profiles*. Directorate-General for Communications Networks, Content and Technology. https://digital-strategy.ec.europa.eu/en/news/women-digital-scoreboard-2024

Fabini, G. (2015). Bridget Anderson, Us & Them? The Dangerous Politics of Immigration Control. *Punishment & Society*, *18*(2), 249–253. https://doi.org/10.1177/1462474515587072

Franck, A. K., & Spehar, A. (2010). *Women's labour migration in the context of globalisation*. WIDE. www.wide-network.org

Gillespie, M., Osseiran, S., & Cheesman, M. (2018). Syrian Refugees and the Digital Passage to Europe: Smartphone Infrastructures and Affordances. *Social Media + Society*, *4*(1), 205630511876444. https://doi.org/10.1177/2056305118764440

Governance of migrant integration in the Netherlands | European Website on Integration. (2023, December 14). Migrant-Integration.ec.europa.eu. https://migrant-integration.ec.europa.eu/country-governance/governance-migrant-integration-netherlands_en

Guevarra, A. R. (2009). *Marketing Dreams, Manufacturing Heroes: The Transnational Labor Brokering of Filipino Workers*. Rutgers University Press.

Hennebry, J. L., & Petrozziello, A. J. (2019). Closing the gap? Gender and the global compacts for migration and refugees. *International Migration, 57*(6), 120–134. https://doi.org/10.1111/imig.12640

International Organization for Migration. (2013). *Country migration report: The Philippines*. [PDF file]. Retrieved from https://publications.iom.int/books/country-migration-report-philippines-2013

Kindler, M., Ratcheva, V., & Piechowska, M. (2015). *Social networks, social capital and migrant integration at local level. European literature review* (IRIS Working Paper Series No. 6/2015). Institute for Research into Superdiversity, University of Birmingham. www. birmingham. ac. uk/iris

Leurs, K., & Smets, K. (2018). Five Questions for Digital Migration Studies: Learning From Digital Connectivity and Forced Migration In(to) Europe. *Social Media + Society*, *4*(1), 205630511876442. https://doi.org/10.1177/2056305118764425

Lin, N. (2001). *Social capital: a theory of social structure and action*. Cambridge University Press.

Lythreatis, S., Singh, S. K., & El-Kassar, A. N. (2022). The digital divide - A review and future research agenda. *Technological Forecasting & Social Change, 175*, 121359. https://doi.org/10.1016/j.techfore.2021.121359

Madianou, M. (2016). Ambient co-presence: transnational family practices in polymedia environments. *Global Networks*, *16*(2), 183–201. https://doi.org/10.1111/glob.12105

Madianou, M. (2019). Technocolonialism: Digital Innovation and Data Practices in the Humanitarian Response to Refugee Crises. *Social Media + Society*, *5*(3). https://doi.org/10.1177/2056305119863146

Marchetti, S. (2016). Citizenship and maternalism in migrant domestic labour: Filipina workers and their employers in Amsterdam and Rome. In B. Gullikstad, G. K. Kristensen, & P. Ringrose (Eds.), *Paid migrant domestic labour in a changing Europe* (pp. 147–168). Palgrave Macmillan. https://doi.org/10.1057/978-1-137-51742-5_7

Menjívar, C. (2008). Educational Hopes, Documented Dreams: Guatemalan and Salvadoran Immigrants' Legality and Educational Prospects. *The ANNALS of the American*

Academy of Political and Social Science, *620*(1), 177–193. https://doi.org/10.1177/0002716208323020

Minderhoud, N. (2000). The Dutch Linking Act and the violation of various International Non-Discrimination Clauses. *European Journal of Migration and Law*, *2*(2), 185–201. https://doi.org/10.1163/15718160020958890

Mohyuddin, S. I. (2017). Female migrant labor in the Philippines: The institutionalization of traditional gender roles in the name of economic development. *Pursuit: The Journal of Undergraduate Research, 8*(1), Article 10. https://doi.org/10.7290/pur8sklw

Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step Process of Thematic Analysis to Develop a Conceptual Model in Qualitative Research. *International Journal of Qualitative Methods*, *22*(1), 1–18. Sagepub. https://doi.org/10.1177/16094069231205789

Philippine Statistics Authority. (2024, September 13). *2023 Overseas Filipino Workers (Final Results)*. Philippine Statistics Authority. https://psa.gov.ph/statistics/survey/labor-and-employment/survey-overseas-filipinos

Portes, A. (1998). Social Capital: Its Origins and Applications in Modern Sociology. *Annual Review of Sociology*, *24*(1), 1–24. https://doi.org/10.1146/annurev.soc.24.1.1

Putnam, R. D. (2001). *Bowling alone* (pp. 32–33). Simon & Schuster. https://ebookcentral-proquest-com.ru.idm.oclc.org/lib/ubnru-ebooks/reader.action?docID=4935299&c=RVBVQg&ppg=32

Ramdjan, T. (2025, July 26). How Filipino and Indonesian cleaners at Saints & Stars gym face exploitation. *Het Parool*. https://www.parool.nl/topverhalen/how-filipino-and-indonesian-cleaners-at-saints-stars-gym-face-exploitation~b73affe4/

Re-Starter & Erasmus University Rotterdam. (2025). *Empowering migrant workplace integration in a digital world*. [PDF]. https://re-starter.org/

Rudmin, F. (2009). Constructs, measurements and models of acculturation and acculturative stress. *International Journal of Intercultural Relations*, *33*(2), 106–123. https://doi.org/10.1016/j.ijintrel.2008.12.001

Scheerder, A., van Deursen, A., & van Dijk, J. (2017). Determinants of Internet skills, uses and outcomes. A systematic review of the second- and third-level digital divide.

Telematics and Informatics, *34*(8), 1607–1624. https://doi.org/10.1016/j.tele.2017.07.007

Schroeder, R. (2017). Towards a theory of digital media. *Information, Communication & Society, 20*(4), 471–483. https://doi.org/10.1080/1369118X.2017.1289231

Siruno, L., & Siegel, M. (2023). Resilience strategies of Filipino irregular migrant domestic workers in the Netherlands during the COVID-19 pandemic. *Population, Space and Place, 29*(6), e2676. https://doi.org/10.1002/psp.2676

Siruno, L., Swerts, T., & Leerkes, A. (2024). Personal Recognition Strategies of Undocumented Migrant Domestic Workers in The Netherlands. *Journal of Immigrant & Refugee Studies, 22*(3), 632–645. https://doi.org/10.1080/15562948.2022.2077503

Smit, A., Swart, J., & Broersma, M. (2024). Bypassing digital literacy: Marginalized citizens' tactics for participation and inclusion in digital societies. *New Media & Society*, 14614448231220383. https://doi.org/10.1177/14614448231220383

Udwan, G., Leurs, K., & Alencar, A. (2020). Digital Resilience Tactics of Syrian Refugees in the Netherlands: Social Media for Social Support, Health, and Identity. *Social Media + Society*, *6*(2), 2056305120915587. https://doi.org/10.1177/2056305120915587

United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women) (2015). *Filipino Women in International Migration: Situation Analysis, Policy Context and International Mechanisms*. UN-Women Philippines, Quezon City.

van Deursen, A. J. A. M., & Helsper, E. J. (2015). The Third-Level Digital Divide: Who Benefits Most from Being Online? *Communication and Information Technologies Annual*, *10*(1), 29–52. https://doi.org/10.1108/s2050-206020150000010002

van Deursen, A. J. A. M., & van Dijk, J. A. G. M. (2019). The first-level digital divide shifts from inequalities in physical access to inequalities in material access. *New Media & Society, 21*(2), 354–375. https://doi.org/10.1177/1461444818797082

van Dijk, J. (2002). A framework for digital divide research. *Communication Institute for Online Scholarship, Inc.*, *12*(1 & 2)

Wall, M., Otis Campbell, M., & Janbek, D. (2017). Syrian refugees and information precarity. *New Media & Society*, *19*(2), 240–254. https://doi.org/10.1177/1461444815591967

Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: the acculturation process in its ecological context. *Current Opinion in Psychology, 8*, 98–104. https://doi.org/10.1016/j.copsyc.2015.09.021

Warschauer, M. (2003). *Technology and social inclusion: Rethinking the digital divide*. The MIT Press

Zapata-Barrero, R., & Yalaz, E. (2022). Qualitative Methods in Migration Research. In P. Scholten (Ed.), *Introduction to Migration Studies* (pp. 411–423). Springer. https://doi.org/10.1007/978-3-030-92377-8_25

Appendix A: Codebook

TableA1

Code Categories and Subcodes Used in Data Analysis

Code Category	Subcodes
1. Migration Journey & Status	Migration Motivations; Irregular Status Experiences; Regular Status Experiences; Legal Precarity; Information Precarity; Entry Challenges; Shifting Status (from irregular to regular); Years in the Netherlands
2. Digital Literacy & Access	Language Access: Dutch; Language Access: English; Language Access: Filipino; Frequency of Digital Use; Device Access (e.g., smartphone, laptop); Internet Access (e.g., home Wi-Fi, public Wi-Fi); Motivational Access (general attitudes toward the internet); Physical & Material Access; Perceived Digital/Internet Skills Access (self-assessed): advanced digital skills/confident; Perceived Digital/Internet Skills Access (self-assessed): intermediate digital skills/pretty confident; Perceived Digital/Internet Skills Access (self-assessed): basic digital skills/not-so-confident; Digital Skills Development: Self-Taught; Digital Skills Development: Formal Training; Digital Skills Development: Learned from Family/Friends; Internet Usage Access
3. Digital Practices & Usage	Information Seeking (General); Transnational Ties/Family Connection; Maintaining Home Culture; Learning Dutch Culture/Language (Digital); Learning Dutch Culture/Language (Non-digital); Using Digital for Formal Services; Digital for Informal Economy; Seeking Legal Information (Digital); Seeking Legal Information (Non-digital); Online Safety Practices; Privacy Concerns (Digital); Privacy Concerns (Non-digital); Fear of Surveillance (Digital)
4. Employment & Livelihoods	Job Search Strategies (Digital); Job Search Strategies (Non-digital); Employment Barriers (General); Employment Barriers (Status-Related); Informal Work; Formal Work; Working Conditions (digital impact on this); Remittances & Economic Contribution; Financial Independence (Perceived)
5. Socioeconomic Integration	Access to Legal Services (Digital); Access to Legal Services (Non-digital); Access to Healthcare Services (Digital); Access to Healthcare Services (Non-digital); Social Inclusion (Perceived); Economic Independence (Actual/Perceived); Housing Search (Digital); Housing Search (Non-digital)
6. Social Networks & Capital	Bonding Social Capital (Online); Bonding Social Capital (Offline); Bridging Social Capital (Online); Bridging Social Capital (Offline); Network Creation (Digital); Network Creation (Non-digital); Network Maintenance (Digital); Access to Information via Online Network; Access to Information via Offline/Personal Network; Access to Opportunities via Offline/Personal Network; Access to Opportunities via Online Network; Diaspora Networks (Online); Diaspora Networks (Offline/Personal); Trust in Networks

7. Acculturation & Adaptation	Digital Adaptation Process; Coping Strategies (Digital); Coping Strategies (Non-digital); Maintaining Cultural Identity (Digital); Maintaining Cultural Identity (Non-digital); Adopting Host Culture (Digital); Adopting Host Culture (Non-digital); Mental Well-being (Digital Acculturation); Mental Well-being (Non-digital Acculturation); Social Well-being (Digital Acculturation); Social Well-being (Non-digital Acculturation)
8. Challenges & Barriers (Specific to Digital/Integration)	Language Barriers (Digital Context): Migrant Perspective; Language Barriers (Digital Context): Organizational Perspective; Technological Barriers (e.g., device quality, internet reliability): Migrant Perspective; Technological Barriers (e.g., device quality, internet reliability): Organizational Perspective; Skills Gap (lack of specific digital skills): Migrant Perspective; Skills Gap (lack of specific digital skills): Organizational Perspective; Distrust of Online Information/Platforms; Exploitation Risks (Online); Dutch Digital Environment Complexity; Exclusion from Formal Online Services (e.g., migrants without BSN); Cultural Barrier; Institutional & Policy-Related Barriers
9. Support Systems & Policies (Organizational Representatives)	NGO Digital Inclusion Strategies; Municipal Digital Inclusion Strategies; Observed Digital Literacy Needs (Organizational Perspective); Perceived Digital Literacy Needs (Migrant Perspective); Policy Implementation Challenges; Service Provision Gaps; Role of Digital Tools (Organizational Perspective); Interorganizational Collaboration; Support System from Diaspora Group (Online); Support System from Diaspora Group (Offline)
10. Digital Literacy (DL) Programmes (by NGOs and Municipalities)	Awareness of DL Programs (Migrants); Participation in DL Programs (Migrants); Perceived Usefulness/Effectiveness of DL Programs (Migrants); Gaps in DL Programs (Migrant Perspective); Suggestions for DL Program Improvement (Migrant Perspective); Content of DL Programs (Organizational Perspective); Target Audience of DL Programs (Organizational Perspective); Delivery Methods of DL Programs (Organizational Perspective); Observed Impact of DL Programs (Organizational Perspective); Challenges in Program Delivery (Organizational Perspective)

Appendix B: Participant Categories and Roles

Table B1

Summary of Participant Categories and Roles

Participant Category	Number of Participants	Status/Role	Description
Filipina migrants with regular status	6	Residence permits for work/family reunification	Experiences with formal labor market and digital tools
Filipina migrants with irregular/formerly irregular status	5	Undocumented, overstayed, or previously without legal status	Insights into legal precarity, informal labor, and coping strategies
Dutch municipal representatives	3	Municipal integration/digital inclusion officers	Policy and program perspectives
Regional connector for status holders	1	Supports residence permit holders and asylum migrants	Links between migrants and local services
NGO representatives	4	Migrant- or Filipino-focused support, integration, and legal counseling[1]	Organizational interventions for migrant support
COA volunteer	1	English teacher for asylum seekers	Language support in asylum centers

Note. [1]Two of these NGOs focus specifically on Filipino community.

Appendix C: Code-frequency Analysis

Table C1

Digital Tools (Social Media and Non-social Media) Mentions by Migrants and Filipino NGOs, Categorized by Digital Literacy Levels (Absolute and Column-relative Frequencies)

	DL_High		DL_Intermediate		Filipino NGOs		Totals
	Absolute	Column-relative	Absolute	Column-relative	Absolute	Column-relative	Absolute
(Other) Digital Tools: Buienradar	0	0,00%	1	0,65%	0	0,00%	1
(Other) Digital Tools: Canva	0	0,00%	2	1,29%	0	0,00%	2
(Other) Digital Tools: Care.com	0	0,00%	0	0,00%	7	4,35%	7
(Other) Digital Tools: ChatGPT	0	0,00%	2	1,29%	0	0,00%	2
(Other) Digital Tools: CoronaCheck app	0	0,00%	1	0,65%	7	4,35%	8
(Other) Digital Tools: DigiD	4	2,82%	2	1,29%	13	8,70%	20
(Other) Digital Tools: Duolingo	2	1,41%	0	0,00%	0	0,00%	2
(Other) Digital Tools: Google	9	5,63%	7	4,52%	0	0,00%	16
(Other) Digital Tools: Google Maps	2	1,41%	0	0,00%	0	0,00%	2
(Other) Digital Tools: Google Translate	4	2,82%	2	1,29%	0	0,00%	6
(Other) Digital Tools: Indeed	0	0,00%	6	3,87%	0	0,00%	6
(Other) Digital Tools: MijnOverheid	2	1,41%	0	0,00%	0	0,00%	2
(Other) Digital Tools: NS app	0	0,00%	1	0,65%	0	0,00%	1
(Other) Digital Tools: OV9292	0	0,00%	1	0,65%	0	0,00%	1
(Other) Digital Tools: Teams	2	1,41%	1	0,65%	0	0,00%	3
(Other) Digital Tools: Zoom	0	0,00%	1	0,65%	0	0,00%	1
Social Media: Facebook	22	14,08%	42	27,10%	67	43,48%	131
Social Media: Facebook Messenger	17	11,27%	11	7,10%	34	21,74%	62
Social Media: Instagram	37	23,94%	24	15,48%	0	0,00%	61

Social Media: LinkedIn	13	8,45%	15	9,68%	0	0,00%	28
Social Media: Meetup	4	2,82%	0	0,00%	0	0,00%	4
Social Media: Reddit	2	1,41%	0	0,00%	0	0,00%	2
Social Media: TikTok	4	2,82%	4	2,58%	0	0,00%	8
Social Media: Viber	0	0,00%	1	0,65%	0	0,00%	1
Social Media: WhatsApp	24	15,49%	28	18,06%	27	17,39%	79
Social Media: YouTube	4	2,82%	3	1,93%	0	0,00%	7
Totals	155	100,00%	155	100,00%	155	100,00%	465

Note. Frequencies were normalized to account for unequal group sizes. The group with one participant (DL_Unclear) was excluded from the analysis due to insufficient sample size, which would have skewed the results. Colum-relative frequencies are presented to show proportional usage.