

DATA FOR FINANCIAL INCLUSION?

An assessment of the value that migrants receive in exchange for data on remittance platforms.

AUTHORS

Chiedza Kehle	Chenai Chair
chiedza@mydatarights.africa	chenai@mydatarights.africa

TABLE OF CONTENTS

01 ABOUT THE AUTHORS	iii
02 ABSTRACT	v
03 INTRODUCTION	01
04 LITERATURE REVIEW	04
Financial Inclusion and Fintech	04
Digital Remittance Platforms and Immigration	05
Country Context	06
Datafication of Fintech Platforms	07
Migration and Financial Rights	09
Interoperability	10
05 THEORETICAL FRAMEWORK	12
African Feminism, Migration and Financial Inclusion	12
Data Feminism Approach to Digital Financial Systems	13
Migration Theory	14
Integrated Analytical Approach	15
06 METHODOLOGY	17
07 FINDINGS AND DISCUSSION	19
Case Studies	19
HelloPaisa	19
Mama Money	20
Mukuru	22
The Value of the Data	24
Completion of the Cycle	25
Traditional bank data requirements vs. Remittance Platforms	27
Access, accessibility and inclusion	31
Discussion	33

08 IMPLICATIONS	36
Policy implications	36
Implications for Inclusion Framework	37
Research Implications	37
09 CONCLUSION	39
10 REFERENCES	40

ABOUT THE AUTHORS



CHIEDZA KEHLE

Ms. Chiedza Kehle is a multidisciplinary artist, researcher, educator, and designer working in the fields of digital rights, technology, culture, and social impact in Africa. Her work explores how design, emerging technologies, and community-centred approaches can contribute to more equitable and inclusive digital futures. With experience spanning higher education, civil society, and creative practice, she has worked on projects related to digital governance, data rights, user experience design, and social justice across the continent.

Through her consultancy and creative venture, Art of Afrika Collective, she supports organisations working in human rights, social justice, and education, helping them communicate complex ideas, strengthen community engagement, and design meaningful interventions that create lasting impact.

ABOUT THE AUTHORS



CHENAI CHAIR

Ms. Chenai Chair is the Director of the Masakhane African Languages Hub, where she leads strategy and initiatives aimed at positioning the Hub as a global leader in African language AI. In 2020, she founded My Data Rights (Africa), an online platform that maps AI, privacy, and data protection issues from an African feminist perspective.

Her work applies feminist principles to examine how digital technologies are designed, deployed, and experienced, ensuring they reflect contextual realities and global connections. Ms. Chair has contributed extensively to areas including women and gender diverse peoples rights online, digital identity, online gender-based violence, and data and AI governance, bringing a strong focus on equity, social justice, and inclusive digital transformation.

ABSTRACT

Migration within Africa is primarily driven by economic necessities leading people to participate in their home country economies from outside. In 2024 intra-Africa remittances reached \$19.4 billion (AfDB, 2024). The need to send money easily has been responded to by digital channels with the emergence of platforms that facilitate transfers of money to be picked up by digital wallets in seconds. This has also led to migrants providing troves of data that reveal information on their personal needs and behavioural patterns of their finances (Ahnert et al., 2024). In the proliferation of digital remittance platforms and the associated data collection, it is important to understand how this data translates into value for the platform users. Adopting an African Feminist approach to data, the research investigates the justice of these technologies, questioning user agency, datafication, data governance, platform interoperability and most critically; financial inclusion. The three primary remittance platforms assessed in this discussion are HelloPaisa, Mama Money and Mukuru. This assessment will analyse the platforms' cycle of joining and use, data governance, standards applied (open or closed for interoperability) and services offered based on material available online to users of the platforms.

This paper was developed with support from the Interledger Foundation under its 2025 Call for Papers grant program. The views expressed are those of the authors and do not necessarily reflect the views of the Interledger Foundation.

INTRODUCTION

It is critical to analyse the playbooks of data collection and processing of remittance platforms in South Africa which has the highest level of migration in the Southern African region with a high number of that being irregular and informal migrants¹ (*Migration III: Interpreting the Data on South African Migration, n.d.*). Remittance platforms play a key role in providing a pipeline between people's former countries of residence and their new found homes in South Africa; and often this pipeline becomes the only connection left (*Remittances Matter: 8 Facts You Don't Know About the Money Migrants Send Back Home | UN DESA | United Nations Department of Economic and Social Affairs, n.d.*).

In Zimbabwe and Mozambique in particular, economic challenges have pushed people to emigrate and so the search for money and a way to send it back home are the pinnacle of successful migration; regular or irregular. Prior to the introduction and popularity of digital remittance platforms, money was often transported across borders by long haul truck and bus drivers, friends and relatives, and it was not uncommon for a person to travel to the bus stations to entrust a stranger going in their home direction with a parcel that included cash. This system of trust was not without its failures and often the accountability measure was to simply not send an untrustworthy person again but choose someone new to trust (Chisasa, 2014). This system existed outside of the datafication of society. Datafication is the phenomenon of whether one is connected to the internet or not and how the different social actions that people are involved in within their respective communities have now become data points that can be easily monitored, tracked and optimised (Mejias, 2013). The many terms and conditions to agree to can create the illusion that people can choose to monitor and track themselves on platforms for ease of life (Chair and Mhaka, 2020), however, users often have little or no knowledge of the data being collected, how it is being used and their rights to this data. In traditional remittance, credibility was established through human trust systems and so the data collected was often not digitised or stored for long term use. This data, in the instance of bus and truck drivers, would include the name of the driver, their

¹There is no measure for irregular migration in South Africa. The concept is often used a xenophobic tool that further increases the challenges for all migrants to South Africa.

phone number and the company which they drove for and the route they drove. For the non drivers, credibility was created through referrals and past experiences. At a national level, this lack of record-keeping meant that the South African Reserve Bank and other financial bodies did not have a full record of how much money was crossing between borders, who was sending it and for what purpose (Chisasa, 2014). Digital remittance platforms such as HelloPaisa, Mama Money, and Mukuru have transformed how migrants send and receive money, offering convenience, speed, security, and relative affordability as well as greater levels of transparency for financial institutions and governments. However, as these services increasingly integrate digital identity verification and data-driven services, questions arise regarding privacy, data governance, and the actual depth of financial inclusion achieved.

This paper employs an African Feminist framework as the primary framing device for critical analysis. African Feminism is a critical framework that centres the lived experiences, knowledge systems, and socio-political realities of African women and marginalized communities, foregrounding the intersections of gender, race, class, migration, and colonial history (Mama, 1995; Oyewumi, 1997). It challenges universalist Feminist assumptions by emphasizing context-specific, relational, and community-oriented approaches to power, agency, and justice, often through strategies of negotiation and transformation rather than opposition (Nnaemeka, 2004; Ogundipe, 1994). As an analytical lens, African Feminism is attentive to how structural inequalities and historical legacies shape access, participation, and value, making it particularly useful for interrogating the extractive dynamics and uneven benefits often embedded in data-driven systems such as remittance platforms.

This paper interrogates whether these digital remittance platforms genuinely promote financial inclusion or if they reinforce existing socio-economic exclusions through data-driven practices. An African Feminist framework to understand inclusion and concerns with data is used to assist in answering the following questions:

1. What data is needed for migrants to be able to use digital remittance platforms and to what extent does the data translate into financial inclusion?
2. Are platforms ensuring inclusion from a Feminist perspective?

Financial inclusion and fintech

The World Bank (2025) defines financial inclusion as access to a full suite of financial products which include savings, credit, insurance, and payment systems delivered in a responsible and sustainable way. This is critical to define because as part of their offerings, the remittance platforms investigated in this paper - HelloPaisa, Mama Money and Mukuru describe and offer banking services as well as speak of their promotion of financial inclusion.

In South Africa, banks are categorised into three tiers. The first tier includes Commercial banks, Investment banks and Land and agricultural development banks, the second tier includes Mutual banks, The Postbank of South Africa and cooperative banks. Remittance platforms form part of the third tier which includes village banks, stokvels and mobile banking services (Sharrock, 2016). It is not unusual or out of scope that remittance platforms in South Africa describe their services as banking despite being registered as Financial Service Providers (FSPs) and Money Transfer Operators (MTOs). Remittance platforms typically partner with formal banks registered under the Banks Act which allows them to trade as Authorised Dealers in foreign exchange with Limited Authority (ADLAs). There are no statutes specific to mobile banking service but they adhere to the legal frameworks of the South African Reserve Bank Act (Act 90 of 1989), the National Payment Systems Act (Act 78 of 1998), the Banks Act (Act 94 of 1990), the Exchange Control Regulations (for crossborder transactions), the Financial Intelligence Centre Act (Act 38 of 2001) and the South African Reserve Bank Position Paper on Electronic Money (position paper 1 of 2009).

Without specific statutes, it is critical to investigate how this digital turn in financial services and products address inclusivity. Ahnert et al. (2024) note that remittance platforms rely heavily on user data for identity verification, risk profiling, and product personalisation. Migrants are required to share extensive personal information, including passports, addresses, employment details, and biometric data. While necessary for compliance with Know Your Customer (KYC) and Anti-Money Laundering (AML) regulations, this data collection raises concerns about privacy, surveillance, and discrimination.

Furthermore, data-driven pricing models could enable predatory pricing or differential service access, undermining the very inclusivity these platforms claim to promote (Mhlanga, 2022). Madianou (2025) describes how technology for social good often reinforces the frameworks of governing structures which can be colonial or authoritative in nature. In technological innovation, migrants face epistemic violence as the subjects of tests for new innovations promising belonging and ease.

Digital Remittance Platforms and Immigration

Digital remittance platforms have significantly improved the lives of migrants and their families by acting as a powerful catalyst for positive financial inclusion. By significantly lowering transaction costs, often reducing fees to between 1% and 3% when using modern technologies, these platforms ensure that more money directly reaches the intended recipients (Ekshian, n.d.). For many marginalized communities, receiving funds digitally serves as a critical first step into the formal banking system (Ardic Alper et al., 2025). Once connected, users frequently expand their financial engagement by adopting savings accounts, debit cards, and term deposits (Miguel, Parrado, & Santana, 2025). Furthermore, regular digital remittance inflows establish verifiable financial histories as well as a way to get paid for migrants in the informal work sector (Miguel, Parrado, & Santana, 2025).

Beyond basic banking access, these platforms empower families to achieve greater economic resilience (Hamdan, 2019).

Mobile money and digital remittances enable effective "consumption smoothing," allowing households to quickly share risks and recover from unexpected income shocks (Hamdan, 2019). Ultimately, these accessible financial tools help alleviate poverty by ensuring a bridge between new homes and families left behind in the old countries. Through remittance many basic education and healthcare have been facilitated across borders (Ardic Alper et al., 2025; Ekshian, n.d.)

Country context

South Africa formally hosts about 2.4 - 3.9 million migrants but it is estimated that the figure may be over 4 million including informal migrants mainly from the

Southern African Development Community (SADC) countries (StatsSA, 2022). This makes South Africa the largest remittance sending market in Africa with most remittance transactions conducted by Zimbabwean and Mozambican migrants. "Gauteng remains the top destination, with 28,4% of male immigrants and 21,8% of female immigrants calling it home. The Western Cape follows as the second most preferred province, attracting 9,1% of male immigrants and 6,8% of female immigrants" (StatsSA, 2025).

Living as a migrant in South Africa, formally or informally is precarious. Amongst the issues to contend with is xenophobia at various levels including legal and administrative challenges often including the risk of violence, detention and deportation. In employment sectors, migrants also run the risk of exploitation and limited opportunities.

Challenges also exist in restricted access to services and social exclusions. While all these challenges at integrating into South Africa pose difficulties, the expectations, responsibilities and burden of still participating socially and economically to the home countries left behind increases the precariousness for the immigrant experiences.

Various subsets of immigration and financial responsibilities occur – one partner leaving behind the other with children, parents leaving behind their children, young families leaving behind their parents and children's grandparents. In these scenarios, while a new life must be established, the old must be maintained and financed. Remittance is therefore not just a conversation about a fixed amount of money but of rentals, school fees, savings, emergencies, gifting amongst other needs that form the gamut of financial participation. It is also important to note that while men earn more money and remit higher amounts, women earn less and remit a higher portion of their earnings while also paying higher remittance fees (UN Women, 2021).

Women migrants often earn less than men due to gendered labour market inequalities, yet they remit a higher proportion of their income and do so more

consistently, reflecting strong social and caregiving obligations (World Bank, 2023; UN Women, 2020). Despite this, they frequently face higher relative remittance costs, as smaller, more frequent transfers and limited access to formal financial and digital systems place them in more expensive service tiers. From a data governance and platform design perspective, this reveals a structural imbalance showing that women contribute significant financial flows and valuable data to remittance platforms, yet receive less value in return, as systems are not designed around their economic realities or usage patterns.

Datafication of fintech platforms

Digital remittance platforms are fundamentally data-driven systems. Platform capitalism and datafication highlights how digital platforms rely on continuous data extraction, processing, and monetisation as core business models (UNCDF, 2023). In fintech, data including personal data is central to identity verification, fraud detection, and regulatory compliance through KYC and AML regimes (Gabor & Brooks, 2023).

The collection, processing and use of this data is governed by data protection and access to information legislation.

In South Africa, The Protection of Personal Information Act of 2019 (POPIA) and the Promotion of Access to Information Act of 2000 (PAIA) provide clarity on the processing of data, safeguards of personal data and rights to access this data. As a constitutional instrument, all non-nationals - i.e. migrants - are protected by this act (SAHRC, 2016).

Immigration shapes the experience of datafication with more points of inequality such as status, gender and education affecting the way in which immigrants data is collected, processed and used by platforms. Informed consent is the bedrock of being able to collect all forms of personal data. Feminist frameworks and principles highlight the challenges with data collection and processing and access to rights. Chair and Mhaka's (2022) research with African Feminists surfaced that

marginalised groups are likely to experience “forced consent” where individuals do not have a choice to opt out if they want to access a service nor meaningfully understand what they are signing up to. The POPIA (Section 5, 2019) provides for the right to be informed on how data will be collected and used with a specific provision for automated decision making (Section 18 and Section 17 of the POPIA) but implementation does not take into account power dynamics that would enable one to exercise agency and control of their data (Chair, 2020).

It can be argued that these data practices produce conditional inclusion, where access to financial services depends on users’ ability to generate compliant and legible data (Couldry & Mejias, 2019). For migrants, this conditionality is particularly acute, as documentation gaps, cross-border surveillance, and algorithmic risk profiling can lead to delays, denials, or account closures (Aas, 2011). The phenomenon of data colonialism further suggests that marginalised populations disproportionately bear the costs of data extraction, while benefits accrue to platforms, regulators, and financial institutions (Couldry & Mejias, 2019). The question will then be: to what extent do platforms facilitate migrants’ ability to exercise their data rights?

Migration and financial rights

Migrants often face structural barriers to financial inclusion, including lack of recognised identification, unstable legal status, language barriers, and fear of surveillance or enforcement (Aas, 2011; Martin, 2019). Regulatory frameworks designed to mitigate financial crime frequently impose disproportionate compliance burdens on migrants, reinforcing exclusion under the guise of risk management (Gabor, 2021).

Emerging work on financial citizenship reframes access to financial services as a matter of rights, recognition, and belonging rather than individual capability alone (Isin & Nielsen, 2008; Martin, 2019). From this perspective, exclusion from digital financial systems constrains migrants’ ability to participate fully in economic and social life. Digital remittance platforms occupy an ambivalent position: while they may expand access relative to traditional banks, they also

reproduce regulatory and data practices that discipline migrants through monitoring and control.

In addition to the structural barriers posed by fintech platforms, user experience design is also central to the design and evaluation of digital financial services, with platforms emphasising simplicity, transparency, and trust as solutions to exclusion. However, it is demonstrated that usability of digital platforms is socially structured, reflecting assumptions about language proficiency, cultural norms, and digital literacy (Selwyn, 2004). For migrants, user experience can significantly shape whether platforms are perceived as accessible or risky.

Critical user experience and human–computer interaction research highlights the hidden labor users perform to navigate complex or poorly designed systems, particularly when platforms fail to account for marginalisation, even in solutions that may be said to be designed particularly for the marginalised (Gray & Suri, 2019). Hidden labours include cognitive effort to interpret interfaces, emotional strain from high-stakes transactions, time spent resolving errors, and administrative and infrastructural burdens such as repeated data entry, verification, and securing connectivity. This labour is effectively shifted from the system onto the user, and is unevenly distributed along existing inequalities. Trust in fintech platforms is similarly shaped by prior experiences with institutions, surveillance, and exclusion (Eubanks, 2018). Examining the user experience therefore provides insight into how data governance and financial regulation are encountered in everyday practice.

Interoperability

It is also critical to look at the interoperability of remittance platforms. Interoperability allows for different payment systems, platforms, and institutions to exchange data and transact seamlessly. In the context of remittances, interoperability encompasses technical standards, messaging protocols, identity systems, and settlement infrastructures that enable cross-platform and cross-border transactions (BIS, 2022; World Bank, 2021). In fintech, platform interoperability can be framed as a means to enhance competition, reduce costs, and expand access by preventing platform silos.

Remittance platforms often operate within fragmented ecosystems characterised by proprietary standards, bilateral agreements, and uneven regulatory alignment (BIS, 2022). Lack of interoperability can lock users into specific platforms, limit choice, and reinforce market concentration. For migrants, this may translate into higher costs, reduced transparency, and constrained ability to move funds across services or borders. An apparent outcome of the lack of interoperability between remittance platforms and traditional banks is that migrants are often forced to have a remittance account and a traditional account which means double the upkeep costs.

Interoperability is not merely a technical issue but a governance problem. Decisions about standards, APIs, and system integration shape whose data circulates, under what conditions, and under whose control (van Dijck et al., 2018). In remittance systems, interoperability intersects with migration status and geography, as cross-border data exchange is subject to national regulations, geopolitical power asymmetries, and differential risk classifications. As such, interoperability can both enable inclusion and reproduce exclusion depending on how it is governed.

THEORETICAL FRAMEWORK

This paper takes on an African Feminist framework to understanding migration inclusion and data issues. African Feminism layered with migration theory places into context the challenges with migration and a Feminist lens to thinking of data privacy and access to information will provide an analytical framework to understand the extent of value derived by migrants in data collection. These are the critical lenses through which we examine how digital remittance platforms mediate financial inclusion for migrants in South Africa. Together, these frameworks enable a deeper analysis of the socio-political structures that shape migrants' access to financial services, the power embedded in data collection practices, and the gendered and racialised dynamics of mobility and economic participation.

African Feminism, migration and financial inclusion

African Feminist theory provides a vital foundation for understanding the lived realities of migrants whose experiences are shaped by intersecting systems of gender, class, race, nationality, and legal precarity while emphasizing community-centred, culturally situated, and historically informed understandings of power. Migration to South Africa is gendered (UN Women, nd). Women migrants often navigate overlapping forms of inequality, including limited access to formal employment, vulnerability to exploitative labour practices, limited legal recognition, and a higher dependence on informal financial systems. These factors influence migrant women's reliance on money transfer platforms and their exposure to risk. African Feminist approaches highlight that financial exclusion cannot be understood solely through economic indicators; it must be examined through the intersecting political, social, and structural constraints that shape women's mobility and autonomy (Ojo, 2020).

Chant (2016) writes on the "feminisation of responsibility and obligation", which underscores that women migrants often bear primary responsibility for household welfare, making remittances a gendered financial practice. This lens helps explain why women, even when marginalised in labour markets, play central roles in the flow of remittances and thus interact intensively with remittance platforms.

Applying this framework reveals that digital remittance services can either enable economic agency or exacerbate vulnerability depending on the inclusivity of their onboarding requirements, transaction costs, and data practices.

Data Feminism approach to digital financial systems

The collection, processing and use of data is not done as a neutral process. It is often processed in contexts of power imbalances, with those already in marginalised contexts holding less power on the impact of the process.

As highlighted, collection of personal data is protected under the POPIA Act in South Africa, but there may still be harms or risks to health, finances, or personal safety (Chair, 2021). Remittance platforms increasingly operate as data-intensive infrastructures, meaning they do not merely facilitate transactions but also extract, analyse, and monetise user data (Couldry & Mejias, 2019).

Migrants using platforms like Hello Paisa, Mama Money, and Mukuru are required to provide, among other things: Identification documents, biometric information, employment status, physical addresses, proof of income or source of funds. While these processes are framed as necessary for compliance with Know Your Customer (KYC) and Anti-Money Laundering (AML) regulations, they also create complex data trails that may expose migrants to surveillance and discrimination, particularly those with uncertain legal status.

The Financial Intelligence Centre (FIC) applies a risk-based approach to client verification, allowing institutions to determine appropriate levels of data collection rather than enforcing a uniform standard. At a baseline, individuals must provide proof of identity (such as a national ID or passport) and proof of residential address (e.g., a recent utility bill or bank statement). For higher-risk clients, additional information is required, including details on the source of income and the origin of funds, enabling institutions to build a more comprehensive risk profile.

The high level data requirements of platforms like HelloPaisa, Mama Money, and Mukuru appear to place every transaction as high risk. Data justice theory also highlights asymmetries in control: platforms determine what data is collected and

how it is used, while users have limited agency or understanding of these processes. Ahnert et al. (2024) warn that extensive data collection enables price discrimination, algorithmic profiling, potential exclusion of “high-risk” individuals and surveillance of migrant mobility patterns.

African Feminism would argue that these forms of digital surveillance disproportionately affect marginalised groups, particularly women whose interactions with state systems are already fraught (Tamale, 2020). Thus, data governance intersects with structural inequality. Data governance frameworks also distinguish between open and closed financial systems. Remittance platforms often operate in semi-closed ecosystems, limiting user freedom to move data or funds across networks. This restricts financial agency and contributes to digital enclosure, where users are locked into proprietary systems with limited alternatives.

Migration theory

Drawing on migration theory allows us to examine why migrants maintain transnational financial ties. Intra-African migration has historically been shaped by colonial labour systems, economic inequality, political instability and climate-induced stress (Crush & Chikanda, 2019). Transnationalism theory asserts that migrants maintain active ties across borders, forming “transnational social fields” (Levitt & Glick Schiller, 2004). These ties are sustained through regular remittances, communication, and the movement of goods and people. Remittance platforms thus function not only as financial services but as infrastructures of transnational belonging and family maintenance. Despite the growth of digital platforms, informal remittance channels persist.

Migration theory explains the persistence of informal channels through the existence of trust networks, financial participation of those with irregular legal statuses, exclusion from formal financial systems and high transaction costs in regulated systems. These informal channels challenge the assumption that digitisation naturally increases inclusion. Instead, it reveals that inclusion depends on legal recognition, affordability, social trust, and accessibility.

Financial inclusion literature often treats inclusion as access to services, but migration theory reframes it as contingent on citizenship, documentation, border governance, and labour market segmentation. This perspective is essential for evaluating remittance platforms because it highlights that digital solutions cannot compensate for structural exclusion embedded in immigration regimes.

Integrated analytical approach

These three frameworks together create a multidimensional lens through which to evaluate remittance platforms. African Feminist theory highlights the gendered nature of financial responsibilities, the vulnerability of female migrants, and the socio-political structures shaping access. Data governance theory reveals the power dynamics in data collection, privacy risks and algorithmic exclusion. Through migration theory, our understanding of the larger role of remittances across intra Africa is enhanced and the theory further reveals digital exclusions by showing the persistence of informal remittance routes.

Together, these frameworks enable a holistic understanding of the opportunities and risks embedded in digital remittance ecosystems. They support a critical examination of not only what services are provided but also who is excluded, how data is used, and what structural forces shape access. These frameworks also bring pause to us as researchers, and migrants in considering whom we should direct our questions to.

We undertook a comparative case study approach assessing three platforms; Mukuru, Mama Money and HelloPaisa that offer financial products to consumers in addition to facilitating remittances. These platforms were selected because they are the most popular amongst the most common migrant groups. Our approach took the following steps:

A desk study assessing the platforms' cycle of joining and use, data governance, standards applied (open or closed for interoperability) and services offered based on material available online. This allowed us to understand the overall approach to data and services offered by the platforms. We also compared these to services offered by a traditional bank.

Our initial primary methodology involved lived experience research with identified participants that use the platforms. Lived experience research that would have helped us to understand the experiences of people interacting on these platforms in their own words - the what and why. Participants were selected based on gender, educational background, economic positioning and frequency of use of platforms through a public call and snowball sample method. This primary research methodology was revised. In following the guidance of African Feminist ethics of research we reflected on our own positionality as migrants and the precariousness relating to the safe and trusted ways that information is stored and disseminated for marginalised groups. To ask for data from participants who already appeared to be giving up large amounts of their personal data appeared to be unnecessarily extractive. For this reason we turned our focus onto the remittance platforms and the information they show publicly to the users of their platforms.

Our research aimed to understand financial inclusion for migrants in South Africa in contrast to the data collected and processed by remittance platforms. The focus on remittance platforms has mainly been ease, accessibility, safety and functionality but to what extent do they allow ownership and control of data by marginalised groups? Our approach focuses on data from the end user in terms of what they give up and what they have control over. In understanding the value

that remittance platforms assign to their data and if it is matched to financial services and products provided, we built on work that has been conducted as part of My Data Rights (Africa) which provides a Feminist insight that puts people at the center in response to data and digital technologies. In imagining practices of inclusion and exclusion, it is important to reflect on using digital platforms as an embodied experience and the extent of control of data across digital platforms to enable meaningful inclusion. The Open Standards proposed by the Interledger Foundation may be a way to ensure migrants' control and ownership of data when navigating remittances.

Case studies

The three primary remittance platforms assessed in this discussion are HelloPaiza, Mama Money and Mukuru. This assessment will analyse the platforms' cycle of joining and use, data governance, standards applied (open or closed for interoperability) and services offered based on material available online. These platforms' services will be compared to services offered by traditional banks.

HelloPaiza

HelloPaiza began with the Hello Group whose goal was to address expensive international calling rates. In 2013, HelloPaiza officially began as an online international money transfer platform. In the original partnership with Sasfin Bank, HelloPaiza offered a sim card, mobile banking and remittance app as well as a debit card. HelloPaiza is now partnered with Bidvest Bank and their services include the ability to purchase and get groceries delivered to multiple countries on their Malaicha(dot)com platform. HelloPaiza offers users 3 access tiers on the platform depending on the data the user provides. HelloPaiza's signup process can be initiated digitally. The first tier allowing a user to send R2000 immediately can be completed digitally. The upgrades to further tiers require a call back from a consultant as well as up to 24 hours of document verification in which the user is waiting for confirmation on whether their account has been upgraded or not. The platform does not immediately offer access to the debit card or banking features and instead requires a consultant call back too.

HelloPaisa (Experience of signing up digitally)

Tier	Details required	Benefits
1st	First name, Last name, Date of birth, Nationality, phone number, Identification type and Identification number, Home address	Immediate access. Send up to R2000/per month internationally
2nd	First name, Last name, Date of birth, Nationality, phone number, Identification type and Identification number, Home address, Upload of ID document, Selfie	Send up to R3000/per month internationally
3rd	First name, Last name, Date of birth, Nationality, phone number, Identification type and Identification number, Home address, Upload of ID document, Selfie, Proof of Address	Send up to R25 000/per month internationally

Mama Money

Mama Money was founded in 2013, to address high costs and inefficiencies in sending money to Zimbabwe. The service has since expanded to multiple countries servicing more than the cross border needs but the local unbanked community too. Mama Money has three account tiers based on user data provided but the information on the middle tier is not accessible before signing up. Mama Money's signup can be completed through their mobile app as well as through WhatsApp. Mama Money also offers a debit card that one can receive a salary into, send and receive money locally, transact in South African stores and withdraw cash at selected retailers and ATMs. Mama Money integrates with Access Bank in South Africa and they refer to this transactional section as a bank account. In order to create a profile on the app, Mama Money requires that their app access the device's location details – changing or updating the picked up location results in a failure to register on the platform.

In a second attempt to register on the platform, details such as phone number were pre-filled in despite not having created an account, leading to the belief that they store user data even before a profile is successfully created. Post signup, an sms message is received detailing user's full name, login username and pin as well as new bank account details. Mama Money specifically refers to their debit card offering as a bank. Amongst the SMSes received was a prompt to WhatsApp banking, the description on this business WhatsApp profile was "Move to our new WhatsApp number: +27 ** *** *****" which did not provide confidence on whether to continue transacting on this current number.

Mama Money (Experience of signing up digitally)

Tier	Details required	Benefits
1st	Mobile phone number, Identification document photographed in real time (ID, Passport, Refugee status or asylum), Selfie taken in real time, email address, home address captured by allowing app access to device's approximate location. Personal details such as full name were extracted from passport	Immediate access to remittance and bank account registration. Send up to R2000/per month internationally. A USD savings account is included
2nd	Mobile phone number, Identification document photographed in real time (ID, Passport, Refugee status or asylum), Selfie taken in real time, email address, home address captured by allowing app access to device's approximate location. Personal details such as full names were extracted from the passport. Proof of address, Proof of visa (not needed for asylum seekers or refugees), proof of income	All offerings in previous tier plus sending up to R100 000/per month internationally

Mukuru

Mukuru is a platform that was founded in 2004 in the UK. The simple goal was to create a way for a person in the UK to purchase an international talk time voucher for a person in Zimbabwe, this eventually led to grocery and fuel vouchers usable only between these two countries. By 2009, remittances from the EU to Zimbabwe began. It is now possible to send money via Mukuru across Africa, EU and Asia. Mukuru's signup can be completed through their mobile app as well as through WhatsApp. In order to sign up the platform requires full names and an email address to which a verification code is sent after which a request to login using phone saved biometrics is made. While a user can read details about how Mukuru works, the terms and conditions are presented as a checkbox rather than displayed in a modal. The platform does not explicitly specify any type of visa / temporary residence permit required and so it is not upfront on whether a person with a student or relative visa can remit money (in South Africa a person on a student visa can work up to 20 hours per week). Mukuru also offers a debit card that one can receive a salary into, send and receive money locally, transact in South African stores and withdraw cash at selected retailers and ATMs. Mukuru works with Standard Bank for its South African prepaid card service, which is issued by the bank.

Additionally, for receiving electronic fund transfers (EFTs) to the Mukuru Card, the bank used is Access Bank. Mukuru also partners with Stanbic Bank in Zimbabwe to allow customers to receive funds. Mukuru is clear on not referring to themselves as a bank despite these banking services provided. This will form a critical part of our argument on the service limitations of these non-bank financial service platforms and whether they force migrants to additionally open traditional bank accounts which require their own fees and other governing methods.

Mukuru (Experience of signing up digitally)

Tier	Details required	Benefits
1st	First name, Last name, Gender, Date of Birth, Email address, Mobile phone number, Country of birth, Country of Legal document issue, Number from a legal document (SA ID, Foreign ID, Passport or Asylum Document) Occupation, Preferred language, Residential Address.	Immediate access. Send up to R2000/per month internationally
2nd	First name, Last name, Gender, Date of Birth, Email address, Mobile phone number, Country of birth, Country of Legal document issue, Number from a legal document (SA ID, Foreign ID, Passport or Asylum Document) Occupation, Preferred language, Residential Address. Clear image of legal document, Selfie while holding legal document used. Requires an identity verification process which can take up to 24hrs	Send up to R25000/per month internationally
3rd	First name, Last name, Gender, Date of Birth, Email address, Mobile phone number, Country of birth, Country of Legal document issue, Number from a legal document (SA ID, Foreign ID, Passport or Asylum Document) Occupation, Preferred language, Residential Address. Clear image of legal document, Selfie while holding legal document used. Proof of income exceeding R25 000 per month.Requires an identity and proof of income verification process that can take up to 24hrs.	Send up to R1 000 000/per annum internationally

The value of the data

The playbook of these platforms seems to be clear, the more they know their users (KYC and AML compliance) the more product a customer can access which in this case is that the more details, documentation and verifications a customer provides, the higher their remittance amount can be. It does appear that there is a cap where a customer has provided everything required and what they still get is the ability to send money across borders – does this constitute full or inclusive financial participation? Or fair exchange of data?

When compared to the full suite offering of traditional banks the question of the value of data becomes tied in with compliance and access. It is important to note that offering credit cards or investment products requires separate licences such as credit provider registration under the National Credit Act and investment compliance under financial services law. Most remittance firms operate under money transfer or payment service licences not full banking licences. Figure 1 below shows the complete offerings of HelloPaisa, Mama Money and Mukuru contrasted with the offerings of ABSA bank, a traditional bank in South Africa. Figure 2, 3 and 4 show the access requirements for the first tiers of HelloPaisa, Mama Money and Mukuru. It is unclear why these requirements are not standardised for the same offerings.

Completion of the Cycle

The analysis so far has focused on the data required in the platform's joining cycle but it is also important to consider the cycle of use and account closing. In the joining cycle the platforms collect extensive user data for regulatory compliance, but their third-party data sharing practices are largely opaque, limiting user control despite formal privacy and data protection policies. Migrant financial inclusion is highly conditional, account closures are typically not user-managed. Instead, they are often automated and punitive, where minor documentation gaps or algorithmic surveillance can result in sudden service denials. Platforms offer basic support like FAQs, WhatsApp lines, and call centres. Their formal mechanisms vary: Mukuru lists a "Complaints Procedure", Mama Money provides PAIA manuals, and HelloPaisa offers standard Terms and Conditions. However, because migrants rely on these platforms for vital services, they are subjected to "forced consent", making these theoretical data rights and grievance mechanisms highly ineffective in practice.

Figure 1.

Data required by HelloPaisa, Mama Money and Mukuru

First name	Last name	Date of Birth	Country of Birth / Nationality
Mobile Phone Number	Type of Legal Identification Document in use	Number from Legal Identification Document	
Residential Address	Email Address	Gender	Country of Legal Identification Document Issue
Occupation	Preferred Language	Real-time Photo of Legal Identification Document	
Real-time Selfie	Real-time Selfie while holding Legal Identification document	Upload of proof of address	
Proof of income exceeding R25 000	Device location access	Upload of visa / permit	

This shows the overall data points required by the remittance platforms, collectively. This shows what is required of an immigrant in South Africa

Data required by ABSA, a traditional bank

First name	Last name	Date of Birth	Country of Birth / Nationality
Mobile Phone Number	Email Address	Passport	Passport number
Residential Address	Proof of residential address	Proof of income	Tax number
Visa / Permit			

This shows the overall data points required by this traditional bank from an immigrant.

Differences between traditional bank data requirements vs. remittance platforms

Figure 1 shows a listing of the requirements to open a traditional bank account as well as those to open an account with a remittance platform. The difference is the digital data that is required by remittance platforms such as real time selfies, real-time selfies while holding a legal identification document as well as mobile device locations.

This data requirements comparison does not compare the service offerings of remittance platforms vs traditional banks yet. This comparison illustrates what is needed for full interaction with these platforms as listed on their websites. These comparisons also form the basis of answering our research questions:

1. What data is needed for migrants to be able to use digital remittance platforms and to what extent does the data translate into financial inclusion?
2. Are platforms ensuring inclusion from a Feminist perspective?

Traditional banks can be said to be providing a wider spectrum of financial inclusion and can be what other platforms are measured against. Looking at the data requirements, a user can determine what their barriers to entry are e.g Remittance platforms allow users to complete the end to end flow digitally whereas traditional banks require any non citizen to be physically in the bank. For remittance platforms that offer debit cards, users can collect from outlets such as retail stores.

Figure 2.

Data Points

These are the data points required by the 3 remittance platforms in order to create an account. These first data points are what is required only for the first tier of access – sending R 2000/pm. The requirements are not standardised across the platforms.

☐ Empty data point

☒ Tier 1 required data point

First name	☒	Last name	☒	Date of Birth	☒	Country of Birth / Nationality	☒
Mobile Phone Number	☒	Type of Legal Identification Document in use	☒	Number from Legal Identification Document	☒		
Residential Address	☒	Email Address	☐	Gender	☐	Country of Legal Identification Document Issue	☐
Occupation	☐	Preferred Language	☐	Real-time Photo of Legal Identification Document	☐		
Real-time Selfie	☐	Device Location Access	☐				

Service Tiers Unlocked

HelloPaisa tier 1

- Send up to R2000pm immediately
- Access to HelloPaisa Debit Card (requires physical collection)

Figure 3.

Data Points

These are the data points required by the 3 remittance platforms in order to create an account. These first data points are what is required only for the first tier of access – sending R 2000/pm. The requirements are not standardised across the platforms.

☐ Empty data point

☒ Tier 1 required data point

First name	☒	Last name	☒	Date of Birth	☒	Country of Birth / Nationality	☒
Mobile Phone Number	☒	Type of Legal Identification Document in use	☒	Number from Legal Identification Document	☒		
Residential Address	☒	Email Address	☒	Gender	☒	Country of Legal Identification Document Issue	☒
Occupation	☒	Preferred Language	☐	Real-time Photo of Legal Identification Document	☐		
Real-time Selfie	☐	Device Location Access	☐				

Service Tiers Unlocked

HelloPaisa tier 1

- Send up to R2000pm immediately
- Access to HelloPaisa Debit Card (requires physical collection)

Mukuru Lite

- Send up to R2000pm immediately
- Access to Mukuru Debit Card (requires physical collection)

Figure 4.

Data Points

These are the data points required by the 3 remittance platforms in order to create an account. These first data points are what is required only for the first tier of access – sending R 2000/pm. The requirements are not standardised across the platforms.

☐ Empty data point ☒ Tier 1 required data point

First name	Last name	Date of Birth	Country of Birth / Nationality
Mobile Phone Number	Type of Legal Identification Document in use	Number from Legal Identification Document	
Residential Address	Email Address	Gender	Country of Legal Identification Document Issue
Occupation	Preferred Language	Real-time Photo of Legal Identification Document	
Real-time Selfie	Device Location Access		

Service Tiers Unlocked

HelloPaisa tier 1

- Send up to R2000pm immediately
- Access to HelloPaisa Debit Card (requires physical collection)

Mukuru Lite

- Send up to R2000pm immediately
- Access to Mukuru Debit Card (requires physical collection)

Figure 2, 3 and 4 show the data requirements in the cycle of joining for the platforms' first tier of access. In comparison, HelloPaisa appears to be the least data hungry. HelloPaisa and Mukuru's first tier offers the same services - the ability to send up to R2000pm as well as a debit card that can be used for local purchases despite their data requirement differences. Mama Money appears the most data hungry for an entry level tier but they do offer a bank account as well as a US Dollar savings account immediately. This is a first in the consideration of the migrant experience being more than sending money but saving money too.

Figure 5 shows the data requirements of the highest tiers of the platforms. The data requirement increase is quite significant but so are the remittance values, but a noticeable decrease in new features. The mid tiers have not been included as they are inconsistently promoted on the platforms websites as well as within the apps.

Figure 5.

Data Points

These first and second data points that are required for the first and second tiers of access are marked. New data is added to access the next tier of access on the platforms. The requirements are not standardised across the platforms.

☐ Empty data point ☒ Tier 1 required data point ☒ Tier 3 required data point

First name	Last name	Date of Birth	Country of Birth / Nationality
Mobile Phone Number	Type of Legal Identification Document in use	Number from Legal Identification Document	
Residential Address	Email Address	Gender	Country of Legal Identification Document Issue
Occupation	Preferred Language	Real-time Photo of Legal Identification Document	
Real-time Selfie	Real-time Selfie while holding Legal Identification document	Upload of proof of address	
Proof of income exceeding R25 000	Device location access	Upload of visa / permit	

Entry level service tiers

HelloPaisa tier 1 - Send up to R2000pm immediately - Access to HelloPaisa Debit Card (requires physical collection)	Mukuru Lite - Send up to R2000pm immediately - Access to Mukuru Debit Card (requires physical collection)	Mama Money tier 1 - Send up to R2000pm - Access to Mama Money Banking - USD Savings Account
---	---	--

Highest level service tiers

HelloPaisa tier 3 - Send up to R25000pm after a verification of up to 24 hours - Access to HelloPaisa Debit Card (requires physical collection)	Mukuru Max - Send up to 12x the monthly income recorded on proof of income per year - Access to Mukuru Debit Card (requires physical collection) - Access to Mukuru Loan facility - Access to USD savings through VALR wallet	Mama Money 2 - Send up to R100 000pm - Access to Mama Money Banking - USD Savings Account
---	---	--

Access, accessibility and inclusion

The remittance platforms explored in this research are difficult to navigate. Firstly as a point of information, the website and mobile apps are lacking in usability. It is difficult to find the information relating to their tiers, the cost of their services and what information is required for signup. The best way to compare was to sign up for all three and go through their verification processes. Security risk issues arise in that it is possible to have multiple remittance accounts possibly circumventing the AML laws that these limits were set for.

When contrasted with traditional banking platforms, remittance platforms, through their tiered service offering provide financial access for those who may not have regular migration status. To open an account at a traditional bank in South Africa, an immigrant would require a temporary residence visa or permit. The barrier is definitive. However, remittance platforms allow for access, albeit with limited

service offerings. This means that a person without a regular migration status in South Africa is able to send and receive money into a bank account, transact digitally and send some money home and in the case of Mama Money, also have a USD savings account.

DISCUSSION

The analysis of HelloPaisa, Mama Money, and Mukuru reveals a consistent pattern in how digital remittance platforms operationalise financial inclusion while simultaneously reinforcing data-driven exclusion. The platforms' onboarding processes demonstrate a high threshold of data extraction that migrants must fulfil before accessing even the most basic services. While the platforms describe these requirements as compliance necessities under KYC and AML regulations, the scale and granularity of data collected—biometrics, full identification records, employment details, and proof of residence—exceed what many migrant users can reliably produce given their precarious legal and living circumstances. This cycle of joining, in which lower-tier accounts offer limited functionality and higher tiers require increasingly intrusive documentation, establishes a structure of conditional inclusion. Migrants can participate only to the extent that they meet the platforms' data demands.

A key tension arises from the fact that the value of the data extracted does not correspond to the value users receive. Although platforms collect extensive personal and behavioural data, the financial products available to migrants remain basic and transactional. None of the platforms extend services such as credit, insurance, or investment products in proportion to the amount of data collected, despite claiming to advance financial inclusion. Instead, data predominantly benefits the institution—supporting compliance, risk categorisation, personalisation, fraud detection, and expanded service modelling.

This imbalance affirms what data Feminism and data justice frameworks warn: that marginalised populations often bear the disproportionate burden of data extraction while receiving minimal structural benefits. Local laws play a role in the limitations of remittance platform offerings so they largely avoid credit cards and investments because they are legally constrained, risk-exposed, and structurally designed for payments, not lending or wealth management. Expanding into these areas would require becoming regulated financial institutions with significantly higher compliance, capital, and risk obligations. It would appear that for the remittance platforms themselves, just as it is for their customers, higher access would require more compliance.

User experience (UX) design further compounds this imbalance. Although remittance platforms emphasise simplicity and accessibility, their usability assumptions privilege users with stable documentation, high digital literacy, and linguistic competence. Migrants often face linguistic barriers, limited familiarity with financial terminology, and inconsistent access to smartphones or stable internet. As a result, the seemingly simple onboarding flows can quickly become inaccessible or intimidating. The requirement for location access in the Mama Money app, the multi-step verification in HelloPaisa, and the offline-to-online dependencies in Mukuru illustrate user experience (UX) practices that do not adequately account for migrant realities. These gaps produce additional labour for migrant users, who must navigate complex verification procedures, travel to physical agents, or maintain multiple accounts to achieve functionality comparable to basic banking services.

The findings also highlight that closed or semi-closed system architectures limit interoperability. Because these platforms operate in silos with proprietary standards, migrants are restricted in how they move their funds or data across networks. This lack of interoperability creates a form of digital enclosure—locking users into specific platforms and obliging them to maintain separate bank accounts for deposits, withdrawals, savings and investments or salary payments. In practice, this imposes additional financial burdens on migrants who must pay multiple account maintenance fees and navigate fragmented service ecosystems. Interoperability challenges thus reveal that inclusion is not only a function of access but of systemic design choices that prioritise platform control over user agency.

Overall, the platforms reproduce longstanding structural inequalities rooted in migration governance, data surveillance, and gendered economic responsibilities. Rather than disrupting these inequalities, digital remittance ecosystems embed them into their operational logic, reinforcing the particular precarity that African Feminist scholars identify as central to migrant women's experiences.

IMPLICATIONS

Policy implications

The findings point to an urgent need for regulatory scrutiny of how remittance platforms collect, process, and store personal data. While POPIA provides a legal framework for data protection, the implementation of informed consent remains weak, particularly for non-citizens who operate from positions of legal and social vulnerability. Policies must address the overcollection of data relative to the limited financial products offered as well as the unclear data sharing practices between platforms, their partner banks and third parties. The issue of unclear data sharing practice can start with a user experience overhaul where these platforms display information that would help in decision making before joining rather than a trickle in the signup processes.

It is not clear what the recourse mechanisms are for anyone facing data driven exclusion or how the regulatory ambiguity that is created by the tiered model is addressed, particularly with the lack of information before sign up. All three remittance platforms—HelloPaisa, Mama Money, and Mukuru—provide basic consumer support features such as FAQs and multiple customer service channels (call centres, email, and WhatsApp). While Mukuru is the only platform with a clearly defined complaints procedure, all platforms rely on general contact systems for issue resolution. In terms of consumer protection, each offers privacy policies and terms of service, with additional safeguards varying by provider: Mukuru emphasises data protection, information security, and fraud prevention; Mama Money highlights transaction and data security and provides PAIA manuals for user rights; and HelloPaisa includes standard privacy, terms, and cookie policies.

South Africa's financial inclusion agenda must better account for migrant-specific barriers, recognising that inclusion cannot be achieved through compliance-heavy digital channels alone.

Implications for Inclusion Framework

The findings challenge the assumption that digitisation inherently leads to financial inclusion.

Instead, inclusion must be understood as an interplay between legal recognition, data rights, economic stability, social trust and system interoperability.

African Feminist theory helps illuminate how gendered labour, familial obligations, and precarious legal status shape the remittance experience. Inclusion frameworks must thus expand beyond economic metrics to account for the social realities of migrant households.

Research Implications

The study underscores the need for a deeper investigation into algorithmic profiling and its impact on migrant financial behaviour not just from the sender's side but on the receiver side as well. It would be critical to understand how cross-country regulatory differences shape data rights for migrants. These deeper investigations may explore how alternative technical architectures such as the Interledger protocol's decentralised system could more equitably distribute power between migrants and platforms. At the moment, HelloPaisa, Mama Money and Mukuru operate in closed, proprietary ecosystems that limit interoperability, increase costs, and restrict user choice, effectively creating digital "enclosures." Interledger offers an open, interoperable payment standard that enables seamless transfers across different ledgers and currencies, potentially lowering transaction costs and increasing speed. It also supports greater user agency by reducing platform lock-in and strengthening data ownership through decentralised systems. If integrated into existing remittance platforms, Interledger could break down current silos, enhance competition, and enable migrants to move money more freely and affordably across borders and services, shifting the system toward more inclusive and user-centred financial infrastructure.

CONCLUSION

It cannot be said definitively the extent to which remittance platform services cater to financial inclusion. Remittance platforms are not self-governing and rely on KYC (Know Your Customer) and AML (Anti Money Laundering) laws as well as the governance of FICA (Financial Intelligence Center Act) in South Africa. Migrants are required to provide extensive personal data to access basic financial services, yet the value they receive in return remains limited to transactional services. UX design choices, fragmented interoperability, and data governance practices further restrict meaningful participation, often forcing migrants into precarious and expensive service arrangements.

To advance genuine financial inclusion, remittance platforms must adopt user-centred design, reduce data burdens, strengthen transparency, and build interoperable systems that enhance, not limit, mobility and agency. Policymakers, technologists, and financial institutions must work together to ensure that digital remittance infrastructures protect migrant rights, recognise migrant contributions, and support equitable participation in the financial ecosystem. Only through such reorientation can remittance platforms move from conditional inclusion toward meaningful, rights-based financial empowerment for migrant communities.

REFERENCES

- Aas, K. F. (2011). 'Crimmigrant' bodies and bona fide travelers: Surveillance, citizenship and global governance. *Theoretical Criminology*, 15(3), 331–346.
- Ardic Alper, O. P., Camino, M., Garcia Vargas, A., & Savonitto, B. (2025). Remittance behaviors among migrant communities: Evidence from Ethiopian and Nigerian senders. *World Bank Group*.
- Bennett, C. J., & Raab, C. D. (2020). *The governance of privacy: Policy instruments in global perspective* (2nd ed.). MIT Press.
- Benjamin, R. (2019). *Race after technology: Abolitionist tools for the new Jim Code*. Polity Press.
- Bank for International Settlements (BIS). (2022). *Interlinking payment systems and the role of application programming interfaces*. <https://www.bis.org>
- Chisasa, J. (2014). Nature and characteristics of informal migrant remittance transfer channels: Empirical study of remittances from South Africa to Zimbabwe. *Banks and Bank Systems*, 9, 59–64.
- Couldry, N. (2022, November 17). Data colonialism brings about a new social order. *State of Big Tech*. <https://projects.itforchange.net/state-of-big-tech/data-colonialism-brings-about-a-new-social-order/>
- Couldry, N., & Mejias, U. A. (2019). *The costs of connection: How data is colonizing human life and appropriating it for capitalism*. Stanford University Press.
- Datta, K. (2017). The digital turn in postcolonial urbanism: Smart citizenship in the making? *Transactions of the Institute of British Geographers*, 42(1), 3–15.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The Global Findex Database 2017: Measuring financial inclusion and the fintech revolution*. World Bank.

Donovan, K. (2012). Mobile money for financial inclusion. In T. Kelly & C. Rossotto (Eds.), *Information and communications for development*. World Bank.

Ekshian, E. (n.d.). Stablecoins and the future of remittances: A comparative analysis of costs, efficiency, and economic impacts across emerging markets. Fundação Getulio Vargas Universidade.

Eubanks, V. (2018). *Automating inequality*. St. Martin's Press.

Gabor, D. (2021). The Wall Street consensus. *Development and Change*, 52(3), 429–459.

Gabor, D., & Brooks, S. (2023). The digital revolution in financial inclusion. *New Political Economy*, 28(1), 1–18.

Gray, M. L., & Suri, S. (2019). *Ghost work*. Houghton Mifflin Harcourt.

Gurumurthy, A., & Chami, N. (2014). *Digital financial inclusion: A feminist critique*. IT for Change.

Hamdan, J. (2019). The impact of mobile money in developing countries (DIW Roundup No. 131). Deutsches Institut für Wirtschaftsforschung (DIW).

Hello Paisa. (2025, September 4). *Cheap international money transfers worldwide*. <https://hellowpaise.co.za/>

Helen Suzman Foundation. (n.d.). Migration III: Interpreting the data on South African migration. <https://hsf.org.za/publications/hsf-briefs/interpreting-the-data-on-south-african-migration>

International Fund for Agricultural Development. (2017). *Sending money home: Contributing to the SDGs, one family at a time*.

Isin, E. F., & Nielsen, G. M. (2008). *Acts of citizenship*. Zed Books.

Levitt, P. (2001). *The transnational villagers*. University of California Press.

Lopez-Ekra, S., Aghazarm, C., Kötter, H., & Mollard, B. (2011). The impact of remittances on gender roles and opportunities for children in recipient families. *Gender & Development*, 19(1), 69–80.

Mama, A. (1995). Feminism or femocracy? State feminism and democratisation in Nigeria. *Africa Development*, 20(1), 37–58.

Mama Money. (n.d.). *Mama Money limits*. <https://www.mamamoney.co.za/mama-money-limits>

Martin, I. W. (2019). *Money, politics, and the constitution of citizenship*. Oxford University Press.

Mazzucato, V. (2011). Reverse remittances in the migration–development nexus. *Population, Space and Place*, 17(5), 454–468.

Mejias, U. A. (2013). *Off the network: Disrupting the digital world*. University of Minnesota Press.

Miguel, M., Parrado, E., & Santana, D. (2025). From digital remittances to financial inclusion: How digital remittances drive financial depth. Inter-American Development Bank.

Migration Policy Institute. (2023). *The uneven path toward cheaper digital remittances*. <https://www.migrationpolicy.org/article/cheaper-digital-remittances>

Nnaemeka, O. (2004). Nego-feminism: Theorizing, practicing, and pruning Africa's way. *Signs: Journal of Women in Culture and Society*, 29(2), 357–385.
<https://doi.org/10.1086/378553>

Ogundipe, M. (1994). *Re-creating ourselves: African women and critical transformations*. Africa World Press.

Oyewumi, O. (1997). *The invention of women: Making an African sense of Western gender discourses*. University of Minnesota Press.

RemitScope. (2023). *South Africa: Country diagnostic*. https://remitscope.org/wp-content/uploads/2023/06/SouthAfrica_Diagnostic_Remitscope_Africa_EN.pdf

ResearchGate. (n.d.). *Remittances, transaction costs and informality*. https://www.researchgate.net/publication/222241925_Remittances_Transaction_Costs_and_Informality

ResearchGate. (n.d.). *Remittances and development: The impact of migration to South Africa on rural livelihoods in Southern Zimbabwe*. https://www.researchgate.net/publication/227611092_Remittances_and_development_The_impact_of_migration_to_South_Africa_on_rural_livelihoods_in_Southern_Zimbabwe

Selwyn, N. (2004). Reconsidering political and popular understandings of the digital divide. *New Media & Society*, 6(3), 341–362.

Taylor, L. (2017). What is data justice? *Big Data & Society*, 4(2).

UN DESA. (n.d.). *Remittances matter: 8 facts you don't know about the money migrants send back home*. <https://www.un.org/development/desa/en/news/population/remittances-matter.html>

UN Women. (n.d.). How migration is a gender equality issue. <https://interactive.unwomen.org/multimedia/explainer/migration/en/index.html>

UN Women. (2020). *Migrant women and remittances: Exploring the data from selected countries*. <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2020/Policy-brief-Migrant-women-and-remittances-Exploring-the-data-from-selected-countries-en.pdf>

UN OSAA. (2023). *Digital remittances in Southern and Eastern Africa: From transactions to transformation*. https://www.un.org/osaa/sites/www.un.org.osaa/files/digital_remittances_in_southern_and_eastern_africa-from_transactions_to_transformation.pdf

van Dijck, J., Poell, T., & de Waal, M. (2018). *The platform society*. Oxford University Press.

Western Union. (2016). *Western Union pays tribute to global women workforce as world economic change agents* [Press release].

World Bank. (2021). *Interoperability of digital financial services*. World Bank.

World Bank. (2022). *Financial consumer protection and inclusion in the digital age*. World Bank.

World Bank. (2023). *Migration and development brief*. World Bank.

Zuboff, S. (2019). *The age of surveillance capitalism*. PublicAffairs.