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Eritrean Refugees in the Digital Netherlands: Between Inclusion and Exclusion

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Abstract

While the use of digital technologies has been associated with refugees' successful integration, this perspective overlooks the digital divide growing on the existing structural inequalities. For Eritrean refugees living in the Netherlands, the digital divide cuts deep into their personal lives and endangers their relation to authorities. Based on two months of ethnographic research and five continuous months of digital participant observation (first author), our article aims to show how differences in digital knowledge and unequal digital infrastructures between Eritrean asylum seekers and Dutch society led to challenges for both refugees and street-level bureaucrats in the Netherlands. Tackling the case study of Eritrean refugees in the Netherlands, we demonstrate how a non-homogeneous understanding of the digital divide, organizational blind spots, and a lack of socio-political support hinder refugees' integration. At the same time, the case study offers novel ways to ethically assess the digital training and learning paths of street-level bureaucracy as well as the state's adaptation and updating of the asylum seekers' digital assessment framework in the Netherlands.

Keywords

bureaucracy; digital divide; digital inclusion; Eritrea; refugees; The Netherlands

1. Introduction

The rapid advancement of digital technologies in recent years has transformed societies worldwide, creating both new opportunities and structural challenges for vulnerable populations such as refugees, and for their host states. While digital tools are increasingly critical for integration into host societies (Culbertson & Schuler, 2019), existing scholarship often reflects a techno-optimistic bias (Bouffet, 2020; Damian & Van Ingen, 2014), failing to capture the digital exclusion many refugees face due to structural barriers (Bryant, 2022; Kaurin,

2020; Potocky, 2021). This dominant narrative, while recognizing the utility of digital tools, tends to obscure the systemic inequalities embedded within digital access and literacy.

Portraying digital technologies as a "one-size-fits-all" solution overlooks the differentiated realities of refugee populations, particularly their unequal access to devices, networks, skills, and language resources that help refugees navigate displacement, reconnect with transnational families, and access essential services (Bouffet, 2020; Damian & Van Ingen, 2014; Gifford & Wilding, 2013). Some authors (AbuJarour et al., 2021; AbuJarour & Krasnova, 2017) link digital engagement with successful integration but fail to critically interrogate the digital divide and the socio-political structures that mediate refugee–state interactions in increasingly digitalized bureaucracies. AbuJarour et al. (2021) and AbuJarour and Krasnova (2017) argue that digital engagement supports integration by enabling refugees to access services, build networks, and participate socially. However, these studies largely treat digital tools as integration enablers, without critically interrogating how the digital divide and state-driven infrastructures simultaneously reproduce exclusion.

In this context, what is called a "digital divide" is less a technological gap and more a reflection of bureaucratic indifference: a failure to imagine that digital illiteracy, like homelessness or trauma, is not a personal deficit but a product of systemic design. The refugee is expected to adapt—quickly, invisibly—to a digital order that was never made with them in mind. Building on van Dijk's (2006, 2017) foundational work, we understand the "digital divide" as a multi-layered phenomenon encompassing (a) access to devices and infrastructure, (b) digital skills and literacy, (c) patters of use and meaningful outcomes, and (d) the agency or awareness required to critically and securely engage in digital spaces. While these levels are often treated as sequential or technical, our findings show they are relationally produced through encounters between refugees and state bureaucracies. By foregrounding this framework, we highlight how Eritrean refugees' struggles with access, skills, and use are not simply personal deficits but the outcomes of systemic blind spots and bureaucratic assumptions.

Much of the literature on digital technologies and refugee integration has celebrated the enabling power of smartphones, apps, and platforms to support refugees in navigating displacement, accessing information, and maintaining transnational ties (Alencar, 2018, 2020; Gillespie et al., 2018; Udwan et al., 2020). These studies rightly document how digital tools can offer continuity, empowerment, and mobility in moments of disruption. Yet, they often remain silent on the structured asymmetries that determine who gets to benefit from these technologies and who does not. The uneven distribution of digital tools, skills, and access among refugees is routinely underexamined, as is the digital architecture through which states classify, assess, and manage asylum seekers.

We contend that this absence—showing how structural asymmetries in benefiting from digital technologies disadvantage refugees—is not accidental but symptomatic of a deeper failure to interrogate how digital governance produces inequality. Digital literacy, in this context, is not just a skill but a gatekeeping device. Our contribution begins from this gap: to understand the digital divide not only as a technical issue of access or skills, but as a relational process between refugees and states, humans and infrastructures. It includes the hardware (devices), the software (portals, forms, ID cards), and the human dimension—the clerks and caseworkers whose own digital fluency or biases shape outcomes. In this article, we trace these entanglements to show how digital systems are used to manage asylum, but rarely to support it.

Our argument unfolds in three parts. First, we situate our approach within scholarship on Science and Technology Studies, surveillance, and migration governance, which highlights how digital infrastructures embed power and reproduce inequality. Second, we examine how the digital divide manifests across the refugee journey, from connectivity gaps in places of origin to survival strategies on the move, to structured constraints in the Netherlands. Drawing from our fieldwork with Eritrean refugees, we uncover how language hierarchies, racialized assumptions, and institutional inertia shape their digital encounters. These are not simply matters of access or skills, but entanglements of power, visibility, and erasure. Finally, we turn to the Dutch state itself, showing how public servants, platforms, and policies project an idea of the "digitally ready migrant," an ideal type few Eritreans are in a position to perform. In doing so, we highlight how migration governance increasingly relies on digital systems that sort, assess, and often exclude. Unless digital frameworks are reimagined as sites of learning rather than judgment, the promise of inclusion will remain hollow.

1.1. Note on Methodology

This article is based on qualitative fieldwork with Eritrean refugees in the Netherlands, conducted between May and June 2023 by the first author. Data were analyzed, interpreted, and structured together with the second author. Seventeen in-depth interviews and one focus group were carried out by the first author in Tigrinya, with participants selected through intersectional criteria including gender, age, education, and location. Recruitment occurred via Eritrean community centers and associations, using both phone and in-person outreach. Interviews focused on digital practices in daily life—communication, services, employment, and access to digital infrastructures and information. Participants reflected on their experiences with smartphones, apps, and public portals, as well as their interactions with institutions such as the Immigration and Naturalisation Service (IND), municipalities, and welfare agencies. Thematic analysis (Braun & Clarke, 2019) was used to interpret the data. Coding yielded 76 initial codes, which were clustered into 15 categories and then into broader themes. Pseudonyms were used throughout.

Using empirical data, we explore how a lack of training on both sides—refugees and bureaucrats—contributes to a digitally skewed integration process. Digital literacy is not a static skill but a relational capacity shaped by support, recognition, and institutional flexibility. We argue for a shift from digital acceleration to digital empathy: toward infrastructures that adapt and update rather than assess, and that treat integration as a process of mutual learning rather than unilateral compliance.

This study passed through the ethics review self-check provided by the Faculty of Social Sciences Research Ethics Review Committee, Vrije Universiteit Amsterdam. Informed consent was obtained from all participants after the study procedures were explained in Tigrinya, both orally and in writing. Given the sensitivity of participants' asylum status and digital vulnerabilities, particular care was taken to anonymize personal details and avoid traceable digital identifiers. The first author shared with participants a cultural and linguistic background, such as speaking Tigrinya and being Eritrean himself, which facilitated rapport but also shaped interpretation. We acknowledge this positionality as a methodological strength that requires reflexive awareness.

2. Structural Inequalities and the Digital Divide

The digital divide does not come from nowhere, but reveals societal inequalities rooted in multiple forms of exclusion. Specifically, migration and border studies have shown how augmented and/or automated decision-making in migration governance (Godin et al., 2025; Nedelcu & Soysüren, 2022; Scheel, 2024) disproportionately surveil, police, and punish with deportation racialized migrants (Vrăbiescu, 2020). The influential work of Eubanks (2018) demonstrates how digital welfare systems reproduce inequality, shaping outcomes well before individual discretion. Especially, in surveillance studies, discretion is located at the interface between refugees and the state (Ozkul, 2023; Vohra, 2023), between the automated decisions and human biases. Building on this scholarship, we argue that digital infrastructures are never merely technical—they embed social assumptions and organizational routines. Our findings show how these embedded assumptions about a "digitally ready migrant" systematically reproduce exclusion.

Previous studies of voluntary migrants show us how digital tools can support mobility, belonging, and economic participation (Anderson & Daniel, 2020; Damian & Van Ingen, 2014). However, voluntary migrants typically engage with digital infrastructures by their choice and under conditions of relative stability. Refugees, by contrast, are compelled to interact with state-mandated digital systems that determine their access to housing, benefits, and legal recognition. Our contribution lies in extending this literature to the governance of asylum, showing how digital infrastructures can function less as enablers of inclusion and more as gatekeeping devices that institutionalize inequality.

We situate our work within *digital divide scholarship* (Alam & Imran, 2015; Potocky, 2021) but push beyond its technocratic framing to confront the epistemic erasure of refugee knowledge. The digital divide perpetuates existing social inequalities, keeping refugee groups with limited digital skills in the margins of society (Correa-Velez et al., 2013; Helsper, 2012)—a topic debunked by the socio-technical systems theoreticians (Fill, 2025). Recent studies reflect on how refugees are affected by newly introduced automated decision-making and artificial intelligence, but also how these new technologies shake the foundations of the human rights framework (Judijanto, 2025; Kinchin, 2021; Madianou, 2019; Molnar, 2021). Given the ubiquity of digital technologies in all spheres of life, particularly in Western societies, the digital divide can put some groups at a disadvantage compared to others. Studies on the digital divide focus on economic and demographic factors (Lythreatis et al., 2022; Ramsetty & Adams, 2020) and on inequalities as a result of access (Bartikowski et al., 2018). Yet, digital skills as an aspect of the digital divide among refugee groups and how these skills influence the integration process is an overlooked area.

In the Dutch context, despite the rapid digitalization of public services, little attention has been given to Eritrean refugees, who are the second-largest group of asylum seekers after Syrians, among the refugees who arrived between 2014 and 2017 (Sterckx & Fessehazion, 2018). While policy and scholarship have historically focused on migrant groups from Morocco, Turkey, and Surinam (Te Lindert et al., 2008), Eritrean realities remain peripheral. This invisibility is not benign; it shapes policy blind spots, obstructs tailored support, and reinforces a default model of integration that fits few and fails many (Bonjour & Chauvin, 2018).

Moreover, we look at how mismatched digital infrastructures and asymmetric digital literacies generate tension not only for Eritrean refugees but also for the Dutch street-level bureaucrats tasked with integrating them. We focus on how a non-homogeneous understanding of the digital divide, organizational blind spots,

and a lack of socio-political support hinder refugees' integration. When refugees encounter state systems that presume universal connectivity and fluency, they are often positioned as failing before they begin (Vrăbiescu, 2019). But this is not a story of individual incapacity but rather of a faulty design, of digital regimes calibrated to a normative user that Eritrean refugees were never imagined to be. Integration, then, becomes an exercise in endurance: navigating misrecognition, opacity, and technologies that offer access while demanding compliance.

Through the case of Eritrean asylum seekers in the Netherlands, we interrogate how institutional blind spots—assumptions about what digital competence looks like, who possesses it, and who should adapt—reproduce exclusion in the name of efficiency. Refugees with limited access to digital tools are left out of housing systems, job platforms, and healthcare appointments. Meanwhile, civil servants operate within frameworks that rarely acknowledge the digital precarity of those they assess. Lipsky's (2010) theory of street-level bureaucracy and Tummers and Bekkers' (2014) discretionary decision-making help us qualify civil servants' digital assumptions and systemic routines as part of the problem.

Our findings illustrate how Eritrean refugees experience all four levels of the digital divide (van Dijk, 2006, 2017). Access is constrained not only by devices but by unstable housing and precarious internet contracts. Skill deficits center on navigation and language barriers, with email emerging as a critical yet unfamiliar tool. Use and outcomes are highly unequal: While some participants leverage digital tools to secure jobs or education, others miss housing appointments, incur debt, or face homelessness. Finally, agency is curtailed by surveillance fears and linguistic barriers, which limits participants' ability to engage critically and autonomously online.

Despite the spread of digital infrastructures, the digital divide continues to operate as a quiet architecture of exclusion. It no longer simply marks a lack of access to devices—it marks who systems are built for, and who they silently ignore. What began as a conversation about connectivity (van Dijk, 2006) has deepened into a layered structure of inequality: digital skills (Alam & Imran, 2015), comprehension, linguistic inclusion, and the right to private, unmonitored digital presence. For refugees, these are not abstract levels. They show up in the inability to open a state email, to complete a form in a foreign script, to understand what is being assessed; and ultimately why they are being assessed. The digital divide is not a developmental lag, but rather a designed asymmetry, reproduced at the interface where refugees meet the state.

Access to digital technologies has become a prerequisite for navigating life in host societies (Andrade & Doolin, 2016), but not all access is equal, and not all users are imagined. While digital tools promise integration, they often deliver stratification. Refugees who arrive with prior skills and linguistic capital can leverage these tools to find information, housing, and work. Others are left circling systems they cannot enter. Digital access is rarely neutral. It is shaped by gender, class, age, and ability, producing uneven terrains of connectivity and control (Kaurin, 2020). What masquerades as inclusion is often a form of selective legibility, where only the digitally literate become visible to the state. For everyone else—women, older adults, disabled refugees—the platform does not open because it was never designed with them in mind.

Moreover, connectivity is not just about access—it's about privacy, autonomy, and the right not to be watched. Refugees with access to stable devices and connections are better able to obtain life-sustaining information; those without remain dependent and vulnerable. Prior studies highlight how connectivity can

reduce exploitation during displacement (Gillespie et al., 2018; Kaurin, 2020; Mancini et al., 2019), but access is rarely individual: Phones are often shared, making privacy a luxury. As Latonero et al. (2018) explain, digital safety is gendered—when women rely on devices controlled by male relatives, even health apps fail to function as intended.

Fears of surveillance and data misuse (Eubanks, 2018) further shape digital participation. For many refugees, the risks of being watched or misinterpreted outweigh the promise of inclusion. Artificial intelligence and digital systems in migration governance often heighten vulnerability and blur accountability (Kinchin, 2021; Nalbandian, 2022). Studies from Sweden and Australia (García Alonso et al., 2021; Lloyd, 2020) show how surveillance anxiety and linguistic exclusion converge to silence participation. These are not marginal concerns but signs of a system calibrated more for suspicion than safety. In the following two sections, we present our empirical data to demonstrate how each of the four levels of the digital divide—access, skills, usage and outcomes, and agency—manifests in the daily interactions between Eritrean refugees and Dutch state representatives.

3. The Digital Divide of Eritrean Refugees in the Netherlands

Refugee studies have long examined questions of displacement and integration, yet too often refugees are spoken about, not listened to. Their digital competencies—what they know, how they learn, what they build—remain obscured beneath institutional framings that treat them as data points or administrative burdens. What is missing from dominant scholarship is a grounded account of what refugees themselves say about their digital lives: how they navigate bureaucratic portals, what they fear when asked for an email they cannot access, what is lost when a notification is missed. These are not just digital gaps; they are stories of exclusion, shame, improvisation, and (lack of) care. This article centers these lived accounts, not as anecdotes but as analytic evidence.

3.1. Limited Resources, Traveling, and Transition to a New Country

For Eritrean refugees in the Netherlands, the digital divide is not simply a matter of connectivity but a mechanism through which the state sorts, assesses, and disciplines. Refugees are classified not by needs but by their ability to perform digital competence on demand. Integration becomes a performance of fluency, judged against standards that are culturally situated and technologically uneven across EU states. Barriers also begin before arrival: SIM cards that require documents, reception centers with unreliable Wi-Fi, and bureaucratic encounters that assume an email address equals digital readiness. In this context, the digital divide is less a gap to be bridged than a terrain of exclusion structured by unequal access, forced immobility, and institutional oversight. Integration cannot be understood without recognizing the violence of digital expectation.

Digital exclusion is the outcome of intersecting disadvantages—lack of access, limited literacy, constrained mobility—layered upon refugees already navigating fragmented bureaucracies. Refugees often lack the digital skills and resources required to meet the demands of integration (Hudson, 2017). But exclusion runs deeper: Education, age, language, income, and cultural familiarity all shape whether technology becomes a bridge or yet another threshold (Alam & Imran, 2015; Cohen et al., 2022). Even those with prior digital experience may find their knowledge unusable in host societies where essential services are delivered only in dominant

national languages (McCaffrey & Taha, 2019). This linguistic filtering functions as quiet exclusion. It does not deny access outright—just makes it incomprehensible. Over time, these exclusions compound. As Beaunoyer et al. (2020) show, digital disconnection affects work, education, and social ties, reinforcing the very barriers digital technologies claim to dismantle. Nguyen et al. (2021) further reveal that lower internet quality and limited skills are directly tied to diminished communication capacity. Digital exclusion is self-reinforcing—once you fall behind, the system is designed to keep you there.

For many Eritrean refugees, arrival in the Netherlands does not mark the end of precarity—it simply reconfigures it. Digital access, often taken for granted by host institutions, remains patchy, conditional, and deeply unequal. Smartphones are common, but functional internet is not. Housing is unstable, documents are delayed, and with them, SIM cards, Wi-Fi contracts, and digital participation itself. As Mahlet, a 42-year-old woman in Amsterdam, put it: "For many years I was not given a refugee status, I didn't have a permanent place to stay, and I had no Wi-Fi, no internet. I just had a small phone for calling." The device is there—but the infrastructure is missing. In these early months and years, the digital divide is not abstract. It is the silence of an unopened email, the absence of a stable address, the long wait to become legible to the system.

3.2. Digital Challenges: From Smartphone to Emails and Digital Communication

To live in the Netherlands is to engage with a digital state—but for many Eritrean refugees, this state speaks in codes they were never taught to read. Digital engagement is often limited to the familiar safety of calls and WhatsApp, while housing portals, benefit systems, and application platforms remain out of reach. The cost of this partial access is steep: missed appointments, lost letters, and growing invisibility within the very institutions meant to support them (Beaunoyer et al., 2020).

Participants did not speak of programming or software literacy. They spoke of something more basic, more urgent: navigation. The ability to reach a website, locate the right tab, complete a form without needing to ask:

> If I have to choose a specific skill that is very important, I would say the ability to go to a certain website on the internet, search for something, find information, and complete something that concerns you. If a person is able to do this, I think their life here would be much, much easier. (Yonas, 27, male, Amsterdam)

Yonas' reflection captures a quiet truth: In the digital state, to not know how to navigate is to fall behind silently. This is the divide that structured every conversation. Smartphones were everywhere, but computers remained symbols of another tier of access—one that most had not reached. As Salem, a 35-year-old female in Amsterdam, put it: "If you can read and understand the language, if you can use a computer and the internet, you will be happy here." Her words cut to the core: Digital skill is not just a technical asset, it is a condition for well-being. Without it, refugees are left guessing, dependent on others, or locked out of the very tools meant to integrate them.

Smartphones were ubiquitous among participants—but digital confidence was not. Most used their phones for what they knew: calls, messages, WhatsApp, Telegram. These were not just apps; they were lifelines to familiarity, safety, and social presence. As Yonas, 27, male from Amsterdam, explained: "I use my phone for

everything, to connect with my people." But beyond that social terrain, a harder digital world loomed—web portals, payment systems, appointment apps. Only a few, often those with higher education, could navigate these spaces with ease. These individuals became informal intermediaries, bridging digital gaps within the Eritrean community itself. Their roles reveal both solidarity and stratification. We notice communal coping strategies that emerge when public systems fail to offer support. Digital exclusion is not only vertical—between refugee and state—but also horizontal, lived unevenly within the group itself:

> On my phone, I use direct calls, and mainly social media....I also use apps like banking apps and I use email as well....I also have the DigID app on my phone....I use my computer for accessing language learning resources for example. I watch videos and so on. There are also online available books that I access with my computer....I use Microsoft packages, mainly Microsoft Word. I download images on my phone. But if it is a document, for example in PDF version, I download it on my computer. (Gere, man, 22, Tilburg)

Across conversations, participants described smartphones as lifeline tools to stay connected with family, friends, and familiar languages. Basic digital skills like making calls or sending messages were widespread, and for many, these skills sustained their social world. But beyond these familiar platforms, the digital terrain shifted quickly from connection to confusion. Those with stronger digital literacy could navigate public services, apply for jobs, or access education. Those without remained reliant on others for help. Digital skills, then, are not simply technical. They are permissions to move, to know, to belong. And the absence of those skills is not just an inconvenience but a form of exclusion, quietly enacted through every app they cannot open.

While email was peripheral or unused in many participants' countries of origin, in the Netherlands it becomes not just a communication tool but an administrative lifeline. Refugees are quickly expected to rely on email for everything—from housing notifications to medical appointments—yet little support is provided to develop the skills required. The shift is not just technical; it is disorienting:

> We don't use email in my country. But here, wherever you go, they ask if you have an email. It is all about emails. Some of them even say, if you don't have an email, we won't send you a postal mail. This is extremely difficult. (Halima, female, 30, Zandaam)

Halima explains how email itself becomes a threshold; one that determines access to the state. This threshold often excludes those least prepared to cross it. Lacking digital skills is not a minor inconvenience— it is a barrier to everyday life. For Eritrean refugees, the inability to send an email or navigate an online payment system often results in missed opportunities and cascading penalties. Digital bureaucracy becomes punitive by design. The inability to engage with these digital platforms negatively affects refugees' interactions and leads to missed opportunities. Yonas, a 27-year-old young man who is currently living in Amsterdam, shared how he missed an opportunity for housing because he did not know how to use email:

> When I arrived in this country, in the first few months, I had an appointment at an organization. I had an email address, but I didn't know how to use it. Someone set it up for me back then, filling my email address in a form. Later on, they sent the appointment to my email address. I was waiting for someone to tell me or notify me about [the appointment] as I didn't know how to use an email. I had no idea

about it. Because of that, I failed to go to my appointment. It was for a housing arrangement, by the way. And I missed my opportunity [to obtain social housing] just because of that.

Yonas's story is not about forgetting—it is about being untrained and structurally unprepared. The system assumes competence without offering pathways to achieve it. These experiences extend to interactions with private employers and public officials, where digital illiteracy leads to missed opportunities, debt, fines, and even homelessness. What begins as a technical oversight quickly escalates into a life-altering outcome. These are not isolated cases; they are symptoms of a broader design that penalizes nonconformity to digital norms. An interviewee recounted an incident where she was fined due to a missed digital payment, which led to financial pressure. Another touching story narrated how a fellow Eritrean refugee ended up becoming homeless due to accumulating debts originating from digital transactions he could not understand. Halima, a 30-year-old woman living in Zandaam, recounted the tale of this Eritrean refugee who had journeyed alongside her to the Netherlands as follows:

Let me share with you a story of a friend who came here the same year as me. So, a lot of contacts in this country are made via email, or they would ask you to do something on the internet. This guy doesn't know much about the internet or other digital tasks. So, for this poor friend, a debt that he was not aware of was accumulating, because he didn't check and pay on time. Then, his belongings were confiscated, and even then his debt would not be covered. Then he was forced to leave his house and he ended up becoming homeless. He became excluded from all the services and benefits in the country.

This narrative lays bare how digital exclusion is not benign but has material consequences. It can leave people not just offline, but unhoused.

The digitalization of services in the Netherlands, juxtaposed with the often limited digital proficiency of numerous Eritrean refugees, gives rise to sensations of powerlessness and isolation among participants. The high reliance on digital technologies for basic tasks fosters a sense of dependence on others and feelings of inadequacy:

The reliance on digital systems leaves me feeling powerless, as if I can no longer accomplish anything independently. I had to ask for help when applying for something on the internet or using an application. And honestly, I don't like that. The freedom I longed for appears to be further out of reach. (Welday, male, in his 40s, Amsterdam)

Others, too, shared their experiences of seeking support for tasks like making appointments online, checking emails, or navigating applications. These stories encapsulated refugees' yearning for independence and the ability to navigate digital spaces independently.

Even among those with robust digital skills, language remains a bottleneck. Yohanes explained: "Language barrier sometimes makes it hard to understand certain digital applications even if you have the skill to use them" (Yohanes, male, 28, Rotterdam). His statement reveals the co-dependence of language and digital literacy. Integration cannot be reduced to access or skills alone—it must contend with the epistemic exclusions that emerge when the language of the state is the only one that counts. Multilingual design is not a luxury; it is a condition for equitable access.

Language learning, as a key aspect of integration, obliges participants to access digital and interactive language learning platforms. Participants have identified language as a multifaceted challenge that affects their ability to use digital technologies, access information, and engage with different online resources. Few participants acknowledged that having a basic proficiency in the English language provided them with an advantage, especially during the first months or years in the Netherlands. One participant said: "Language is a challenge obviously, but for me, I understand a little bit of English and that helped me a lot. So I translate Dutch content into English" (Gere, male, 22, Tilburg). This shows that individuals with some level of English understanding could reduce some of the language-related challenges. The participant's experience further illustrates this notion, as he articulates how his understanding of English helped his digital engagement.

Eritrean refugees navigating Dutch digital infrastructures encounter a particular form of erasure—one not simply rooted in not knowing the language, but in the deeper misalignment between linguistic systems. Most complaints among participants were not about the content of digital instructions, but their form. Tigrinya, unlike European languages, relies on the Ge'ez script—a non-Latin orthography that most mainstream platforms do not accommodate. The digital world of the Netherlands thus becomes linguistically opaque, even hostile. This isn't just a case of bad translation; it is a structural disjuncture that alienates. As refugees are asked to engage with integration systems online, they are met not only with foreign languages but with characters, logics, and platforms that deny the existence of their mother tongue. One participant voiced a common longing: "The first challenging thing is the language. Sometimes I think to myself, what if all the websites were available in Tigrinya too, all the applications and everything? Everything would have been so much easier" (Yonas, male, 27, Amsterdam).

3.3. Digital Tools and Privacy Concerns

For Eritrean refugees in the Netherlands, the digital divide is not only technical but linguistic. Interfaces assume fluency in Dutch or English, silencing those who cannot read them. These linguistic barriers do not just impede access—they exacerbate privacy risks. Refugees navigating the Dutch asylum system described a deep sense of unease, an anxiety that their digital traces might be weaponized against them. Fears of being monitored prompted some to hide or discard their devices altogether, in a desperate attempt to retain control over their data. Yet the irony is stark: In trying to evade digital scrutiny, many became even more reliant on others to complete the most basic online tasks. This dependency, born of systemic neglect, came at a steep cost. As one participant noted, even opening an email or accessing a government site required surrendering their private information to acquaintances or intermediaries. In these moments, privacy became a luxury afforded only to the digitally fluent.

The absence of secure access not only violated personal autonomy but also made some refugees targets of deception and exploitation. Participants recounted being charged exorbitant sums by strangers to perform simple online tasks—filling forms, checking messages, or printing documents. These interactions, often marked by coercion or manipulation, reveal a darker underside of digital exclusion—where informal economies of exploitation thrive on the very gaps the state refuses to close.

The issue of privacy has arisen as a significant obstacle, impacting the accessibility of devices for Eritrean refugees. Some participants expressed concern about privacy issues due to rigorous monitoring and inspection by authorities during the asylum procedure (see Eubanks, 2018). The fear of having their mobile phones and

online activities inspected thoroughly creates a sense of vulnerability, which in turn leads many refugees to choose either to conceal or discard their phones while seeking asylum. The result is a deliberate self-erasure. One respondent described the whole thing as follows:

> They would ask for your phone, request your password, and check everything that you have. That includes your online presence. That is scary, and you don't want anyone to look at your phone like that….Because of that, many people prefer to go without their phones. But that has its own consequences. Many people would have to navigate the system without having a phone. You can imagine how difficult that would be. (Gere, male, 22, Tilburg)

Eritrean refugees face the dilemma of relying on digital technology for various purposes, while at the same time struggling with issues about privacy and data security in the face of institutional mistrust. Many participants expressed the challenge of needing support to execute even small tasks due to their limited digital skills. This heavy dependence on others compromises their ability to maintain privacy, as their personal information is shared with the people supporting them navigate digital or online platforms. Meron, a 49-year-old woman who talked about seeking help from her neighbors and others for her digital issues, voiced her concern as follows:

> So even for the simplest things I have to ask for help. But that doesn't make you feel good. You won't have privacy, as the person who is helping you will see and know everything—your bank or health information can be at risk. (Meron, female, 49, Amsterdam)

Dependence on intermediaries also erodes privacy, as Meron (woman, 49 y, Amsterdam) explained: "Even for the simplest things I have to ask for help. But that doesn't make you feel good…they will see everything, even bank or health information." Meron (female, 49, Amsterdam) added how one "agent" exploited this vulnerability, charging her €900 for false visa services. These accounts show how exclusion produces not only disconnection but exposure—where lack of digital access opens pathways to mistrust and exploitation. The interaction between device accessibility, privacy issues, and striving for integration holds implications for the successful integration of Eritrean refugees in the Netherlands. Digital tools, heralded as bridges to inclusion, frequently become bottlenecks. While they promise streamlined access to welfare, employment, and communication, their benefits are conditional, predicated on having the "right" devices, languages, and literacies. For Eritrean refugees, the pathway to digital belonging is often obstructed by the very tools meant to facilitate it.

4. Blind Spots of the Dutch Integration System: From Personal Biases to the "Neutral" Digital Divide

The Dutch integration system presents itself as efficient, impartial, and streamlined, powered by digital tools that promise universality. But beneath the surface of digital efficiency lies an infrastructure of exclusion. What is framed as "neutral" infrastructure often encodes social inequalities and assumptions of sameness that refugees—particularly Eritrean ones—must navigate at high cost. This section examines the overlooked gaps and *quiet violences* of a system that presumes technological access and cultural familiarity as default.

Using the lived experiences of Eritrean refugees as a lens, we explore how the integration regime's dependence on digital translation tools, automated interfaces, and untrained frontline workers reproduces

existing inequalities. Far from being passive users of a ready-made system, refugees encounter and resist its blind spots through confusion, improvisation, and fatigue. We show that integration in a digital state is not just about learning the system; it is also about surviving its failures.

4.1. Training Programs for Refugees and for the Street-Level Bureaucrats

One of the starkest silences in the Dutch integration system lies in the absence of refugee-specific digital skills initiatives and training programs. This absence is not a passive oversight, but an active form of exclusion that positions digital fluency as an assumed individual responsibility rather than a structural need. Across all interviews, Eritrean participants articulated a shared experience of navigating a digital society without adequate tools, instruction, or institutional support. No government body, NGO, or municipal partner was identified as offering meaningful, refugee-specific digital training. Instead, the burden of learning fell on informal networks, peers, or volunteers—none of whom had the mandate, resources, or pedagogical expertise to guide newcomers through the intricate architecture of the Dutch digital state. This gap is not just technical—it is relational. The absence of digital support for refugees is mirrored by the limited digital literacy and cultural sensitivity among many street-level bureaucrats. When both sides of an interaction lack the tools to bridge distance—one due to exclusion, the other due to bureaucratic inertia—miscommunication becomes routine. Integration falters not only because refugees are underprepared, but also because the system is untrained to meet them where they are.

In a complex digital environment, language access and digital skills might look like a technicality—a box to tick, a skill to acquire. Yet our findings show it functions far more as a structural filter than a neutral tool. Language barriers are not peripheral; they are constitutive of the digital communication between Eritrean refugees and state institutions. These barriers do not merely obstruct understanding—they reshape the very terms of access, expectation, and recognition. Communication with state institutions is not only about translating instructions; it is also about decoding cultural expectations, reading institutional tone, and navigating a bureaucracy that speaks in registers unfamiliar to many newcomers.

In the section that follows, we unpack how Eritrean refugees encounter these language-mediated assessments and how organizational communication practices silently structure failure into their integration process.

4.2. Digital Translation Tools

One example of how digital tools can fail refugees is the reliance on tools like Google Translate among Eritrean refugees, which poses challenges for non-European languages such as Tigrinya, a language spoken by Eritrean refugees. These systems, trained predominantly on European language corpora, misfire when encountering syntax, idioms, and contextual nuance rooted in East African speech communities. Among Eritrean refugees, the digital promise of inclusion through translation collapses at the limits of linguistic infrastructure.

The challenges stemming from language barriers among Eritrean refugees in the Netherlands are further exacerbated by the insufficiency of translation tools like Google Translate (Ma'shumah et al., 2021; Suhono et al., 2020), particularly for non-European languages like Tigrinya. While these tools can be helpful for those with an understanding of English, they need to be improved when it comes to languages like Tigrinya, especially in contexts where Dutch is the source language. For instance, essential communication such as

emails or banking information sent in the Dutch language can be difficult to understand, even when trying to translate through Google Translate. This creates a significant barrier to managing critical tasks and comprehending important information in Dutch, a language in which Eritrean refugees need to be proficient:

> Also, they would send you emails or information in Dutch; I can translate it in Google but Google Translate is not reliable. For example, my bank was only available in Dutch back then, which made it very difficult for me to check my balance, send money, or adjust settings for automatic monthly bills. (Senait, female, 33, Amsterdam)

This is further echoed by another participant, who shared her account as follows:

> A lot of my friends are actually not able to understand letters sent to them or use a translation tool. But let's say you can use a translation tool—even then, you can only get a better translation if it is English to Dutch or vice versa. Give Google Dutch text and ask it to translate to Tigrinya, and it gives you an unrelated translation. So, that is a huge challenge, I think. (Sara, female, 31, Amsterdam)

While many individuals find it difficult to interpret letters and employ translation tools, even those who have language skills face digital limitations. Sara (female, 31, Amsterdam) reflects on a challenge related to the quality of translation, highlighting how Google Translate may provide accurate translations between English and Dutch but fail when translating to Tigrinya.

The consequences of communication conducted exclusively in Dutch within administrative and service infrastructures go far beyond inconvenience—they enact a form of structural exclusion. Participants describe an enduring struggle to access critical services such as online banking, digital subscriptions, and appointment systems, all of which operate exclusively in Dutch. This language regime, embedded in state and market digital platforms, implicitly assumes Dutch fluency as a condition of access, effectively sidelining refugees whose linguistic backgrounds do not align with that expectation. The absence of native-language resources, particularly in Tigrinya, does not merely slow integration; it systematically undermines refugees' autonomy in managing everyday life in the Netherlands.

5. Conclusion

Our findings illustrate how Eritrean refugees experience the four interconnected levels of the digital divide in the Netherlands: access, skills, usage and outcomes, and agency. Access was hindered not only by the absence of digital devices but also by unstable housing situations and limited access to affordable, reliable internet services. At the skills level, participants struggled with basic digital navigation and linguistic challenges, particularly in using essential tools like email, which was both unfamiliar and indispensable. In terms of usage and outcomes, the divide manifested in stark disparities: While some individuals were able to use digital platforms to gain employment or pursue education, others missed critical housing appointments, accumulated debt, or became homeless. Finally, agency was constrained by surveillance anxieties and persistent language barriers, which undermined participants' ability to critically engage with digital systems and act autonomously online. These findings suggest that digital inequality is not a neutral gap but a relational process shaped by both refugee strategies and bureaucratic blind spots.

This article has shown how digital exclusion is a serious and ongoing issue for Eritrean refugees trying to integrate into Dutch society. While smartphones are widely used, real digital inclusion requires much more than just having a device. Refugees face many barriers—from limited digital skills to language difficulties—that prevent them from accessing essential services like housing, education, and employment. We have shown that one of the most consistent challenges is language. Most digital tools and services in the Netherlands are only available in Dutch. For Eritrean refugees who speak Tigrinya, this creates major difficulties, especially when translation tools like Google Translate fail to accurately convert Dutch into Tigrinya. Many participants explained how this barrier caused them to miss important emails, misunderstand appointments, or even fall into debt. These are not just minor issues—they affect people's ability to live safely and with dignity.

The lack of digital training of Dutch frontline workers directly affects refugees, who are not given the support they need to understand how to use digital tools. In addition, the street-level bureaucrats often do not know or do not have the resources to offer help. This creates a situation where both sides are unprepared. As a result, refugees are often left to rely on their community, which can put their privacy and security at risk, as the digital divide creates inequalities within the Eritrean community as well. Those who speak some English or have higher education end up supporting others. While the practice might indicate a sign of community strength, it also shows how the refugee inclusion system fails to provide proper support.

In an ideal world, digital inclusion would be part of integration—not as a technical detail but embedded in both the experience, training, and knowledge of Eritrean refugees and of the Dutch street-level bureaucrats. This means creating training programs for both refugees and bureaucrats, offering services and information in multiple languages, and making sure that digital systems are adapted to meet the needs of all users. Integration is not just about refugees learning how to fit in—it's also about the system learning how to serve a diverse population. Without these changes, digital systems will continue to leave people behind, and integration will remain out of reach for many Eritrean refugees in the Netherlands.

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Conflict of Interests

The authors declare no conflict of interests.

Data Availability

The raw data for this study are available at the Vrije Universiteit Amsterdam databases, in line with the ethics requirements of the Research Master's programme in Societal Resilience. This article is based on the first author's MSc thesis, which is archived in the VU Amsterdam institutional repository.

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