

THE STATE OF INCLUSIVE INSTANT PAYMENT SYSTEMS IN AFRICA

SIIPS 2025

AfricaNenda foundation

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Acknowledgements

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These data have enriched the analysis of the IPS landscape, providing deeper insights into what is working and where inclusivity gaps remain. We invite additional central banks and IPS operators to share data, fostering greater transparency and knowledge exchange to expand access to digital payments. The list acknowledges contributing central banks and IPS operators in alphabetical order by country, followed by the regions.

System	Data provided by the central bank
KWiK (Angola)	National Bank of Angola
IPN and Meeza Digital (Egypt)	Central Bank of Egypt
EPS Fast Payment Module (Eswatini)	Central Bank of Eswatini
Ghana MMI (Ghana)	Bank of Ghana
Kenya Mobile Money (Kenya)	Central Bank of Kenya
LeSwitch (Lesotho)	Central Bank of Lesotho
Madagascar Mobile Money (Madagascar)	Banque Centrale de Madagascar
MauCAS (Mauritius)	Bank of Mauritius
SWAM and Virement Instantané (Morocco)	Bank Al-Maghrib
PayShap, RTC, and TCIB (South Africa)	South African Reserve Bank (SARB), BankservAfrica
TIPS and Tanzania Mobile Money (Tanzania)	Bank of Tanzania
Tunisia Mobile Money (Tunisia)	Banque Centrale de Tunisie
Uganda Mobile Money (Uganda)	Bank of Uganda

System	Data or information provided by the IPS operator
EthSwitch (Ethiopia)	EthSwitch
Gamswitch (The Gambia)	Gamswitch
GIP (Ghana)	GhiPSS
PesaLink (Kenya)	Integrated Payment Systems Ltd. (IPSL)
Natswitch (Malawi)	Natswitch
SIMO (Mozambique)	Sociedade Interbancaria de Moçambique
NIP, eNaira, and Nigeria Mobile Money (Nigeria)	Nigeria Inter-Bank Settlement System (NIBSS)
eKash (Rwanda)	RSwitch
National Financial Switch (Zambia)	Zambia Electronic Clearing House Limited (ZECHL)
ZIPIT (Zimbabwe)	Zimswitch
GIMACPAY (CEMAC)	Groupement Interbancaire et Monétique de l'Afrique Centrale (GIMAC)

About SIIPS 2025

The State of Inclusive Instant Payment Systems (SIIPS) in Africa 2025 report is a flagship annual report by AfricaNenda Foundation. The SIIPS report aims to inform public-sector and private-sector players in Africa and beyond about the developments in the instant retail payment system (IPS) ecosystem in Africa, including an assessment of the inclusivity of such systems, both in functionality (accessible to all end users) and governance (all licensed payment providers have fair access and design input opportunities). For this report, only systems with live transactions and functionality as of June 2025 were included. The authors gathered the data in this report directly from central banks and public or public-private instant payment system operators in Africa and from publicly available resources between January and June 2025. The findings also include insights from extensive stakeholder interviews conducted during the same period. The consumer research was conducted between February and March 2025.

Foreword

Dr. Robert Ochola,
CEO, AfricaNenda Foundation



The link between digital payments and economic growth is now undeniable. Instant and inclusive payment systems (IIPS) do more than move money. They move economies. Evidence from many countries shows that digital payments innovation is directly associated with higher GDP growth per capita and lower levels of informality, according to a recent study by the Bank for International Settlements. Other independent analyses confirm that these systems produce measurable gains. Sweden's Swish instant payment platform, for example, has been linked to an estimated 0.5% uplift in GDP and a 10% increase in the velocity of money, according to research by Ernst and Young. This demonstrates what is possible when instant person-to-person and person-to-business payments scale: money moves faster, households and businesses transact more frequently, and economies accelerate.

AfricaNenda Foundation has recognized both the urgency and the depth of effort required to build inclusive instant payment systems (IIPS) across the continent. The State of Inclusive Instant Payment System in Africa report (SIIPS) was born out of necessity. Since its first edition in 2022, SIIPS has become the continent's reference point for tracking progress, measuring inclusivity, and understanding the drivers of instant payments. By collecting, harmonizing, and analyzing payment data, AfricaNenda and the SIIPS report equip policymakers, regulators, and innovators with the tools to nurture their financial ecosystems and empower their citizens to climb into middle-income prosperity.

Today, with the launch of the fourth edition, I take this opportunity to congratulate African central banks, payment operators, and financial sector stakeholders. Their continued commitment to modernizing payment ecosystems and advancing financial inclusion remains the bedrock of transformation.

I extend my deepest gratitude to the 13 central banks and 11 payment system operators who shared the data and insights that made this report possible. Since July 2024 alone, five new instant payment systems have gone live in Algeria, Eswatini, Libya, Sierra Leone, and Somalia—a record since AfricaNenda began tracking in 2022. Four of these new systems are cross-domain platforms enabling interoperability between banks and non-bank providers, which is crucial for inclusivity. This brings the number of African countries with domestic instant payment functionality to 25.

Existing systems continue to evolve. Nigeria's NIBSS Instant Payment (NIP) has become the first African IIPS to achieve mature inclusivity. Other markets are advancing as well, with several previously unranked or basic systems moving up the inclusivity scale. These milestones are a testament to the investments of central banks and operators in expanding use cases, strengthening operational models, and laying the foundation for digital public infrastructure across the continent.

Yet, much remains to be done. As of 2024, 42% of Africans aged 15 and older still lacked a bank account or mobile wallet, and 49% have

not made or received a digital payment. SIIPS highlights opportunities to close these gaps, from government-to-person transfers—which both expand financial account ownership and support policy goals in agriculture, health, and education—to cross-border arrangements that can reduce the cost of remittances and accelerate intra-African trade. These are not only payment innovations; they are investments in people's livelihoods and our continent's resilience.

AfricaNenda remains committed to working with central banks, multilateral organizations, digital infrastructure providers, and regulators to realize these opportunities. Together, we can deliver affordable, seamless digital payments and ensure millions of excluded Africans are reached by 2030.

As Chinua Achebe once wrote, "When the moon is shining, the cripple becomes hungry for a walk." The progress we celebrate today is our moonlight illuminating the road ahead, inspiring us to move faster and further. Our work has only just begun, but with the SIIPS report as our compass, we are on the right path.

It is therefore my singular honor to thank the Central Bank of Eswatini, under the leadership of His Excellency Governor Phil Mnisi, for hosting the launch of this year's report. May this platform serve as a launchpad for Africa to embrace emerging technologies such as AI and blockchain, while anchoring our digital transformation on the firm foundations of inclusive instant payment systems.

Foreword

Dr. Phil Mnisi,
Governor, Central Bank of Eswatini



In the three years since I assumed my current role as the Governor of the Central Bank of Eswatini, I have seen remarkable strides toward building a unified, seamlessly connected payment ecosystem in Africa. In Eswatini, we marked a key milestone with the launch of the Eswatini Payment Switch's (EPS) Fast Payment Module in December 2024. We are not alone. Across the continent, instant payments are being launched to deliver affordable, real-time transactions for everyone, from the largest enterprises to individual customers.

That expansion must accelerate. To do so, we as central bankers must collaborate and support each other to build and scale instant payment systems and align them into a cross-border ecosystem. AfricaNenda Foundation and the *State of Inclusive Instant Payment Systems in Africa* report have become indispensable tools for this collaboration. The report's data, analysis of critical priorities such as cross-border payments, end-user insights, and case studies offer us rich opportunities to learn from each other, exchange, and catalyze action.

Such collaboration is essential if we are to move beyond systems to prioritize deeper financial inclusion for all. Gone are the days when a central bank would focus solely on the monetary policy issues without considering the impact of payments on society. In Eswatini, our central bank mandate includes oversight of the digital payments sector. We embrace this responsibility because we see payments as a powerful pathway to inclusion, connecting more people to financial services and deepening their engagement in areas such as merchant payments, savings, credit, remittances, entrepreneurship, and trade. Together, these behaviors fuel economic growth and strengthen intra-African trade.

However, central banks cannot achieve this alone. Financial inclusion accelerates when ecosystems are open, compatible, and inclusive of all players. Banks provide stability and trust; fintechs bring innovation and agility to reach groups excluded from the traditional channels. To enhance our markets, we must focus on delivering compelling end-user experiences while also reducing costs to promote real inclusion.

The work we are doing now to accelerate financial inclusion through integrated and affordable instant payment systems should have begun 20 years ago. I take comfort in the fact that there are many resources available now to enable AfricaNenda, the World Bank, UNECA, and global institutions like the Financial Action Task Force to help us address compliance, risk, and innovation together. Accessible, affordable, and inclusive payments will make Africa a global leader in digital financial services. By working together, we can accelerate Africa with lightning speed to create a unified, interconnected payments system.

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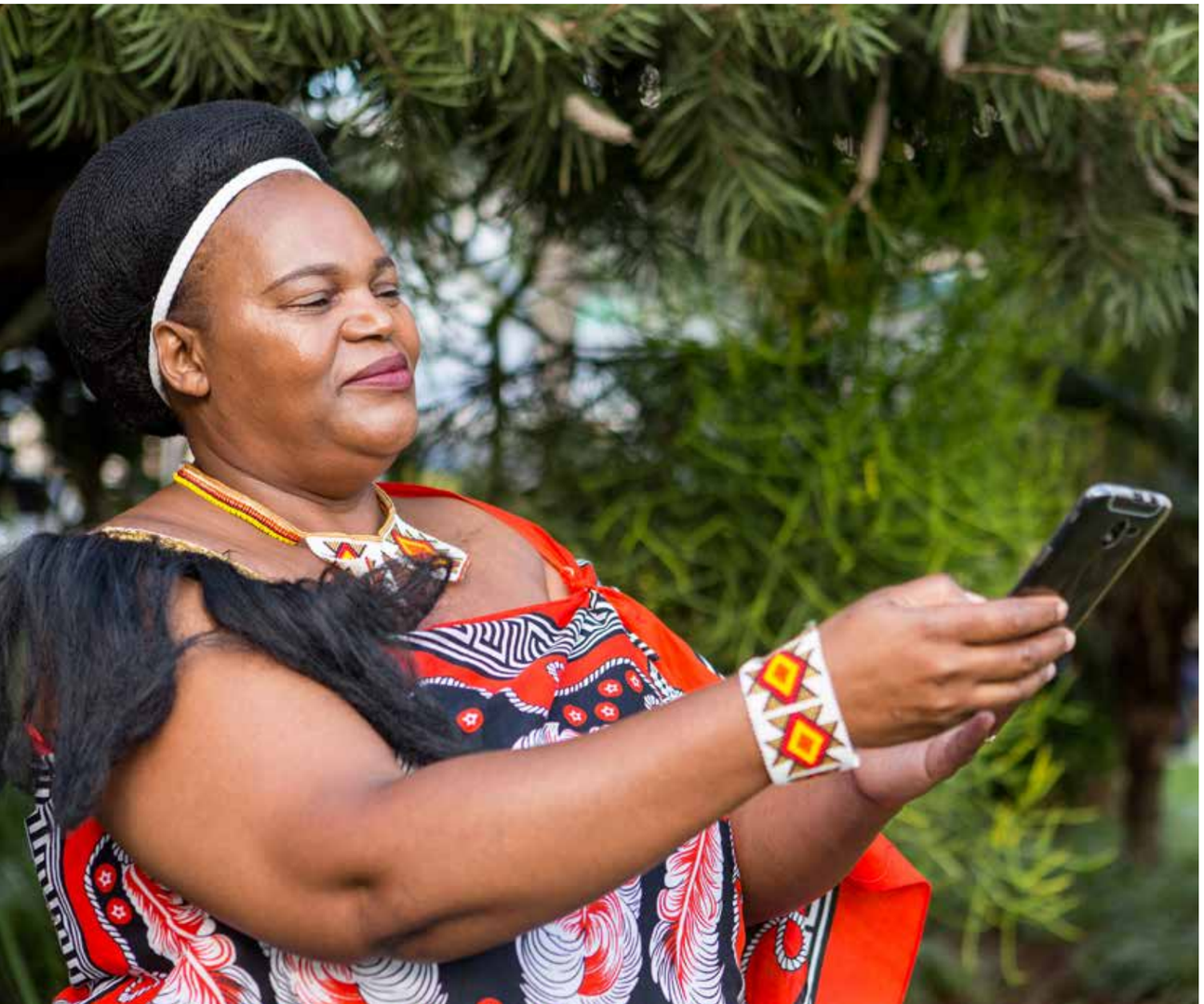
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Acronyms

AI	Artificial Intelligence
AFI	Alliance for Financial Inclusion
AML	Anti-money laundering
API	Application programming interface
APP	Authorized Push Payment
ATM	Automated teller machine
AVS	Account Verification Services
B2B	Business-to-business
BCEAO	Banque Centrale des États de l'Afrique de l'Ouest (Central Bank of West African States)
BEAC	Banque des Etats de l'Afrique Centrale (Bank of Central African States)
BIS	Bank for International Settlements
BNR	National Bank of Rwanda
BOG	Bank of Ghana
BOM	Bank of Mauritius
BoM	Bank of Mozambique
BoT	Bank of Tanzania
BSA	BankservAfrica
BSL	Bank of Sierra Leone
CAGR	Compound annual growth rate
CBC	COMESA Business Council
CBDC	Central bank digital currency
CBE	Central Bank of Egypt
CBK	Central Bank of Kenya
CBL	Central Bank of Libya
CBN	Central Bank of Nigeria
CCBG	Committee of Central Bank Governors
CDD	Customer due diligence
CEMAC	Communauté Economique et Monétaire De l'Afrique Centrale (Economic and Monetary Community of Central Africa)
CFT	Combatting of financing of terrorism
CGAP	Consultative Group to Assist the Poor
COMESA	Common Market for Eastern and Southern Africa
CPF	Combatting of proliferation financing
DFS	Digital financial service
DNS	Deferred net settlement
DPI	Digital public infrastructure

DRC	Democratic Republic of the Congo
EABC	East African Business Council
EAC	East African Community
EBC	Egyptian Banks Company
ECOWAS	Economic Community of West African States
EFT	Electronic funds transfer
EGP	Egyptian pound
eKYC	Electronic know your customer
EMIS	Empresa Interbancária de Serviços
EMI	Electronic Money Institutions
EPAZ	Electronic Payments Association of Zimbabwe
EPS	Eswatini Payment Switch
ESAAMLG	Eastern and Southern Africa Against Anti-Money Laundering Group
FATF	Financial Action Task Force
FPS	Fast payment system
FRA	Financial Regulatory Authority
FSC	Financial Services Commission
FSCA	Financial Sector Conduct Authority
G2P	Government-to-person
GBDT	Gold-backed digital token
GDP	Gross domestic product
GhIPSS	Ghana Interbank Payment and Settlement System
GIMAC	Groupement Interbancaire Monétique l'Afrique Centrale
GIP	GhIPSS Instant Pay
GNI	Gross national income
GPS	Global Positioning System
HDCT	Human Development Cash Transfer
ICT	Information and communications technology
ID	Identity document
IDI	In-depth interview
IIPS	Inclusive instant payment system
IMF	International Monetary Fund
IPA	Instant Payment Address
IPN	Instant Payment Network
IPRS	Integrated Population Registration System
IPS	Instant payment system
ISO	International Organization for Standardization
KWIK	Kwanza Instantâneo
KYC	Know your customer

MauCAS	Mauritius Central Automated Switch
MENA	Middle East and North Africa
MFI	Microfinance institution
ML	Money laundering
MMI	Mobile money interoperability
MMO	Mobile money operator
MNO	Mobile network operator
MSME	Micro, small, and medium enterprise
MTO	Money Transfer Operator
MUR	Mauritian rupee
MVTS	Money or Value Transfer Services
NFC	Near-field communication
NFS	National Financial Switch
NIBSS	National Inter-Bank Settlement System
NIP	NIBSS Instant Payment
NPCI	National Payments Corporation of India
NPS	National Payment System
P2B	Person-to-business
P2P	Person-to-person
PAPSS	Pan-African Payment and Settlement System
PASA	Payments Association of South Africa
PCH PG	Payment Clearing House Policy Group
PF	Proliferation financing
POI	Point of interaction
POPI-A	Protection of Personal Information Act
POS	Point-of-sale
PPP	Public-private partnership
PSOC	Payment Service Oversight Committee
PSP	Payment service provider
QR	Quick response
RBA	Risk-based approach
RBZ	Reserve Bank of Zimbabwe
REC	Regional economic community
RNDPS	Rwanda National Digital Payments System
RPP	Rapid Payments Program
RSP	Remittance service provider
RTC	Real-time clearing
RTGS	Real-time gross settlement
RTP	Request-to-pay

RTPS	Real-time payment systems
SACCO	Savings and credit cooperative
SADC	Southern Africa Development Community
SAPS	Salon Pement Swich
SARB	South African Reserve Bank
SATIM	Société d'Automatisation des Transactions Interbancaires et de Monétique
SDD	Simplified due diligence
SDG	Sustainable Development Goal
SIPS	Somalia Instant Payment System
SIIPS	State of Inclusive Instant Payment Systems
SIM	Subscriber identity module
SIMO	Sociedade Interbancária De Moçambique
SME	Small and Medium Enterprise
SPS	Somali Payment Switch
SSA	Sub-Saharan Africa
SWAM	Switch Al Maghrib
SWIFT	Society for Worldwide Interbank Financial Telecommunication
SYRAD	Système de règlement automatisé de Djibouti
TCIB	Transactions Cleared on an Immediate Basis
TF	Terrorist financing
TIPS	Tanzania Instant Payment System
UN	United Nations
UNECA	UN Economic Commission for Africa
UPI	Unified Payments Interface
US	United States
USD	United States dollar
USSD	Unstructured supplementary service data
VASP	Virtual asset service provider
WAEMU	West African Economic and Monetary Union
WAMA	West African Monetary Agency
WAMZ	West African Monetary Zone
ZAR	South African rand
ZECHL	Zambia Electronic Clearing House Limited
ZIG	Zimbabwe Gold
ZIPIT	Zimswitch Instant Payment Interchange Technology
ZWL	Zimbabwean dollar

Glossary of Terms

Acceptor	Any trading or service establishment that accepts, on its own behalf or on behalf of its network, the payment of goods or services via an electronic money instrument (BIS, 2003).
Acquirer	An entity or entities that hold(s) deposit accounts for card acceptors (merchants) and to which the card acceptor transmits data related to transactions. The acquirer is responsible for collecting transaction information and enabling settlement with acceptors (BIS, 2003).
Agents	Service points where customers can access bank and non-bank services, such as cash-in or cash-out (FinMark Trust, 2019). A settlement agent, in contrast, is an entity that manages the settlement process for transfer systems or other arrangements that require settlement (BIS, 2025).
Aggregator	Third-party institutions that enable acquirers to reach smaller merchants. The third party maintains a direct relationship with the smaller merchants and handles many of the operations and servicing aspects (World Bank, 2022a).
All-to-all interoperability	Ability to link bank accounts to mobile wallets and vice versa, bank accounts to bank accounts, and mobile wallets to mobile wallets to transfer value. All-to-all interoperability includes account-to-account interoperability as well as any other digital instruments or negotiable/fungible instruments.
Application programming interface	A method for two software components to communicate with one another using standard data formats and protocols.
App	For this report, “app” refers to the front-end interface that authorizes and processes payments between a user’s payment portal (mobile device) and a vendor’s financial intermediary, whether that is a bank or non-bank. Apps encrypt cardholder data, authorize payment requests, confirm purchases, and perform similar functions (Slesar, 2022).
APP fraud	Authorized push payment (APP) fraud is a type of fraud where a victim is manipulated or deceived into authorizing a real-time payment to an account controlled by a fraudster (KPMG, 2025).
Authenticate	Methods used to verify the origin of a message or to verify the identity of a participant connected to a system and to confirm that a message has not been modified or replaced in transit (CPMI, 2016).
Automated teller machine	An electromechanical device that permits authorized users, typically using machine-readable plastic cards, to withdraw cash from their accounts and/or access other services, such as balance inquiries, transfer of funds, or acceptance of deposits. ATMs may be operated either online, with real-time access to an authorization database, or offline (BIS, 2003).
B2B payments	Definition of the term for this report: transfers between businesses, such as payments for inventory and business services, especially MSME businesses, i.e., not wholesale payments.
Bank IPS	Typology for the purpose of the State of Inclusive Instant Payment Systems in Africa 2025 report: Bank IPS only support payments between banks using instruments associated with bank accounts, although in some countries, they also allow participation by microfinance institutions.
Bilateral prefunding	A settlement model for IPS, whereby “nostro” accounts are prefunded by connected payment service providers. These accounts are then debited as transactions occur between connected providers. These arrangements have been in place in Kenya, Tanzania, and Uganda (CGAP, 2021).
Bill payments	A payment made by a person from their bank, mobile money accounts, or other financial stores of value to a biller or billing organization via a digital payment platform in exchange for the services provided (GSMA, 2021a).
Branch	For this report, a branch is a payment service provider’s storefront location with a teller that handles cash deposits, withdrawals, and payments for goods and services.
Browser	For this report, a browser refers to a channel for a consumer to make a payment via a web page, linking the payer to a bank or financial service provider’s account details via secure web protocols.
Central bank digital currency (CBDC)	A digital form of a central bank liability, denominated in an existing unit of an account, which serves both as a medium of exchange, a store of value, and a means of payment. CBDC may be transferred either on a peer-to-peer basis or through an intermediary, which could be the central bank, a commercial bank, or a third-party agent (BIS, 2018).
Chargeback	A chargeback is a reversal of a charge on a credit or debit card, typically made because a customer disputes a transaction.



Closed loop

Financial arrangements that only support transactions in a single network or ecosystem.



Consumer-presented QR code

QR codes generated and displayed by a customer (e.g., on their mobile phone) that contain their account information, which a merchant can scan to initiate a payment (World Bank 2021c).



Credit card

A payment instrument linked to a credit facility through a card channel and network, with defined acceptance rules, specified functionality, and user redress protocols for the channel.



Credit electronic funds transfer (EFT)

The message is created whenever a payment instruction via various delivery channels (for example, the internet) is issued, crediting a customer's transaction account, to make an electronic payment to a third party (PASA, 2022a). Credit EFTs are, by definition, push payments.



Cross-border payment

A payment in which the financial institutions of the payer and the payee are located in different jurisdictions (CPMI, 2016).



Cross-domain IPS

Typology for the purpose of the State of Inclusive Instant Payment Systems in Africa 2025 Report. A cross-domain system provides all-to-all interoperability, where switching, clearing, and exchanging instruments are contained within it. Cross-domain systems provide access to banks and non-banks and support transactions from both bank accounts and mobile money accounts. All-to-all interoperability includes the ability for end users to directly transact between wallet accounts at different mobile money operators (MMOs), between mobile money accounts and bank accounts, and across bank accounts. Within one system, there are different rules to accommodate various instruments. The single system provides the governance framework and coordinates the operational functions end-to-end for the various instruments (GSMA, 2014).



Customer due diligence

Customer due diligence goes beyond customer identification and verification. It is a systematic risk management concept defined in relation to elements such as developing customer risk profiles, understanding the nature and purpose of transactions, and ongoing monitoring (CGAP, 2018; FATF, 2023; FATF, 2023).



Debit card

A payment instrument linked to a depository account, such as an on-demand deposit, savings, or transfer account. It can be used to make both debit and credit transactions between accounts, as well as between cards (PASA, 2022b). Although technically a pull payment, the locus of control is often with the payer, meaning debit cards can essentially function as a push payment.



Debit EFT

A payment instrument that allows the recipient to collect money from the sender's transaction account without the sender having to do anything but provide written, electronic approval through a debit order mandate (PASA, 2022b). Debit EFTs are, by definition, pull payments.



Deferred net settlement

The process whereby transaction obligations are netted off and only the balance is settled at a later stage according to a predefined cycle, either daily or more frequently (World Bank, 2021a).



Deposit-taking institution

Deposit-taking institutions include those that, in the normal course of business, solicit the acceptance of liquid (fungible) deposits from the public, subject to a contract of deposit, for the purpose of intermediation (co-mingled on the institution's balance sheet and applied to the acquisition of different asset classes and activities). Deposit-taking institutions may or may not facilitate payments and other financial services on behalf of their customers.



Digital public good

Digital public goods (DPG) encompass open-source software, open data, open AI models, open standards, and open content that adhere to privacy and other applicable laws and best practices, do no harm by design, and contribute to achieving the Sustainable Development Goals (SDGs) (Digital Public Goods Alliance, 2023).



Digital public infrastructure

Digital public infrastructure (DPI) refers to a set of secure and interoperable digital systems built on open technologies, designed to deliver equitable access to public and/or private services at a societal scale (G20, 2023).



Direct IPS participant

Licensed payment service providers governed by the same scheme rules and connected directly to the IPS, with the ability to initiate a transaction in the system.



Dynamic QR code

QR codes that are generated for a specific transaction and include variable details such as the amount or reference, enhancing security and automation (World Bank, 2021c).



Electronic know-your-customer (eKYC)

eKYC refers to the electronic means of conducting the customer's identification process, allowing for the digital or online verification of customer identity (BIS, 2020).



Emerging market segment

Lower-income people and MSMEs based in urban and peri-urban areas.

E-money	An electronically transactable currency instrument and store of value consisting of a claim against a licensed e-money issuer, collateralized by liquid commercial bank deposits or by a direct claim upon a commercial bank.
End-to-end eKYC	For this report, end-to-end eKYC refers to a process where all steps of the KYC process can be conducted electronically, allowing for fully remote electronic identification and verification.
Electronic wallet (e-wallet)	Alternatively referred to as a digital wallet or mobile wallet, electronic wallets (e-wallets) are software applications that store the bearer's payment details and passwords, enabling them to transact using a connected device, usually a mobile phone.
Fintech (payments)	For this report, a payment fintech is a firm that is not a bank, microfinance institution, or postal service, yet provides technology-enabled digital payment services.
Fraud	Acts intended to deceive the victim by misrepresenting or otherwise manipulating information for financial gain.
Government-to-person payments (G2P)	Disbursements from a government to an individual, including social cash transfers, pensions, or emergency relief.
Inclusive instant payment systems	Processes payments digitally in near real-time and is available 24 hours a day, 365 days a year. They enable low-value, low-cost push transactions that are irrevocable and based on open-loop and multilateral interoperability arrangements. Licensed payment providers have fair access to the system, and system participants have equal input opportunities into the system. The central bank has the ability to shape the governance. End users have access to a full range of use cases, payment instruments, channels, and transparent and fit-for-purpose recourse mechanisms.
Indirect system participant	Participants who do not have a technical integration with the central switch instead participate in the system via a direct system participant.
Instant payment systems	IPS are multilateral and open-loop retail payment systems that enable, at a minimum, digital push payments in near real time for use 24 hours a day, 365 days a year, or as close to that as possible.
International Organization for Standardization (ISO) 20022	Introduced in 2004, ISO 20022 has become the standard for new instances of electronic messaging and is used by most financial service providers for both payment and non-payment transactions (World Bank, 2021c).
Inventory and business services (B2B)	Monetary transfers between two business entities. The payment ranges from large-value payments associated with large intra-industry transactions to retail payments between micro, small, and medium enterprises (the focus of this report). For instance, payment for inventory supplies provided by one business to another (World Bank, 2020b).
Irrevocable	A transfer that cannot be revoked by the transferor and is unconditional (BIS, 2003).
ISO 8583	The most common messaging standard for card payments. ISO established ISO 8583 in 1987 (World Bank, 2021c).
Issuer	The payment service provider that issues payment cards or other payment instruments to the payer and processes payments initiated with these instruments (PayTechLaw, 2024).
Know-your-customer	KYC forms part of the broader customer due diligence (CDD) process. It is a commercial compliance concept that can be understood as the process by which institutions collect information or attributes about a potential customer and verify the accuracy of this information using reliable, independent source documents, data, or information (CGAP, 2018; Financial Inclusion Global Initiative, 2021).
Low-value payments	For this report, low-value payments refer to transactions of less than 5 United States dollars. In several markets, this is the threshold allowed for "contactless near-field transactions or e-wallet payments without authentication.
Merchant payments	Retail payments associated with the purchase of goods and services from a business, irrespective of the size, where the payer is a consumer and the payee is a business (World Bank, 2021a).
Merchant-presented QR code	QR codes displayed by a merchant that contain their payment information, allowing customers to scan and initiate a push payment (World Bank, 2021c).



Mobile money

A service in which a mobile phone is used to access financial services, where value is stored virtually in a transaction account issued by an e-money issuer. This service may or may not directly be linked to a bank account.



Mobile money IPS

A system that only provides access to mobile money providers and that supports instruments associated with mobile money accounts. This type of system has a common set of rules and standards that form the basis for clearing and settlement of transactions between customers of the participating MMOs. They may be based either on a centralized infrastructure or on some form of bilateral and multilateral arrangements between participating MMOs.



Mobile money operator

A mobile network operator or an entity that has partnered with a mobile network operator to provide mobile money services, a pay-as-you-go digital medium of exchange and store of value that operates independently of a traditional banking network (IMF, 2022a).



Multilateral interoperability

The permission structure for payment instruments belonging to a given system to be used in platforms developed by other systems, including in different countries. Multilateral interoperability involves the coexistence of multiple attributes, which can be combined in various ways. These attributes fall into three broad dimensions: technical, semantic, and business interoperability (BIS 2021). The nature of the business interoperability rules determines whether a payment system is multilateral but does not dictate the number of providers, platforms, systems, or jurisdictions.



Near-field communication

A standards-based, short-range (that is, a range of a few centimeters) wireless connectivity technology that enables simple and safe two-way interactions between electronic devices, allowing end users to perform contactless transactions, access digital content, and connect electronic devices with a single touch (BIS, 2020b).



Network effect

Overall utility of digital payment products and services depends on the number of individuals, businesses, and entities using them: the more users adopt a product, the more value each user receives (Giuliani, 2022).



Not-on-us transaction

Not-on-us transactions (also referred to as off-us) are those where the issuing and acquiring payment service providers are different institutions. These transactions require processing through external networks for clearing and settlement (such as a switch), as they involve moving funds between payment service providers, rather than being confined to a single payment service provider's internal system.



On-us transaction

Transactions that stay within one payment service provider's core processing platform and on an internal subsidiary ledger without clearing or settling between separate financial institutions. These are internal transactions between customer accounts within a single financial institution or within a financial services group.



Open banking

Practice of sharing financial data within the banking sector via standardized and secure interfaces at the request of clients (OECD 2023).



Open finance

The extension or evolution of open banking, defined as the practice of sharing financial data across broader financial services like credit and insurance providers via standardized and secure interfaces (OECD 2023).



Open economy

Builds on open finance, where data can flow securely and purposefully across diverse sectors like finance, agriculture, and health.



Open loop

An open-loop payment system is one in which any licensed payment service provider that fulfills the scheme rules may participate. An open-loop system implies interoperability. Exclusive bilateral arrangements, closed-loop systems, and on-us or inter-group processes are not open-loop.



Overseer

A person who continually monitors the system and assesses how safely and efficiently it is operating (BIS, 2016). They are responsible for assessing and monitoring the system and enforcing the laws and regulations to promote safe and efficient payments. The system overseer can enforce policy mandates and serves as the primary arbitrator of fairness in the application of the scheme rules (CGAP, 2021).



Payment rails

The underlying infrastructure, networks, and rules through which payment transactions are processed and transferred between financial institutions.



Payment service provider

An intermediary that processes payments on behalf of the payer and payee.



Payment system operator

Responsible for transmitting payment instructions, calculating settlement positions, managing systems daily, and processing in line with scheme rules and governance directives. Their responsibilities also include ensuring the quality of service, mitigating operational risks, and maintaining standards (CGAP, 2021).

Payment system operator interoperability	Interoperability between payment systems involves the capability for the infrastructure, scheme rules, or applications to communicate with each other (World Bank 2021i). The payment system operator can be a private entity or government-owned. True interoperability requires not only technical connections but also standardized rules and agreements among providers.
Phishing	A method of fraud whereby the fraudster sends emails or text messages that appear to be from reputable people or companies to deceive people into sending personal information or money.
Point of interaction (POI)	The initial point in the merchant's environment (e.g., POS, vending machine, payment page on merchant website, QR code on a poster, etc.) where data is exchanged with a consumer device (e.g., mobile phone, wearable, etc.) or where consumer data is entered to initiate an instant credit transfer (ERPB, 2020).
Point-of-sale device	A specialized device that is used to accept payments (for example, a card reader) at a retail location where payments are made for goods or services (GSMA, 2021a).
Primary local channel	The predominant payment channel or channels utilized by the majority of the population within a specific geographic area.
Proxy ID	An identifier (e.g., email address, mobile phone number) that may be used instead of the payer's or payee's transaction account information. These enable the public and the business sector to transact seamlessly while initiating a payment (World Bank, 2021d).
Pull payment	The payee initiates (pulls) the transfer of funds from the payer's account (BIS, 2016).
Push payment	The payer initiates (pushes) the transfer of funds from an account to the payee (BIS, 2016).
Quick response (QR) code	A square-shaped pattern consisting of a set of unique white and black blocks, representing information on the recipient or other transaction details. Any smart device can scan QR codes, or they can be entered manually as unstructured supplementary service data to support transactions (BTCA, 2021).

Real-time payment	The value transfer is assured to be instant (within seconds).
Real-time settlement	When transactions are settled continuously as they occur (World Bank, 2021a).
Recourse mechanisms	The mechanisms in place for end users to raise grievances and have them heard, resolved, or addressed (CGAP, 2013).
Regulatory harmonization	Regulatory bodies in two or more countries agree on a set of regulatory frameworks/standards and/or establish similar processes/services.
Remittances	Cross-border, person-to-person payments of relatively low value that are typically recurrent transfers (BIS, 2022b).
Retail payment system	A funds transfer system that typically handles a large volume of relatively low-value payments in such forms as checks, credit transfers, direct debits, and card payment transactions (CPMI, 2016).
Reversal fraud	An end user intentionally initiates a payment reversal or chargeback for a legitimate mobile transaction they've made to receive a refund while retaining the purchased goods or services (GSMA, 2024a).
Risk-based approach to AML/CFT/CPF	A risk-based approach to anti-money laundering (AML), combating the financing of terrorism (CFT), and countering proliferation financing (CPF) means that countries, competent authorities, and financial institutions are expected to identify, assess, and understand the money laundering, terrorism financing, and proliferation financing risks to which they are exposed and take measures relative to those risks to mitigate them effectively (FATF, 2023).



Salaries and wages

Periodic transactions from businesses to compensate employees for work rendered (for example, payroll and other compensation-related incentives; World Bank, 2021a).



Scheme rules

The comprehensive set of guidelines, procedures, and standards that govern the operation, participation, and conduct of all entities within the payment network (World Bank, 2022b).



Settlement agent

Responsible for moving the settlement value in commercial or sovereign currency between system participants (CGAP, 2021).



Settlement window

A predefined period within a payment system during which net transaction obligations between participating financial institutions are calculated and settled.



Smishing

A social engineering attack that uses fake mobile text messages to trick people into downloading malware, sharing sensitive information, or sending money to cybercriminals (IBM, 2024).



Social disbursements

A payment by a government to a person's transaction account, often for social disbursements, such as grant or subsidy payments (GSMA, 2021b).



Sovereign currency IPS

Typology for the purpose of the State of Inclusive Instant Payment Systems in Africa 2025 Report. Sovereign digital currency IPS combine a central bank digital currency instrument and value transfer system that can provide a unified digital value transfer mechanism between commercial instrument systems, institutional stakeholders, and individuals within an economy.



Static QR code

QR codes that contain fixed payment information and do not change with each transaction, often used by small vendors (World Bank, 2021c).



Switching

Refers to the operation of switch technology that enables safe and efficient transactions. Switch operators transmit, reconcile, confirm, and net transactions between participants (collectively, these make up the clearing function); submit instructions for real-time or deferred transfer of final funds (settlement initiation); and perform other operational functions, including managing disputes and monitoring for fraud (CGAP, 2021).



System governance body

Responsible for strategic direction, including any explicit inclusivity mandate (pro-poor governance), and accountability of IPS participants. Their function is related to control over scheme management (Cenfri, 2020).



System owner

Responsible for and entitled to receive all the benefits and risks associated with ownership of the system (BIS, 2003).



Taxes and fees

Obligations that individuals pay to central, regional, and local public administrations, such as tax payments or utility payments (World Bank, 2021a).



Tiered KYC

Tiered KYC is a form of customer due diligence (CDD) in which account functionality and CDD requirements increase progressively in tandem, allowing greater functionality as more KYC requirements are met (GSMA, 2019).



Transfers and remittances

Transfers of money to family members or friends without an underlying economic transaction (for example, remittances sent from one person's transaction account to another, World Bank, 2021a).



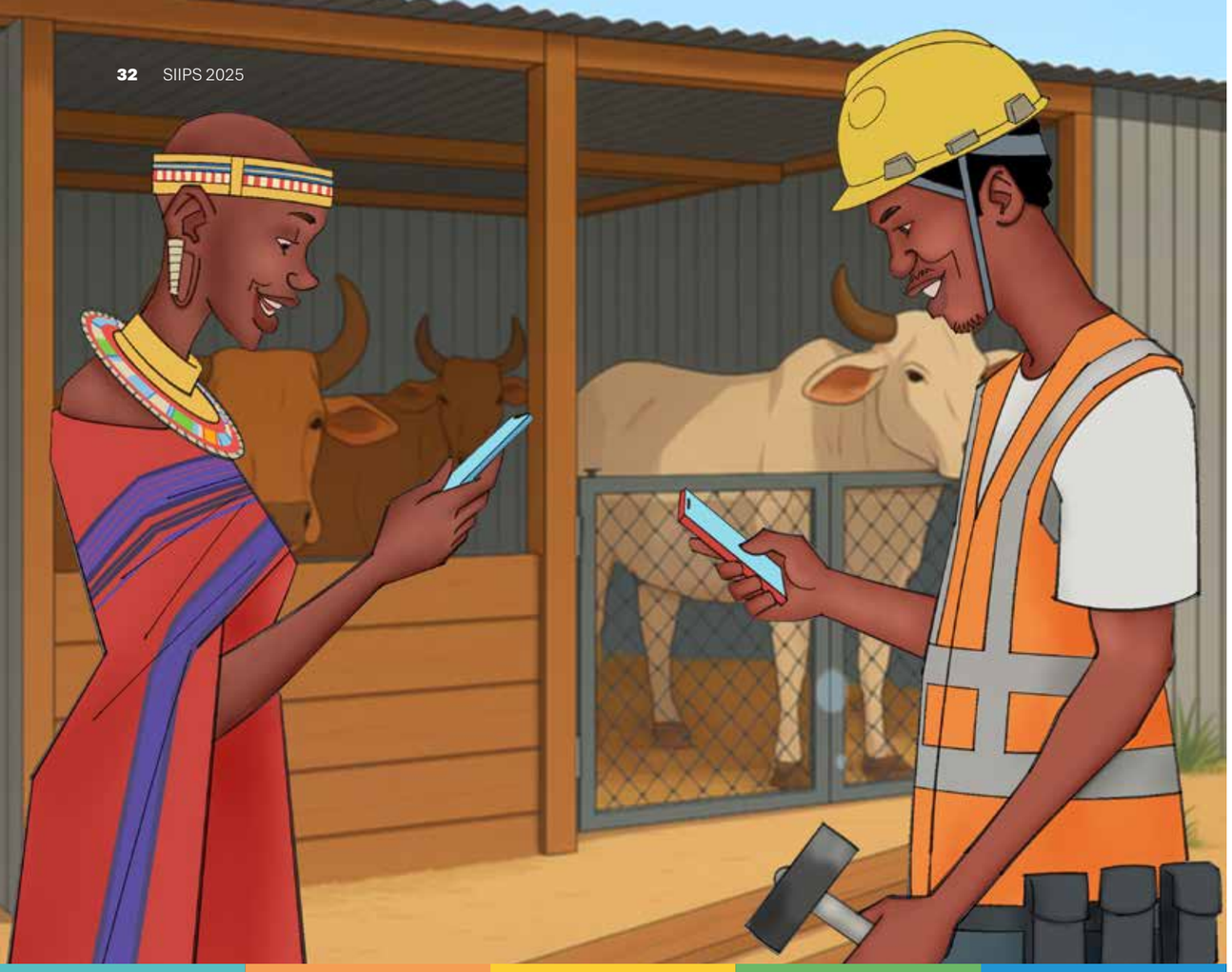
Unstructured supplementary service data (USSD)

Part of the Global System for Mobile Communications protocols for second-generation digital cellular networks and devices. This communication channel was adapted to accommodate financial transactions by enabling customers to send predefined instructions to mobile financial services providers, along with their personal identification number for authentication, while allowing the provider to send responses to clients and confirm transactions (CGAP, 2015).



Vishing

A type of cyberattack that uses voice and telephony technologies to trick targeted individuals into revealing sensitive data to unauthorized entities (Cisco, 2025).



Executive summary

Digital payments are transforming African economies by fostering financial inclusion and economic participation. Despite significant increases over the past decade, however, end-user adoption remains uneven due to a lack of modern, inclusive, and interoperable instant payment infrastructure that makes digital payments accessible and motivates market actors to simplify onboarding, improve the customer experience, and address security and fraud concerns that keep people using cash.

Instant payment systems (IPS) are helping counteract these barriers. These national-scale retail payment systems provide the shared infrastructure that ensures anyone in a country can pay anyone else, regardless of where (or even if) the respective parties have an account. IPS help expand access to low-cost digital payments and enable immediate access to the funds. When effectively implemented and made widely accessible to all end users and payment service providers (PSPs) in a market, these systems become inclusive IPS, or IIPS (see Box 0.1). This inclusivity can drive scale and lead to reductions in explicit and implicit costs, as well as deeper financial services usage through savings, credit, and insurance.

In this fourth annual ***State of Inclusive Instant Payment Systems (SIIPS) in Africa 2025*** report, AfricaNenda Foundation highlights efforts to develop, launch, scale, and drive inclusivity in IPS. Utilizing both supply-side and demand-side quantitative data collected between January and June 2025, as well as qualitative insights from in-depth interviews, the report serves as a key resource for Africa's payment market stakeholders, including central banks, IPS operators, payment service providers, and financial inclusion advocates.

As in previous years, the SIIPS 2025 edition begins with the premise that IIPS function as the payments layer of a country's digital public infrastructure (DPI)—the shared, interoperable building blocks that provide a market with equitable access to digital identity, digital payments, and digital data exchange services.

The report measures the progress made in expanding inclusivity while also identifying persistent gaps in inclusivity and opportunities for improvement. It starts with an update of the IPS landscape in Africa, based on data from a survey and interviews with central banks, IPS operators, and expert stakeholders. It continues with the findings from a demand-side study of digital payment users in four countries: Angola, Côte d'Ivoire, Madagascar, and Tunisia. From this data foundation, the report explores the high-profile trends and opportunities that are either driving inclusivity in the digital payments space or hampering it. Three spotlight chapters offer deep dives on the opportunity for IPS to expand scale and impact through DPI, G2P payment digitalization, and cross-border payments. Furthermore, four IPS case studies focused on Egypt, Ethiopia, Mozambique, and Nigeria offer in-depth details on the successes and challenges involved in designing and launching an IPS. Finally, the report wraps up with a set of recommendations geared to different stakeholder groups.

Box 0.1 | What is an instant payment system, and when does it become inclusive?

Instant payment systems (IPS) are **open-loop** retail payment systems that enable **irrevocable, low-value** digital credit push transactions in **near real-time** for use **24 hours** a day, **365 days a year**. IPS and fast payment systems (FPS) are synonymous.

***Inclusive* instant payment systems (IIPS)** process payments **digitally in near real time** and are available **24 hours** a day, **365 days** a year, or as close to that as possible. They enable **low-value, low-cost push** transactions that are **irrevocable** and are based on **open-loop multilateral** interoperability arrangements. Licensed payment providers have **fair access** to the scheme, and system participants have **equal input** opportunities. The **central bank** has a role in scheme governance. End users have access to a **full range of use cases and channels**, as well as transparent and fit-for-purpose **recourse** mechanisms.

Note: These definitions inform the criteria applied in the AfricaNenda IPS Inclusivity Spectrum. For a complete description of the Inclusivity Spectrum and which criteria constitute the different levels of inclusivity, refer to the full assessment in Chapter 2 of the State of Inclusive Instant Payment Systems in Africa 2025 Report.

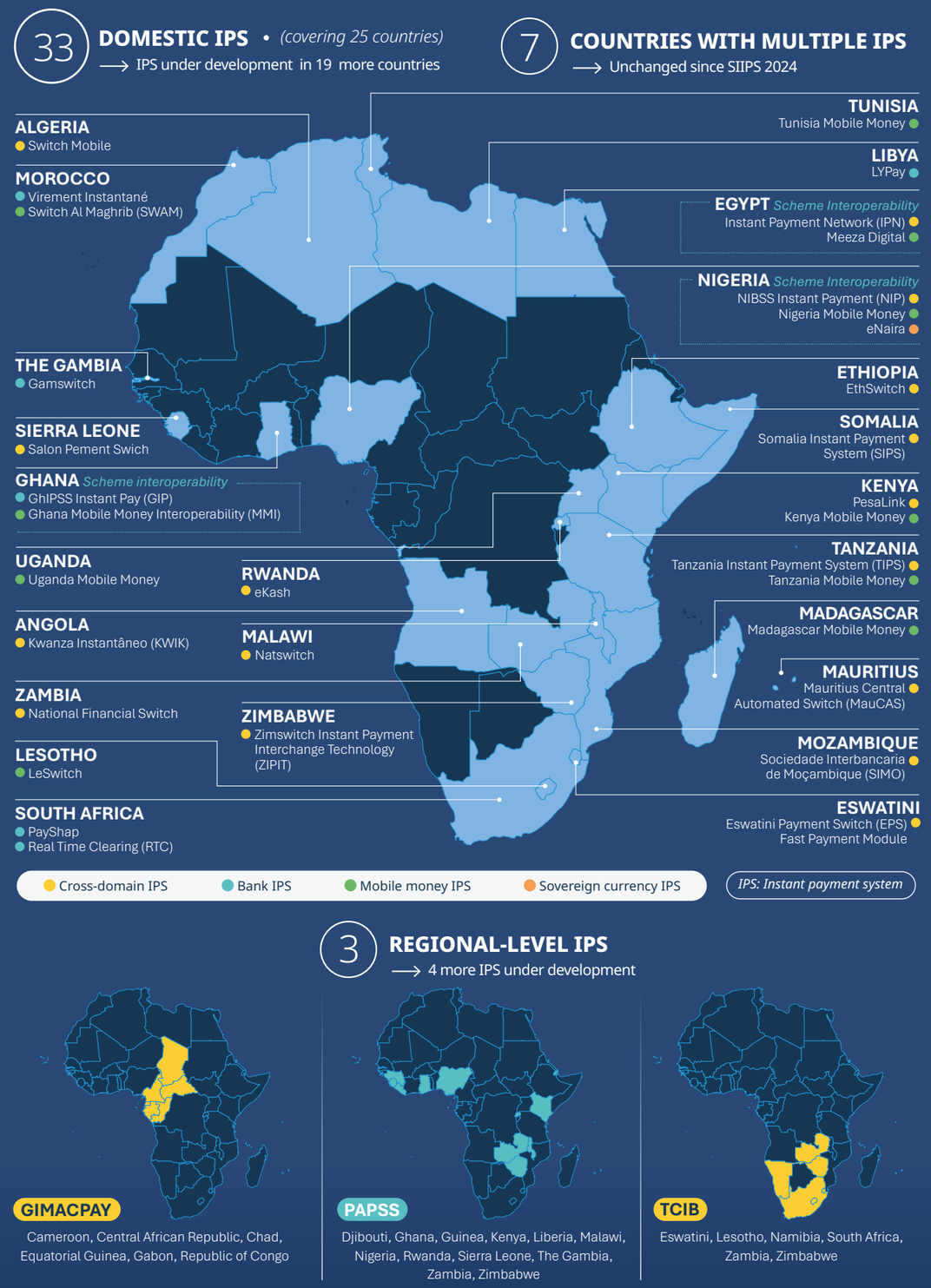
The 2025 IPS landscape: New systems launch and others progress toward inclusivity

Between July 2024 and June 2025, five new domestic IPS went live, raising the total number of domestic systems in Africa to 33 across 25 countries (see Map 0.1). This growth increased the total number of all live systems—including three live regional systems—from 31 in June 2024 to 36 as of June 2025 (see Box 0.2 for a summary of changes in the IPS landscape).

Box 0.2 | Summary of changes since SIIPS 2024

- The five new systems that launched between July 2024 and June 2025 are Switch Mobile (Algeria), Eswatini Payment Switch (EPS) Fast Payment Module, LYPay (Libya), Salon Pement Swich (Sierra Leone), and Somalia Instant Payment System (SIPS).
- Two systems in the SIIPS 2025 are listed under new names compared with SIIPS 2024 based on survey responses: MarocPay is now Switch Al Maghrib (SWAM) (Morocco), and Taifa Moja is now Tanzania Mobile Money.
- Two systems were reclassified based on the categories of PSPs they allow to participate: SWAM (Morocco) was reclassified from a cross-domain IPS to a mobile money IPS, while PesaLink (Kenya) was reclassified from a bank IPS to a cross-domain IPS.

Map 0.1 | Active domestic and regional IPS in Africa as of June 1, 2025



Four of the five new IPS are cross-domain systems, meaning that they allow banks and non-bank financial institutions to participate (see Box 0.3). The four are Switch Mobile (Algeria), EPS Fast Payment Module (Eswatini), Salon Pement Swich (Sierra Leone), and SIPS (Somalia). The IPS "type" is based on its interoperability arrangements and defines the PSPs it allows to participate (see Box 0.2).

Box 0.3 | IPS types

An IPS can fall into any one of four types:

Cross-domain IPS are characterized by their ability to facilitate all-to-all interoperability between various types of financial institutions and their respective account types. This includes enabling transactions between traditional banks, mobile money operators (MMOs), microfinance institutions (MFIs), and fintech companies, allowing all licensed payment providers to participate. All-to-all interoperability includes the ability for end users to transact between wallet accounts at different MMOs, between mobile money accounts and bank accounts, and across bank accounts.

Bank IPS are primarily operated by or for traditional banking institutions. These systems often focus on facilitating real-time transfers between accounts held at different banks and primarily serve existing bank account holders.

Mobile money IPS are primarily designed to facilitate instant payments within and between different mobile money platforms.

Sovereign digital currency IPS only process transactions in central bank digital currencies.

A notable trend is the continued gravitation towards cross-domain interoperability: 16 of the live domestic IPS are now classified as cross-domain IPS, enabling transactions between various types of financial institutions. This is followed by mobile money IPS (10), bank IPS (6), and sovereign digital currency IPS (1). Nigeria's eNaira is still the sole sovereign digital currency IPS on the continent. Seven countries (Egypt, Ghana, Kenya, Morocco, Nigeria, South Africa, and Tanzania) boast multiple live IPS of different types, some of which are interoperable.

In addition to domestic systems, three regional IPS are currently active: GIMACPAY in the Economic and Monetary Community of Central Africa (CEMAC), the Pan-African Payment and Settlement System (PAPSS), which aspires to be pan-continental, and Transactions Cleared on an Immediate Basis (TCIB) in the Southern Africa Development Community (SADC). These regional systems provide regional functionality to 22 countries. The Central Bank of West Africa States (BCEAO) launched its regional IPS for the countries of the West African Economic and Monetary Union (WAEMU), in September, 2025. As this is outside the data collection period for the SIIPS 2025 report, it is not reported as live in this edition.



There has been continued growth in transaction volumes and values.

IPS across Africa are demonstrating robust adoption growth, with transaction volumes and values continuing their upward trajectory (see Figure 0.1). Between 2020 and 2024, total transaction volumes increased by an average annual growth rate of 35%, reaching over 64 billion transactions in 2024. Mobile money IPS continue to process the highest share of transaction volumes, though bank IPS grew at the fastest rate between 2023 and 2024 at 50%.

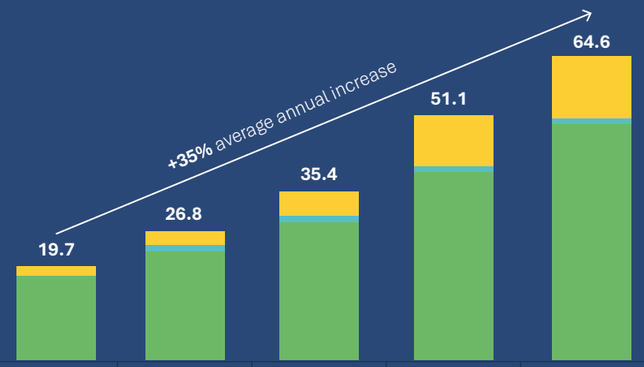
Total transaction values also saw growth, increasing by an average annual rate of 26% from $775.5 billion in 2020 to 1.98 trillion in 2024.[1]

Bank IPS led this growth, with a 28% increase in transaction value between 2023 and 2024, followed by cross-domain systems (9% growth) and mobile money (7% growth). Mobile money IPS maintained a low average transaction value of $11, consistent with high-volume, low-value transactions. Cross-domain IPS saw their average transaction value decline to $95 in 2024, indicating potential use of these systems for a wider range of payment types, including smaller-value payments. Cross-domain systems processed the largest share of total transaction value in the past year.

1 To avoid distortions caused by major year-to-year exchange rate differences, AfricaNenda used the World Bank Atlas Conversion Method to convert data reported in local currencies into U.S. dollars for consistent reporting. This method smooths exchange rate fluctuations by applying a three-year, inflation-adjusted moving average. As a result of these adjustments, several values differ from those reported in past editions of SIIPS.

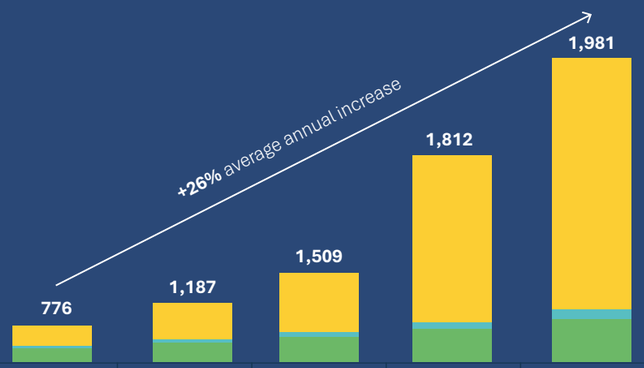
Figure 0.1 | Transaction volumes and values (n=30)

VOLUME
(billions of transactions)



	2020	2021	2022	2023	2024	2023/2024 Growth
Cross-domain IPS	2.1	3.5	5.3	10.5	13.6	29%
Bank IPS	0.1	0.2	0.3	0.4	0.7	50%
Mobile money IPS	17.5	23.1	29.9	40.2	50.3	25%
Total	**19.7**	**26.8**	**35.4**	**51.1**	**64.6**	**26%**

VALUES
(USD billion)



	2020	2021	2022	2023	2024	2023/2024 Growth
Cross-domain IPS	460	732	943	1,195	1,299	9%
Bank IPS	50	71	96	114	147	28%
Mobile money IPS	266	383	470	502	535	7%
Total	**776**	**1,187**	**1,509**	**1,812**	**1,981**	**9%**

Note: Volume and value data were unavailable for four of the new systems—Switch Mobile (Algeria), LYPay (Libya), Salon Pement Swich (Sierra Leone), and SIPS (Somalia)—and no data was received from PAPSS (continent-wide). Volume data was available for SIMO (Mozambique), but value data was not; therefore, their transaction data is not included in the analysis. As a result, these calculations include 30 IPS. Since eNaira (Nigeria) is the only sovereign digital currency IPS, and its data are included in the NIP (Nigeria) data, sovereign digital currency IPS are excluded from the IPS performance analysis.

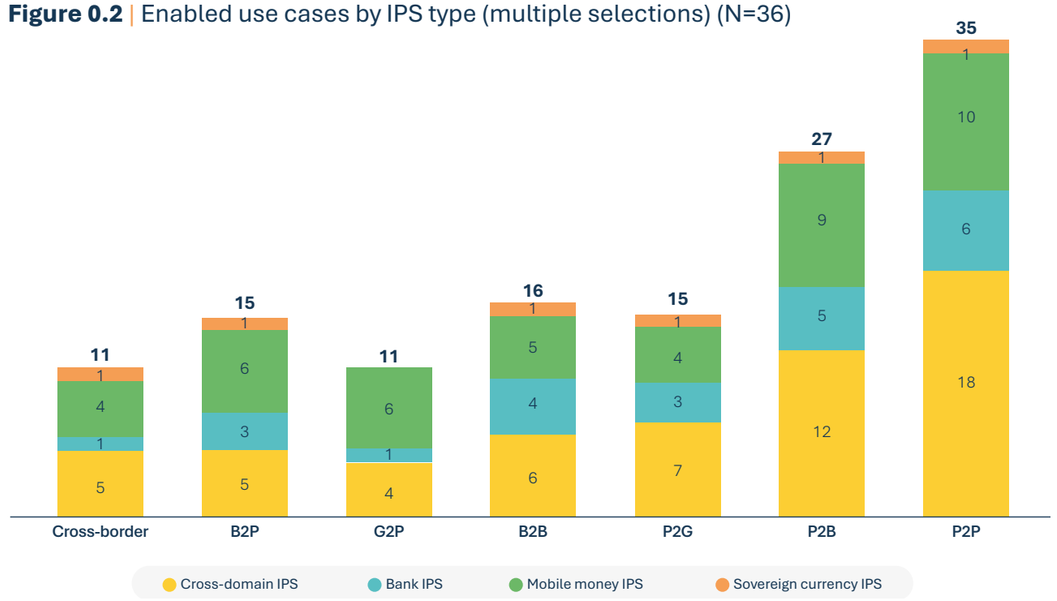
Available channels, instruments, and use cases are broadening.

IPS creates the condition for more end users to adopt them—and thereby become more inclusive—when they expand the breadth of channels, instruments, and use cases they support.

SIIPS 2025 reflects steady progress across all three dimensions:

- **Mobile phone applications (apps) remain the most widely supported channel,** enabled by 33 systems. This reflects a broader shift toward smartphone-centric design, consistent with Sub-Saharan Africa's growing smartphone penetration rate, which currently stands at 54%. **USSD and browser-based internet banking remain critical** in areas where basic phones are more common, ranking as the second and third most supported channels (25 and 22 systems, respectively). **QR code support rose notably,** and support for **human-assisted channels declined,** though they are still relevant for users with limited digital or financial literacy.
- **Credit EFT and e-money remain the most prevalent instruments,** with an equal number of IPS now supporting both (23 IPS). Fourteen IPS support debit EFT instruments, and thirteen IPS support card instruments. Only one IPS, eNaira, supports a central bank digital currency (CBDC).
- **Most IPS support the person-to-person (P2P) payment use case,** with a growing number enabling person-to-business (P2B), government-to-person (G2P), and cross-border payment use cases (see Figure 0.2).
- **User-centric innovations,** such as request-to-pay, third-party connections, real-time payment confirmation, and transaction validation, are enhancing IPS inclusivity by improving the user experience, building trust, and encouraging adoption, particularly among underserved populations.

Figure 0.2 | Enabled use cases by IPS type (multiple selections) (N=36)



Note: Out of 36 IPS, 35 are included in the use case analysis. No use case data was received from PAPSS.

Commercial banks remain the most common direct IPS participants, though an increasing number of IPS allow non-banks to participate directly.

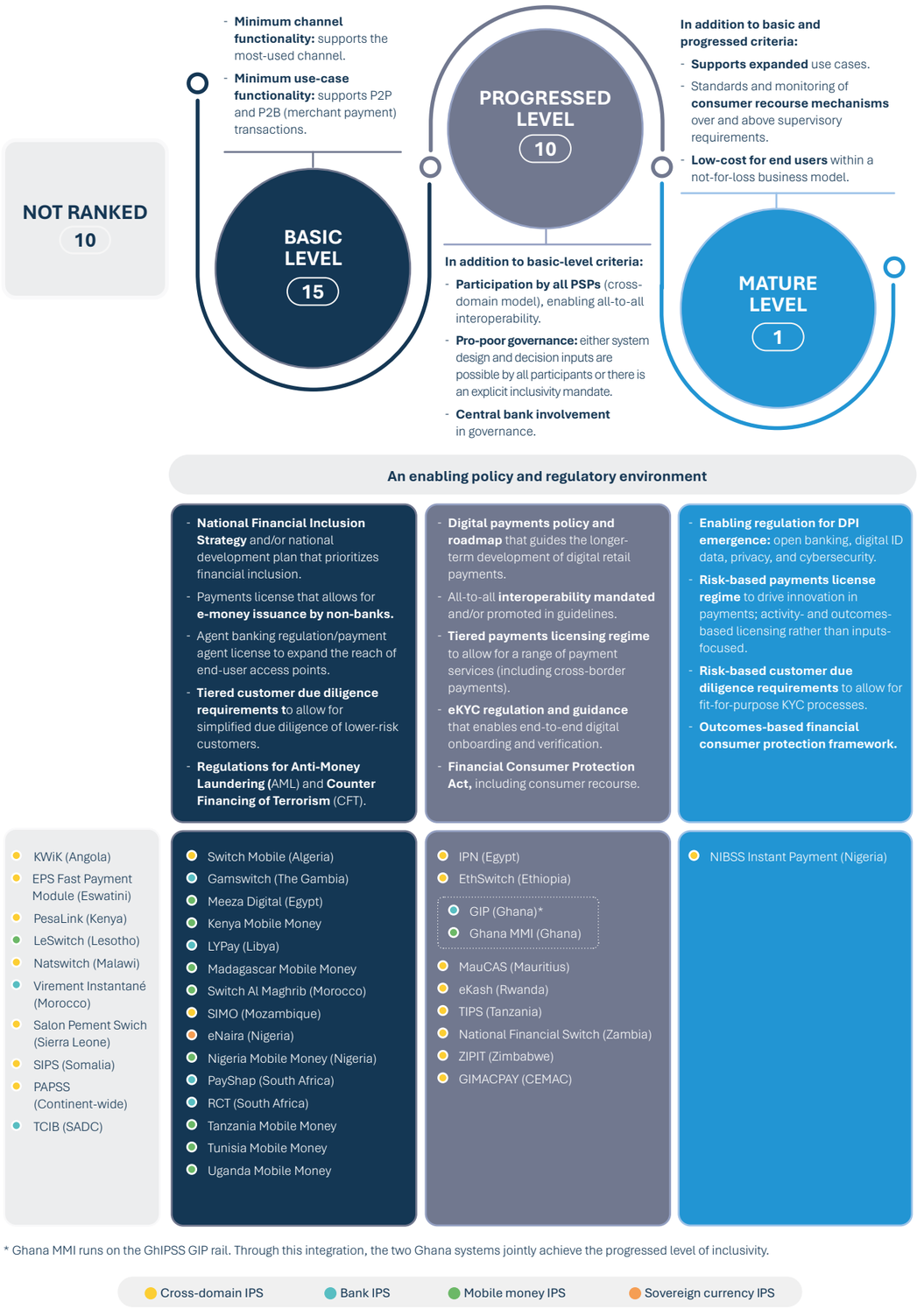
Commercial banks continue to dominate direct participation in IPS, though inclusivity is expanding to non-bank PSPs. Of the more than 1800 total IPS participants in 2025, 42% were direct and 58% indirect (This data excludes eNaira and Nigeria Mobile Money and PAPSS (continent-wide), Madagascar Mobile Mobile, Switch Mobile (Algeria), LYPay (Libya), and Uganda Mobile Money, as the total number of participants for these systems was not available.). Nigeria's NIP accounted for 39% of total participants, followed by Ghana's GIP and CEMAC's GIMACPAY. While banks made up the majority of direct participants (463), 15 IPS enabled direct non-bank participation by e-money issuers and microfinance institutions (MFIs) : KWiK (Angola), Meeza Digital (Egypt), EthSwitch (Ethiopia), Gamswitch (The Gambia), GIP (Ghana), PesaLink (Kenya), MauCAS (Mauritius), SWAM (Morocco), SIMO (Mozambique), eKash (Rwanda), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money, National Financial Switch (Zambia), and ZIPIT (Zimbabwe). This highlights a growing push toward broader ecosystem inclusion in IPS governance and operations.

The first IPS achieved mature inclusivity.

The aggregate impact of a system's governance, structure, interoperability, channel coverage, functionality, and use cases shapes the inclusivity potential of the IPS. The 2025 AfricaNenda Inclusivity Spectrum categorizes systems into basic, progressed, and mature levels of inclusivity based on defined criteria (see Figure 0.4 for full definitions and IPS classifications), as follows:

- Fifteen IPS are at the **basic** level of inclusivity. These systems support both P2P and P2B use cases and have enabled the primary channel that people use in their country. Mobile money and bank IPS cannot independently progress beyond the basic level due to the lack of all-to-all interoperability. Six of the IPS with a basic level of inclusivity are cross-domain and could progress to the next level by enabling P2B (merchant) payments.
- Ten IPS have reached the **progressed** level of inclusivity. In addition to meeting the basic criteria, these systems allow all licensed PSPs to access the system (cross-domain model), feature pro-poor governance through inclusive decision-making, and have a central bank involved in governance. In Ghana, GIP and Ghana Mobile Money jointly enable all-to-all interoperability via integration between the two schemes and therefore jointly achieve progressed inclusivity.
- **Mature** systems meet all the criteria for basic and progressed inclusivity while enabling most use cases and operating according to not-for-profit or not-for-loss principles to ensure that end-user transaction fees are as low as possible. Nigeria's NIP is the first IPS in Africa to reach the **mature** level of inclusivity. The biggest challenges progressed systems face in reaching mature inclusivity are enabling expanded use cases and additional recourse mechanisms.
- Ten IPS remain **unranked**, either because they do not support P2B functionality, lack the minimum channel functionality, or have insufficient data available to enable assessment. Although the number of unranked systems remains the same as in 2024, the addition of new systems and improvement across the spectrum show progress.

Figure 0.3 | Mapping IPS across the Inclusivity Spectrum



* Ghana MMI runs on the GhIPSS GIP rail. Through this integration, the two Ghana systems jointly achieve the progressed level of inclusivity.

End-user insights

As with previous editions of the SIIPS report, AfricaNenda Foundation carried out in-depth end-user research to better understand the experiences and perspectives that individuals and micro, small, and medium enterprises (MSMEs) have around digital payments. This year's research took place in Angola, Côte d'Ivoire, Madagascar, and Tunisia, and involved one hundred end users in each country in addition to forty in-depth interviews.

The findings from the 2025 end-user research are consistent with those from previous SIIPS studies. In brief, frequent income earners are particularly likely to be active users. Relatedly, adults older than 30 years of age use digital payments more often than younger adults, and men use them more often than women. Merchant adoption, however, is mixed and depends on the degree of business formality and whether there is sufficient customer demand for digital payments and easy access to digital payment services.

In all four economies, P2B payments were made more often than P2P payments. In Angola and Côte d'Ivoire, more than 70% of merchants had received a digital payment from a customer in the previous two weeks; Angola's payments were through point-of-sale systems, while Côte d'Ivoire's were through mobile apps and QR codes. Such positive signs notwithstanding, 75% of the merchants in the sample reported that they faced constraints in adopting digital payments because customers still prefer to pay with cash.

Overall, the sample participants fell into one of five common end-user profiles:

- **The digital mover** embraces a fully digital lifestyle but can occasionally encounter usability issues and inconsistent features, which push them to use cash.
- **The situational user** opts for digital payments when they offer clear benefits, but often uses cash when digital is unavailable or less reliable than cash.
- **The cash-first user** earns money through casual work or from a household kiosk. They prefer familiarity and simplicity and often face digital literacy and access gaps, which force them to rely on family members for support with digital channels.
- **The structured boss** runs a formal business and wants digital payment systems that are safe and fast, and make it easy to track expenses, supervise employees, and offer great experiences for customers and suppliers.
- **Juggling merchants** run micro businesses, and their customers differ in their payment preferences, requiring them to manage both cash and digital payment inflows.

These profiles highlight the fact that even active digital payment users in Africa live in a hybrid world that requires them to have cash when digital channels are not available, not reliable, not trusted, or not intuitive to use. Concerns about fraud and security are prevalent across the customer journey from awareness to habitual use, particularly among cash-first users: half to three-quarters of them say that fraud concerns are a barrier. Other barriers, such as network outages, inadequate training, high transaction fees, and insufficient customer support, likewise suppress both adoption and continued use for a broader array of use cases.

> **"I usually make my payments with cash. I don't make digital payments because… I don't use tools that allow me to have apps and other things. Nowadays, there are a lot of scams and clones, so I prefer to go to the bank, withdraw the money at the counter, keep the money, and do my things normally."**
>
> —Man, merchant, urban, Angola

On the other hand, end users also recognize that digital channels can be safer than carrying cash and more convenient because they do not need change. Both are viewed as adoption and usage enablers, as are merchants that only accept digital payments, convenience for large transactions, and flexibility for small transactions. These can motivate end users to embrace digital payments, though the journey can take many turns as people adopt and then sometimes abandon digital payments if the services do not fulfill expectations of safety and convenience.

> **"What encourages me to use mobile money more often is the quick assistance it provides when necessary. I have confidence in using it."**
>
> —Woman, individual user, urban, Côte d'Ivoire

Looking ahead, the keys to deepening adoption of digital payments among low-income individuals and small or informal businesses will be the broader acceptance of digital payments by payees, their usefulness for small-value transactions, and easy onboarding. At the system level, expanding use cases—such as rent, public transportation, utilities, and government-to-person (G2P) payments—will encourage broader adoption.



Key trends and opportunities for promoting inclusivity

Several emerging trends and innovations affect IPS inclusivity. They suggest opportunities for expanding IPS access and the use of instant payments. These trends play out at the market, system, and consumer levels (see Table 0.1).

Table 0.1 | Key trends and opportunities

Market trends	Importance/relevance	Opportunities for generating IPS inclusivity
IPS will enable the next cross-border play in Africa	Merchants selling across borders and emigrants sending remittances wish to avoid high costs and settlement delays in traditional channels. IPS-to-IPS links offer real-time, low-fee experiences.	• Charge less than money transfer operators and deliver instant, irrevocable funds to reduce costs and latency. • Remove intermediaries to eliminate foreign exchange currency dependency, cutting costs and de-risking pressure. • Provide universal access to counterparties under harmonized rules to expand market reach. • Monetize message conversion, routing, and low-risk FX, and layer cross-border services to generate new revenue.
Consumer-protection frameworks tighten, led by APP fraud reimbursement rules	A sharp rise in authorized push payment (APP) fraud and high levels of end-user concern about fraud are causing regulators to shift liability to PSPs.	• Offer quick, automatic reimbursement to build user trust and boost IPS volumes. • Split liability to incentivize fraud prevention. • Create demand for shared fraud-intelligence hubs to catalyze data-sharing. • Embrace third-party risk-management tools built on IPS rails.
IPS design gaps stall launches	Many live IPS process low volumes and values due to design and governance gaps, such as high/unclear transaction fees, partial/delayed participation, limited use-case coverage, weak trust architecture, and governance inertia.	• Rapidly digitalize low-value payments and increase daily active users to align pricing. • Achieve full network effects and steeper volume curves to ensure universal participation. • Create sticky, everyday relevance for consumers and small businesses to enable multi-use functionality.

Market trends	Importance/relevance	Opportunities for generating IPS inclusivity
(cont.)		• Increase user willingness for higher-value flows and attract key transfers to build visible trust. • Roll out features and policies to keep IPS competitive.
System trends	**Importance/relevance**	**Opportunities for generating IPS inclusivity**
QR code functionality is gaining traction	Growing smartphone adoption, expanding internet access, and reduced data costs present an opportunity to leverage QR codes for expanding IPS access, especially in retail and informal sectors.	Design and introduce QR systems that enhance inclusivity as follows: • Use merchant-presented QR codes with push payment functionality for real-time confirmations. • Promote shared QR codes by embedding them within the IPS for an open, interoperable platform. • Act as a QR issuer to lower entry barriers for acquirers. • Offer flexible QR payloads to allow merchants to change providers while keeping payment methods consistent. • Implement robust fraud management for stronger security through push-based methods and real-time analytics. • Set zero/near-zero merchant fees to attract small merchants.
Development of consumer-facing solutions/ applications	IPS are launching dedicated consumer-facing applications to build their brands and offer simple, convenient, and secure user experiences.	• Control the end-user experience to ensure service consistency and brand building. • Provide a single access point to the IPS to facilitate unified market entry, enabling all PSPs to go live simultaneously. • Allow users to link multiple accounts in one place to enhance accessibility, convenience, and control. • Enable expanded financial services access, such as credit, savings, and insurance. • Enable a wider range of financial service providers to participate in driving enhanced competition and innovation.

System trends	Importance/relevance	Opportunities for generating IPS inclusivity
Free fee structures jumpstart adoption	Free or affordable fee structures can reduce the cost barrier of digital payments and encourage early adoption.	• Waive transaction fees, even temporarily, to increase uptake, making the service more accessible. • Encourage initial trials and build user trust to foster greater financial inclusion and accelerate the shift from cash to digital payments.
Consumer trends	**Importance/relevance**	**Opportunities for generating IPS inclusivity**
Human-assisted channels are more (not less) essential for narrowing inclusivity gaps	Human-assisted channels like agent networks remain crucial for customer acquisition and serving underserved groups, especially first-time users and those who are less digitally confident.	• Innovate agent management and roles in the payments value chain to modernize agent models, including shared agent infrastructure models and “agents-as-a-service” offerings. • Build dependable agent networks through improved selection, training, monitoring, incentives, and support (e.g., credit-linked float management). • Reconsider reducing IPS support for human-assisted channels.
End users embracing digital payments still live in a hybrid world	Despite growth in digital payments, consumers face constraints (habit, infrastructure, fractured markets) that will keep even avid digital adopters in a hybrid payments world (cash and digital) for the foreseeable future.	• Develop digital-analog approaches designed for less digitally/financially enabled groups to innovate hybrid approaches. • Focus on providing convenient, easy, and safe options accessible with current tools (e.g., USSD-enabled options for basic phones) to serve customers where they are and foster loyalty for future transitions to app-enabled channels.
Negative experiences spread virally through social networks and discourage digital channel adoption	Negative perceptions of digital payments, driven by word-of-mouth about scams, fraud, and unsatisfactory issue resolution, deter potential users and erode trust.	• Provide information and skills for safe service use, fraud prevention, and clear grievance redressal. • Fulfill or exceed regulatory mandates, enhance user experience, and promote customer care channels for quick issue resolution and to strengthen consumer protection. • Run regular fraud awareness campaigns and promote success stories to combat negative messaging and build trust.



IIPS for what:
DPI, G2P, and cross-border payments

IPS have a foundational role to play in enabling digital public infrastructure (DPI), modernizing government-to-person (G2P) payments, and revolutionizing cross-border transactions across the continent, as follows:

DPI is Africa’s next frontier for inclusive payments and digital transformation, built on digital payments, foundational digital identity, and data exchange. Integrated DPI is vital, as it enables a complete digital economy through lower-cost identification, cheaper payments, and secure data exchange. A holistic DPI stack offers substantial benefits like reduced digital service costs, efficient government services, streamlined cross-border trade, expanded credit access, increased tax revenue, and enhanced trust via transparent consent.

Despite this potential, only a few countries currently have integrated DPI layers. Instead, Africa has mostly seen progress in developing individual DPI layers, with 36 live IPS in 31 countries, 36 nations issuing digital IDs, and 36 enacting data protection laws. Integrating these into comprehensive, full-stack solutions remains a critical gap.

The barriers to closing that gap are fivefold and focused on weak institutional coordination, infrastructure deficits, human capacity shortfalls, unsustainable financing, and privacy concerns. Overcoming these barriers will require high-level political alignment, strategic investment in infrastructure and human capital, viable funding, and robust privacy safeguards. These all require strong leadership to create integrated, scalable digital platforms.

Overcoming the barriers to integrated DPI could bring particular benefits for **leveraging IPS to modernize G2P payments in Africa.** Every country in Africa has at least one social safety net program, and African countries spend 1.2 percent of their gross domestic product (GDP), on average, on social safety net payments. Roughly 70% of these funds are cash transfers, totaling around $31 billion per year.

Existing methods for sending these payments are rife with inefficiencies, leading to duplication across government agencies, time delays, leakage, and opacity. These financial flows are ripe for modernization through IPS, which could fundamentally transform disbursements by enabling immediate, secure, and cost-effective transfers. Yet only 11 of Africa's 36 live IPS support the G2P use case.

Scaling IPS-enabled G2P payments faces substantial technical and infrastructural hurdles, including fragmented digital identity systems, limited government digital readiness, and API standardization deficiencies. Policy and regulatory limitations, such as insufficient political will, restrictive frameworks for non-bank providers, and reliance on sponsor banks, further impede progress. Overcoming these requires deploying universal ID coverage, establishing dedicated government digital units, standardizing APIs, ensuring interoperable last-mile infrastructure, and amending rules to allow tiered, risk-based access for non-bank financial institutions. By addressing these challenges, IPS can become a robust backbone for G2P payments, delivering immediate benefits to recipients and strengthening the broader financial system.

Finally, interlinking IPS has the potential to facilitate cross-border payments for global trade, investment, and remittances. There are multiple models for achieving this interlinking, including connections to aggregators, direct PSP linkages, and IPS-to-IPS connections. Any of these options could deliver real-time, low-fee experiences that eclipse traditional methods. To date, 11 of Africa's 36 IPS enable cross-border payments, including the three regional systems.

Scaling cross-border payments via IPS faces significant hurdles. These include fragmented policy and regulatory frameworks between corridor countries (e.g., varying KYC, AML/CFT rules), diverse infrastructure and technical limitations (e.g., disparate messaging standards, unclear business cases for PSP participation), complex exchange rate and settlement dynamics (e.g., USD dependency, liquidity management), and challenges in governance and scheme rulebook development across multiple jurisdictions. Opportunities to overcome these involve harmonizing policies and regulations, implementing license passporting, adopting ISO 20022 and API integration layers, enabling local currency settlement, exploring Central Bank Digital Currencies (CBDCs), and fostering collaboration to develop common scheme rulebooks. Realizing this potential will require concerted efforts to align diverse legal and technical frameworks across the continent.

Advancing inclusivity: building on progress

The ***State of Inclusive Instant Payment Systems in Africa* 2025** report showcases the continent's progress toward increasing digital payment access and usage through IPS, while calling attention to the systemic barriers and accelerators that could help drive significant short-to-medium-term impact.

Stakeholders could help accelerate continued progress through the following actions:

IPS operators

can prioritize collecting granular transaction data to inform design for low-adoption segments, adopt affordable pricing models to jumpstart and sustain adoption, and strengthen user trust and confidence through key features like account lookup and transaction confirmation. They can also expand reach and scale by enabling third-party integration, broaden use cases with advanced features like "Request to Pay," support user awareness and education, engage governments to enable G2P payments as a catalyst for adoption, and invest in shared fraud prevention infrastructure.

IPS regulators, policymakers, and supervisors

can mandate comprehensive ecosystem-wide data collection disaggregated by gender and age, strengthen instant payment-oriented consumer protection and fraud management frameworks, and advance a holistic DPI approach by fostering connections between IPS and other DPI components. They can also advocate for no-fee transactions, promote catalytic use cases that drive financial inclusion (like G2P and P2G), and advance digital merchant payment acceptance, especially in underserved areas.

IPS participants

can invest in ongoing digital and financial literacy initiatives, implement trust and confidence-enhancing features, and ensure that the low transaction costs offered by IPS operators are passed on to end users.

Development partners

are well placed to facilitate knowledge sharing between IPS operators through forums, workshops, and case studies; support cross-border integration and infrastructure harmonization; and provide dedicated funding and technical assistance to enable non-bank participation in IPS. They can also support human-centered research to develop an IPS ecosystem that addresses the unique needs of underserved groups and play a catalytic role in convening stakeholders around the DPI agenda to foster alignment and joint planning.

AfricaNenda Foundation is committed to helping stakeholders build IIPS to serve all Africans. We are an avid proponent of interoperability to drive inclusivity in digital payment systems. **Together with our SIIPS partners at the World Bank and the United Nations Economic Commission for Africa, we are ready to support stakeholders in the IPS ecosystem.**



1 Introduction

Digital payment access is transforming African economies, offering an accelerated route to financial inclusion and economic participation. As of 2024, 58% of adults in Sub-Saharan Africa had a financial account, and 51% had made or received a digital payment—up from 49% and 42% just three years earlier (World Bank, 2025b). Despite such promising growth, digital payment access and usage remain uneven across the continent. Barriers such as limited infrastructure, complex onboarding, unintuitive user interfaces, and limited interoperability between banks and non-banks continue to force many adults to rely on cash (BIS, 2024c).

Inclusive instant payment systems (IIPS) have the potential to change this dynamic. These systems provide the infrastructure to enable low-cost and immediate digital funds transfers. When designed to be interoperable—that is, to process transactions between both bank and non-bank payment service providers (PSPs)—they enable seamless user interactions across the financial ecosystem. This can lead to lower explicit (e.g., fees) and implicit (e.g., time and inconvenience) costs, while building trust and creating a gateway to other financial services, like savings, credit, and insurance. IPS may also help level the competitive playing field by providing shared infrastructure to smaller providers offering innovative digital services to previously underserved user groups.

This fourth annual **State of Inclusive Instant Payment Systems (SIIPS) in Africa 2025** aims to help IPS stakeholders learn from each other's experiences and accelerate IPS development and continuous improvement towards interoperability. Through a combination of supply-side and demand-side insights, the report showcases learnings in the design and roll-out of these systems and raises awareness of the barriers and opportunities for increasing inclusivity.

To begin, we explain the role that digital payments, and more specifically, inclusive instant payment systems, play in digital public infrastructure (DPI).

1.1 Inclusive IPS implementation advances as part of the DPI agenda

DPI is an approach to developing the digital economy that focuses on creating "foundational, digital building blocks designed for public benefit," enabling fast and efficient digital transformation at scale (World Bank, 2025d). The DPI approach aligns with continental ambitions such as the African Union Digital Transformation Strategy for Africa (2020-2030) and the Digital Trade Protocol under the African Continental Free Trade Area (AfCFTA). DPI comprises interoperable and inclusive public systems that streamline digital commerce, enable cross-border digital services, and foster trust and regulatory harmonization, thereby accelerating Africa's journey toward a connected, dynamic digital single market. DPI also contributes to and acts as a supportive pillar for the implementation of the Global Digital Compact.

An alternative to a DPI approach is for each sector in a country to pursue digitalization through separate, sector-specific, end-to-end digital systems. This results in inefficiencies, one-off integrations, and duplicative development of standard functionality, such as digital registries for identity verification, payment systems, and data-sharing systems. In contrast, a DPI approach creates the potential for shared, interoperable digital building blocks for digital identity, payments, and data exchange platforms that can be reused across sectors (see Figure 1.1). With shared systems, an entire economy can potentially reduce costs and save time while enabling higher-quality, more secure, and sustainable digital services.

Figure 1.1 | The DPI approach



Source: Adapted from Digital Public Infrastructure and Development: A World Bank Group Approach, 2025.

Based on this definition, the DPI approach must fulfill four characteristics:

Interoperable: It provides the underlying infrastructure for a variety of use cases enabled by a diversity of approved tools, technologies, and service providers.

Open and accessible: Anyone can build on or integrate with it, and any end user can access it.

Robust enabling rules and regulations: It operates according to unified and coherent governance frameworks to safeguard people and prevent misuse.

Society-wide: It is not restricted to a specific geography or demographic within its jurisdiction.

In Africa, the DPI implementations underway have often begun with digital identity systems as the first layer of the DPI stack. For example, in Nigeria, the government is positioning the National Identification Number (NIN) as a single source of identity verification, laying the groundwork for broader digital transformation. The country's IPS—the Nigeria Inter-Bank Settlement System (NIBSS) Instant Payment platform (NIP)—complements the NIN initiative and has experienced significant growth in recent years. The National Digital Economy Policy and Strategy (2020-2030) (NITDA, 2020) and the Central Bank of Nigeria's broader Payments System Vision 2025 (CBN, 2022) underpin both efforts.

Similarly, in South Africa, the government has released a roadmap for digital government transformation and is actively developing advanced digital identity solutions (GoSA, 2025). In parallel, the South African Reserve Bank is leading the Payments Ecosystem Modernization Program (PEMP) to establish a public payments utility. Together, these solutions form key elements of South Africa's DPI agenda (BankservAfrica, 2024b).

IIPS have the potential to enable individuals, businesses, and governments to transfer money securely and efficiently. By facilitating these transactions digitally, they reduce reliance on cash. To be inclusive, they must have been designed from the outset to be accessible to all potential end users in a country and to all payment providers. Such systems are increasingly recognized as a critical element of DPI. An increasing number of countries are working to deploy them to expand the reach and effectiveness of their digital ecosystems.

This report focuses specifically on IIPS in Africa as the digital payments layer of DPI on the continent. While the primary emphasis is on the current state and evolution of existing IPS toward IIPS, the report expands on their increasingly important role in advancing the DPI agenda in a dedicated spotlight chapter.

Throughout this report, the term IPS refers to retail instant payment systems domiciled in African countries. These systems are also alternatively known as fast payment systems (FPS) or real-time payment systems (RTPS). IPS are characterized by their ability to deliver real-time, open-loop digital push payments at any time of day, every day of the year, enabling users to transact seamlessly across different platforms and providers. This definition excludes proprietary or "on-us" systems, such as those offered by individual banks or card networks, which only facilitate transactions within their ecosystems.

For IPS to be inclusive—or IIPS—they must meet the following aspirational benchmarks, which draw on the work of AfricaNenda (2021), CGAP (2021), the World Bank (2021), the Gates Foundation (2019), and the Bank for International Settlements (BIS) (2016).





Inclusive instant payment systems (IIPS) process payments **digitally in near real time** and are available **24 hours** a day, **365 days** a year, or as close to that as possible.[2] They enable **low-value, low-cost, push** transactions that are **irrevocable** and are based on **open-loop multilateral** interoperability arrangements. Licensed payment providers have **fair access** to the scheme, and system participants have **equal input** opportunities. The **central bank** has a role in scheme governance.[3] End-users have access to a **full range of use cases and channels**, as well as transparent and fit-for-purpose **recourse** mechanisms.[4]

1.2 The current IPS context in Africa: pathways to inclusivity and scale

The pursuit of inclusive IPS involves a diverse set of actors. Depending on the context, efforts to modernize a country's payment sector may be driven by government or regulatory authorities seeking to catalyze competition, innovation, and economic growth, or by private-sector actors such as system operators and industry associations. Understanding the roles and interdependencies of these stakeholders is essential for evaluating the design and governance of the current landscape of IPS across Africa and their potential to become IIPS through investment and ongoing improvement.

2 The definitions used in this report are in principle aligned with the definition of the 2016 Fast Payments report by the Committee on Payments and Market Infrastructures: "…fast payments can be defined as payments in which the transmission of the payment message and the availability of final funds to the payee occur in real time or near-real time and on as near to a 24-hour and 7-day (24/7) basis as possible." AfricaNenda's IPS definition seeks to emphasize a few specific aspects that are relevant from a financial inclusion context in several low-income countries—notably, mobile money accounts and push payments. Given this, even solutions that enable users of different mobile money providers to make and receive transfers in real time are considered under this definition, though the limitations of such arrangements are recognized in the different IPS types described in Chapter 2. FPS could also include pull transactions.

3 The central bank has the requisite regulatory powers and implements effective oversight arrangements on an ongoing basis to determine and take corrective action to ensure that governance arrangements are appropriate and support public policy objectives. In some country contexts, the central bank might have to exercise ownership control and/or be directly represented on the board (for example, by nominating its serving staff or nominating an external member) to fully achieve desired governance arrangements.

4 For a full description of the Inclusivity Spectrum included in this report and which criteria constitute the different levels of inclusivity, refer to the full inclusivity assessment in Chapter 2.

IPS ecosystem actors

The primary stakeholders in the IPS value chain include:



IPS owners. Ownership of an IPS entails responsibility for its overall performance, financial sustainability, and liquidity management. There are three different ownership structures among African IPS: central bank ownership, participant ownership, and joint ownership between participants and the central bank (also referred to as a public-private partnership).



Governance authorities. Governance, which is distinct from ownership, refers to the documented and transparent structures, processes, and lines of authority that guide the day-to-day management of the IPS. Governance ensures that the scheme adheres to its scheme rules, which are based on the system's mandate, stakeholders, objectives, regulatory requirements, and ownership structure. In Africa, private associations made up of the direct participants in the system govern some IPS, while the central bank governs others, either independently or in public-private partnerships with participants.



Overseers. The regulator, typically the central bank, defines the legal and operational framework within which the IPS operates. Its role includes promoting safe and efficient payments by monitoring system performance and, when necessary, initiating regulatory or operational reforms.



System operators. Operators manage the technical and operational aspects of the IPS. Their responsibilities could include routing payment instructions, calculating settlement positions, clearing, reconciling, confirming, and netting transactions, as well as managing the day-to-day functioning of the payment infrastructure. For many domestic IPS, a designated operator handles these tasks. Central banks manage clearing and settlement for the systems they operate. Clearing and settlement can also occur bilaterally between certain participants in some systems. In regional IPS, transaction processing may occur via a centralized hub (with direct participant integration) or a hub-switch model, where domestic switches connect to a central hub.



Settlement agent. A settlement agent facilitates the movement of funds between participating financial institutions. African central banks primarily facilitate settlement for the IPS, mainly through real-time gross settlement systems, though a commercial bank may also perform this function.



Participants. PSPs offering services through an IPS can be either direct or indirect participants or a third party. Direct participants are PSPs that sign agreements with the IPS

and comply with its operational and technical criteria. Depending on the type of IPS, participants may include commercial banks, mobile money operators (MMOs), fintechs, microfinance institutions (MFIs), government agencies, and other non-bank PSPs that utilize the IPS' core clearing infrastructure. Indirect participants, in contrast, engage with the IPS ecosystem through a direct participant. They are often non-bank PSPs offering services to end users who access the IPS through a partnership with a direct participant, typically a commercial bank. They may also be service providers offering front-end or back-end technical services to the IPS. Third parties, for their part, integrate with an IPS to provide services or integrate payments into their core offerings; agriculture or supply chain platforms are examples.

End users. These are the clients served by the IPS participants. They can be individuals, businesses (merchants), or government agencies. As the final recipients of instant payment services, they are the ultimate beneficiaries of system inclusivity and functionality. Ensuring their needs are met is a key measure of an IPS's success.



Interoperability as a key enabler of inclusivity and scale

Interoperability is a defining feature of IIPS. It refers to the user's ability to send and receive payments seamlessly in any instrument (e-money, debit, credit, etc.) to any provider, including banks, MMOs, and other PSPs, without being confined to a single provider's ecosystem. This functionality promotes convenience, increases acceptance, reduces reliance on cash, and supports broader adoption of the system.

Full interoperability means that all licensed PSPs, regardless of size, type, or market segment, can participate in the IPS and have a voice in shaping scheme rules. When such interoperability is in place, it helps to resolve the market fragmentation that often hinders digital financial ecosystems and limits the user experience and provider participation.

For end users, interoperability means they can transact freely between bank accounts and mobile wallets. This helps expand the user base, strengthen network effects, and encourage competition based on service quality and innovation. Crucially, interoperability also refers to regulations that create a pathway for smaller, licensed PSPs to enter the market and participate in an IPS.

In Africa, IPS typically achieve interoperability through one of two models. The most common arrangement is through payment system operator interoperability, whereby participants connect to the system operator or to a central switch that connects the IPS participants. This establishes the most straightforward integration of PSPs that are not on the same messaging standard or serve different target markets. By decoupling interoperability from bilateral negotiations between PSPs, this model lowers the technical and operational barriers for new market entrants and promotes a truly open-loop ecosystem.

The second model achieves interoperability through direct technical links between all participants. This approach requires bilateral connections and becomes more complicated as the number of participants increases. However, it may seem more sensible than installing an expensive central switch in countries with a small addressable market and relatively few PSPs. To qualify as an IPS for this report, all PSPs that are bilaterally connected must have a level of shared, multilateral scheme rules that apply to all participants. This ensures that participation is open, meaning that any new PSP that enters the market and fulfills the scheme rules is allowed to become an IPS participant.

Achieving scale and inclusivity in IPS across African markets remains difficult due to a range of interconnected barriers. Limited interoperability, often caused by misaligned regulations, restrictive licensing, and low technical capacity, prevents full participation by non-traditional providers such as fintechs and MFIs, constraining transaction growth and cost efficiency. High implementation costs, including licensing, upgrades, and integration, deter PSPs from investing in cross-platform connectivity, especially when commercial incentives and revenue-sharing models are unclear. Smaller providers face even greater challenges due to outdated systems and limited resources (some MFIs, for example, do not have digital ledgers). At the regional level, inconsistent regulatory frameworks further complicate interoperability. On the user side, adoption remains low due to limited awareness, poor user experience, concerns about fraud, and affordability barriers—particularly for low-income users lacking reliable digital access.

1.3 Bringing the end-user perspective on payment system inclusivity

Thus far, the aspirational benchmark of what makes an IIPS has focused on the supply-side elements of what they offer and how they operate. However, the real-world inclusivity of any scheme must also consider what end users need to embrace digital payments. The exact requirements may vary slightly depending on the economy. End-user research for this report, detailed in Chapter 3, uncovered several factors, referred to in the survey as "digital traits," that influence respondent priorities when choosing a payment method.

Many of these digital traits align with and validate the foundational definition of IIPS. Others reflect additional nuances that are important to end users and that present opportunities for IIPS to deliver value-added services that drive participation and scale—some of which we discuss in the later chapters of this report. According to the demand-side research participants, the primary traits highlighted in end-user interviews that drive digital payment adoption fall into five categories (see Figure 1.2):

Availability. This includes the ability to use the payment method 24/7/365 across platforms, its wide acceptance by all merchants, the option for end users to pay any other end user, and an array of access points, such as ATMs or agents.

These end-user priorities around availability are among the most important for survey respondents. They align with the supply-side definitional elements of 24/7/365 availability, interoperability, and access to a full range of use cases and channels enabled by an open-loop multilateral system.

Reliability. For end users, reliability means that the system is consistently online, transactions go through reliably, and the system quickly produces a confirmation message. In the event of a mistake or problem, customer service is available and works to resolve the issue.

The end-user reliability priorities also align with the benchmark requirements of 24/7/365 availability, though they go further to articulate end-user expectations around service provision and problem resolution. After availability, reliability factors are the most important digital traits for end users, reflecting the importance of fit-for-purpose recourse mechanisms from IIPS.

Safety. Safe use has two meanings for consumers. The first refers to the system having security measures, such as PIN validation, that are easy to use. The second meaning of safety refers to consumer protection issues such as transparent fees and clear terms of use.

End-user perspectives on safety reflect the deeper issue of consumer trust. Transparent fees are important for building trust.

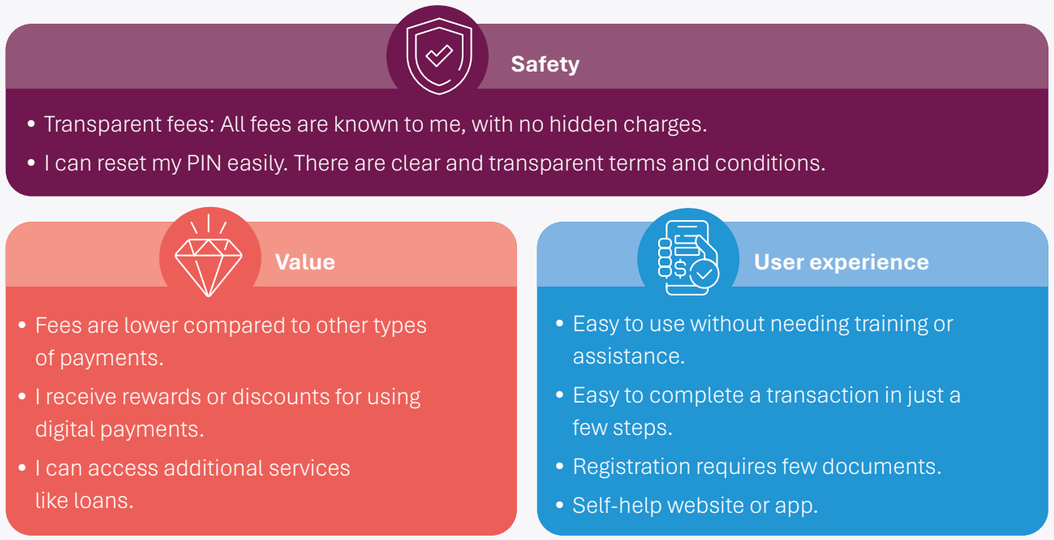
Value means that the cost of digital payments is less than the costs of other payment methods, including cash. Value also includes the opportunity to accrue bonuses and to facilitate access to other financial services, such as credit.

End-user perspectives on value reflect the fairness of pricing and the low-cost mandate for IIPS, particularly for small-value transactions, and highlight opportunities for schemes to offer value-added services that benefit participants (e.g., payment service providers) and the end users they serve.

User experience emphasizes the ease of use of payment systems for all customers, including those who are less digitally and financially experienced.

End-user perspectives on the user experience should be part of how IIPS makes use cases and channels available on the platform. In many cases (though not all, as discussed in the report), the payment service providers design the user experience through their channels.

Figure 1.2 | The five digital traits that matter for end-user inclusivity



Note: These digital traits were identified by participants in the qualitative interviews conducted as part of the end-user research detailed in Chapter 3.



1.4 | Using the report

This report will highlight areas of significant progress in the growth and inclusivity of IPS across Africa. New IPS continue to come online, signaling a strong commitment from African stakeholders and their partners to advancing digital financial infrastructure. However, several challenges remain. These include limited interoperability, slow progress in establishing regional IPS, and barriers to expanding use cases such as government-to-person (G2P) transfers and cross-border payments. Additionally, slow end-user adoption continues to constrain the full potential of IPS. Through SIIPS 2025, AfricaNenda takes stock of these developments and leverages them to support efforts from IPS stakeholders to drive further inclusion.

A note about the transaction values data in this report: the economic turbulence of recent years, marked by high inflation and volatile exchange rates, creates misleading values and high variability when converting local currency values directly to U.S. dollars (USD). This approach creates distortions, weakening the reliability of year-on-year growth comparisons. To avoid these distortions, AfricaNenda used the World Bank Atlas Conversion Method to convert data reported in local currencies into USD for consistent reporting. This method smooths exchange rate fluctuations by applying a three-year, inflation-adjusted moving average.[5]

As a result of these adjustments, several values differ from those reported in past editions of SIIPS. The values reported in this report reflect improved comparability and accuracy, unadulterated by exchange rate shocks or inflation spikes.

5 To calculate the values data, AfricaNenda retrieved the World Bank's Atlas-based GNI in USD and the corresponding GNI in local currency for each country. We then calculated the implied conversion factor by dividing GNI in USD by GNI in the local currency. We used this factor to convert all value data from the report, including data from previous years, to enable consistent comparisons. The exception is Zimbabwe. Given its high exchange rate volatility during 2023 and 2024, we opted for that country to use the IMF period-average exchange rate from the IMF Exchange Rate Dataset, which provides historical exchange rate data between USD, Special Drawing Rights, the Euro, and other national currencies.

Report Outline

The SIIPS 2025 report unfolds as follows:

2 **Chapter 2** catalogues the IPS landscape in Africa at both the domestic and regional levels. It also presents the 2025 AfricaNenda Inclusivity Spectrum, an assessment of the level of inclusivity of each IPS according to defined criteria.

3 **Chapter 3** presents findings from quantitative and qualitative research on digital payment use among individuals and small merchants in four African countries: Angola, Côte d'Ivoire, Madagascar, and Tunisia. The chapter highlights digital payment usage patterns by demographic and customer profile and explores the barriers and enablers to digital payment adoption that people confront at different stages of the customer journey.

4 **Chapter 4** identifies trends and opportunities around achieving IPS inclusivity at the market, system, and consumer levels.

5 **Chapter 5** unpacks the DPI opportunity in Africa by describing the status of payment-specific DPI initiatives across the continent, the challenges they face, and the role that IPS can play in helping them reach full inclusivity and integrate with ID and data exchange systems.

6 **Chapter 6** highlights the approach, benefits, and challenges encountered in enabling the government-to-person payments use case in IPS.

7 **Chapter 7** explores cross-border use cases that support the inclusivity of IPS, highlighting key challenges and opportunities.

8 **Chapter 8** offers recommendations and next steps for action.



As in every previous SIIPS report, the 2025 edition includes **case studies** of live IPS in Africa: Instant Payment Network (IPN) in Egypt, EthSwitch in Ethiopia, Nigeria Inter-Bank Settlement System (NIBSS) Instant Payment (NIP) in Nigeria, and Sociedade Interbancária de Moçambique (Interbank Society of Mozambique, or SIMO) in Mozambique. AfricaNenda aims to add to the library of IPS case studies with each new addition, providing an overview of the system's origin, development, design, governance structure, and technical features. These examples support peer learning and highlight best practices that may inform similar initiatives across the region.



2

The IPS landscape

This chapter systematically examines the instant payment system (IPS) landscape in Africa and its evolution toward inclusivity, or IIPS. As highlighted in the introduction, AfricaNenda advocates for IPS to work towards fulfilling the criteria for mature inclusivity outlined in this chapter. The current reality, however, is that systems launch with only partial inclusivity and evolve toward more complete inclusivity over time. As of 2025, only one scheme in Africa had achieved mature inclusivity. This chapter is therefore titled "The IPS Landscape," because that terminology reflects the current market reality. We urge readers to bear in mind, however, that the goal is to progress toward mature inclusivity so that IIPS can serve as the payments layer of digital public infrastructure (DPI).

We begin this landscape by identifying live IPS and their geographical coverage, followed by those that are under development. Subsequently, we analyze transaction volumes and values processed by live IPS, along with channels, instruments, use cases, and value-added services. We also highlight how IPS are expanding access through the primary local channels used in their countries, broadening their networks of payment service provider (PSP) participants, enabling system participants to contribute to decision-making processes, establishing additional recourse mechanisms, and expanding the range of use cases for instant payment services. The chapter concludes with the 2025 AfricaNenda IPS Inclusivity Spectrum and the current classification of all systems across the continent.

The research methodology for the chapter follows the 2024 edition, incorporating a survey of central banks and IPS operators supplemented by stakeholder and expert interviews (see Box 2.4 for a list of the central banks and schemes that shared survey data; a comprehensive list of interviewees is available in Annex B).

The main findings are that between July 2024 and May 2025, five new systems went live: Switch Mobile (Algeria), Eswatini Payment Switch (EPS) Fast Payment Module, LYPay (Libya), Salon Pement Swich (Sierra Leone), and Somalia Instant Payment System (SIPS). The number of IPS as of June 2025 totals 36, an increase from 31 in June 2024.

In terms of inclusivity, PayShap (South Africa) and Tunisia Mobile Money moved from not ranked to the basic level of inclusivity, having enabled the P2B use case to fulfill minimum use case criteria. Three IPS moved to the progressed ranking: Instant Payment Network (Egypt) and eKash (Rwanda) moved from unranked, and EthSwitch (Ethiopia) moved from basic. Nigeria Instant Payment (NIP) is the first IPS to advance from the progressed to the mature level of inclusivity, having additional criteria for recourse mechanisms in place in 2025.

Table 2.1 summarizes the changes to the IIPS landscape from 2024 to 2025.

Table 2.1 | Key changes in the IPS landscape between 2024 and 2025[6]

Description	2024	2025	Change	Reason
IPS names	-	-	2 renamed	Two IPS have different names in the SIIPS 2025 report upon confirmation of the system's official name. MarocPay is Switch Al Maghrib (SWAM) (Morocco), and Taifa Moja is Tanzania Mobile Money.
Number of IPS	31	36	✔ 5 added	Switch Mobile (Algeria) launched in the drafting period of the SIIPS 2024 report. Eswatini Payment Switch (EPS) Fast Payment Module and LYPay (Libya) launched in the second half of 2024. Salon Pement Swich (Sierra Leone) and Somalia Instant Payment System (SIPS) launched in 2025.
Number of countries with domestic IPS functionality	26	31[7]	✔ 5 added	Algeria, Eswatini, Libya, Sierra Leone, and Somalia gained domestic IPS functionality with the launch of their systems.
IPS Types				
Cross-domain	14	18	✔ 5 added	Switch Mobile (Algeria) and EPS Fast Payment Module (Eswatini) launched in 2024; Salon Pement Swich (Sierra Leone) and SIPS (Somalia) launched in 2025. PesaLink (Kenya) was reclassified as a cross-domain IPS.
			✖ 1 removed	SWAM (Morocco) was reclassified as a mobile money IPS.
Bank	7	7	✔ 1 added	LYPay (Libya) launched in 2025.
			✖ 1 removed	PesaLink (Kenya) was reclassified as a cross-domain IPS.
Mobile money	9	10	✔ 1 added	SWAM (Morocco) was reclassified as a mobile money IPS.
Sovereign digital currency	1	1	Unchanged	eNaira remains the only sovereign digital currency IPS.
Transaction data				
Value data collected	23	30	✔ 8 added	Kwanza Instantâneo (KWiK) (Angola), EPS Fast Payment Module (Eswatini), LeSwitch (Lesotho), SWAM and Virement Instantané (Morocco), eNaira and Nigeria Mobile Money (Nigeria), and Transactions Cleared on an Immediate Basis (TCIB) (Southern Africa Development Community or SADC).
				AfricaNenda collected IPS data through central bank/IPS operator surveys and supplemented it through publicly available sources. PAPSS (continent-wide) did not return the survey. eNaira and Nigeria Mobile Money also did not return the IPS survey; however, their data was included in the NIP data as their transactions run on the same rails. This infrastructure sharing applies to Ghana MMI and the Ghana Interbank Payment and Settlement System (GhIPSS IPS, or GIP) as well. Switch Mobile (Algeria), LYPay (Libya), Salon Pement Swich (Sierra Leone), and SIPS (Somalia) are four new systems that do not have transaction data for 2024. SIMO (Mozambique) provided volume data but was unable to provide value data. There is, therefore, missing transaction data for two systems: SIMO (Mozambique) and PAPSS (continent-wide).
Inclusivity spectrum ranking				
Not ranked	10	10	✔ 4 added	The newly launched EPS Fast Payment Module (Eswatini), Salon Pement Swich (Sierra Leone), and SIPS (Somalia) were not ranked. Natswitch (Malawi) moved from progressed to not ranked based on the survey responses provided by the scheme.
			➔ 4 moved ranking	PayShap (South Africa) and Tunisia Mobile Money moved to the basic ranking. IPN (Egypt) and eKash (Rwanda) moved to the progressed level of inclusivity.
Basic	12	15	✔ 4 added	Switch Mobile (Algeria) and LYPay (Libya) launched at the basic level of inclusivity. PayShap (South Africa) and Tunisia Mobile Money moved from not ranked to basic.
			➔ 1 moved ranking	EthSwitch (Ethiopia) advanced from basic to progressed levels of inclusivity.

6 Unlike with physical infrastructure, an IPS continues to develop after it has launched; the table shows changes in system names, participants, and functionalities that have taken place since the release of the SIIPS 2024 report.

7 25 countries have their own IPS. 6 CEMAC countries (Cameroon, the Central African Republic, Chad, the Republic of the Congo, Equatorial Guinea, and Gabon) share the GIMACPAY regional IPS capabilities for domestic and cross-border transactions.

Description	2024	2025	Change	Reason
Progressed	9	10	✔ 3 added	IPN (Egypt), EthSwitch (Ethiopia), and eKash (Rwanda) moved from the not ranked or basic levels of inclusivity to progressed.
			→ 2 moved ranking	NIP (Nigeria) advanced from the progressed to the mature level of inclusivity. Natswitch (Malawi) moved from progressed to not ranked based on survey responses provided by the scheme.
Mature	0	1	✔ 1 added	NIP (Nigeria) advanced from the progressed to the mature level of inclusivity.

2.1 IPS type and distribution across Africa

The landscape of IPS in Africa is evolving rapidly, reflecting a growing trend towards interoperability and digital financial inclusion across the continent. From July 2024 to June 2025, five new IPS went live in countries that previously lacked domestic IPS capabilities (Algeria, Eswatini, Libya, Sierra Leone, and Somalia) (see Box 2.1).

Box 2.1 | Five new systems launched since SIIPS 2024



Algeria: Société d'Automatisation des Transactions Interbancaires et de Monétique (SATIM) launched **Switch Mobile,** a mobile money IPS that supports account-to-account, account-to-wallet, and wallet-to-wallet transfers (SATIM, 2024). The system runs on ISO 20022 messaging standards (ProgressSoft, 2024). Gulf Bank Algérie (AGB) was among the first financial institutions to connect to Switch Mobile, through which it enabled person-to-person (P2P), person-to-business (P2B), and business-to-person (B2P) transactions. Payments can be initiated via QR codes, aliases, and account numbers. The platform also offers Request to Pay functionality (ProgressSoft, 2025).



Eswatini: The **Central Bank of Eswatini** launched the **Eswatini Payment Switch (EPS) Fast Payments Module** in 2024 as the first phase of a broader payment switch project. Phases two and three will focus on developing open banking, as well as point-of-sale (POS) and ATM switching capabilities. Eswatini Bank, Swaziland Building Society, MTN Momo, e-Mali, and Instacash are live participants. The IPS supports mobile banking, apps, and online banking channels (BIS, 2024a).



Libya: In 2024, the **Central Bank of Libya** launched the interbank system **LYPay** (CBL, 2024a). The central bank owns, manages, and operates the system. Since its launch, the system has enabled the B2B, P2P, and P2B use cases (LinkedIn, 2025). The service is available in four banks, including Jumhouriya Bank, Unity Bank, National Commercial Bank, and North Africa Bank. IPS participation was free of charge without any commissions until the end of 2024 (Libya Herald, 2025). Enabled channels include mobile banking, QR codes, and direct payment links.



Sierra Leone: The **Salon Pement Swich (SAPS)** in **Sierra Leone** launched in 2025 to enhance interoperability across the country's financial ecosystem (Forum News Sierra Leone, 2025). The Bank of Sierra Leone (BSL) has mandated all bank and non-bank PSPs to integrate their domestic transactions with the switch. Orange and CMB Bank recently announced their participation, bringing the total number of integrated participants to 11, including eight commercial banks and three mobile money operators. The switch currently supports P2P transfers and the QR code channel and is accessible via mobile apps and web browsers. It also enables third-party connections, along with real-time messaging and transaction validation, to ensure both speed and reliability in processing (SIIPS 2025 IPS Survey).



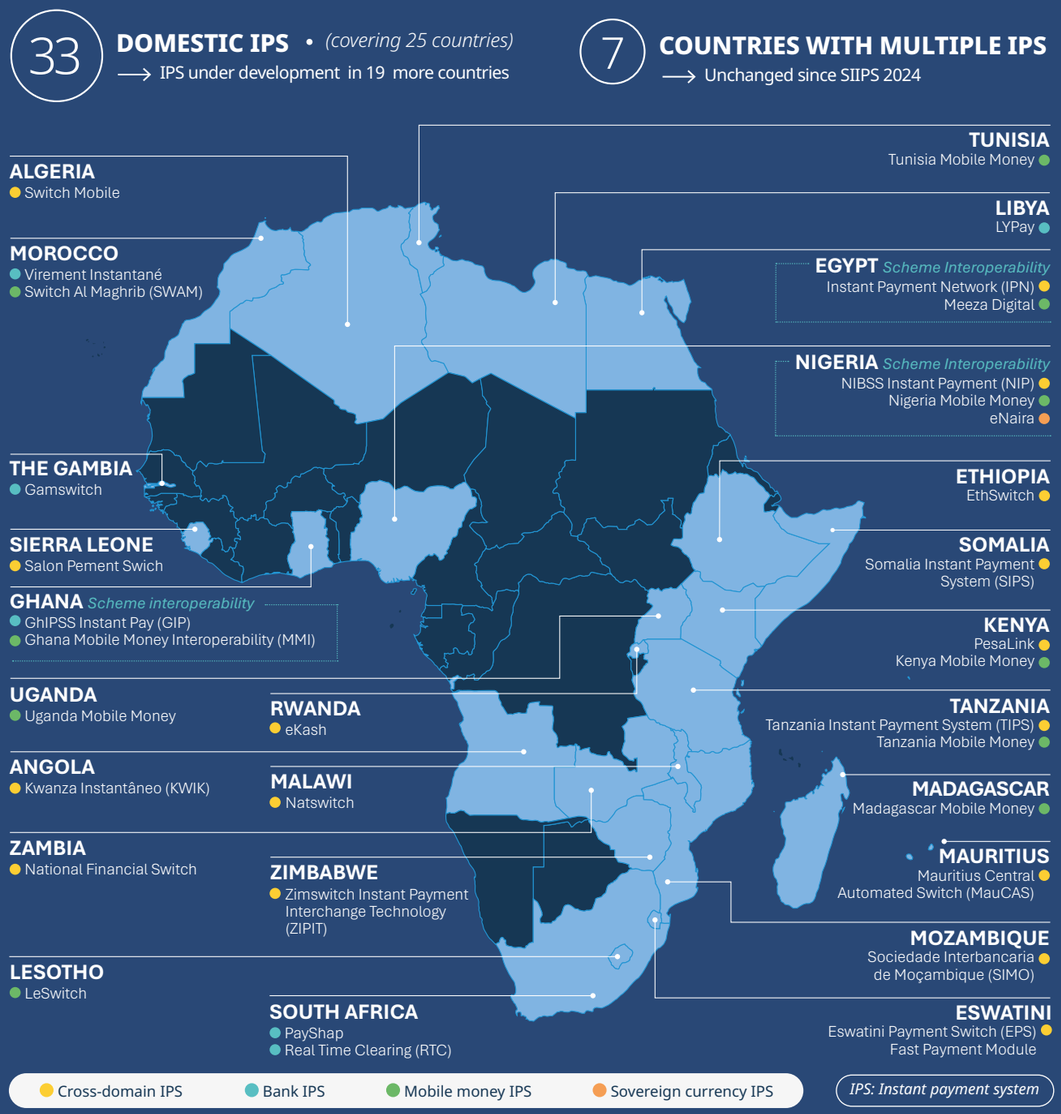
Somalia: In partnership with the Somali Bankers Association, the **Central Bank of Somalia** launched the **Somalia Instant Payment System (SIPS)** in 2025 (SIPS, 2025). Operated by the Somali Payment Switch (SPS), the system currently enables P2P and P2B payments with QR code functionality. SIPS is structured as a cross-domain IPS, with seven commercial banks onboarded as initial participants (SIIPS 2025 IPS Survey).



Domestic IPS initiatives continue to gravitate towards cross-domain interoperability.

The launch of **five** new IPS has expanded the total number of **live domestic IPS** to **33 across 25 African countries.** This is an increase from 2024, when Africa had 28 IPS across 20 countries (see Map 2.1).

Map 2.1 | There are 33 live domestic IPS across 25 countries in Africa as of June 2025[8]



8 Two IPS included in the SIIPS 2024 report are referred to by different names than appear here. MarocPay is referred to as Switch Al Maghrib (SWAM), and Taifa Moja is reported as Tanzania Mobile Money.

Four of the five new systems are of the cross-domain type: Switch Mobile (Algeria), EPS Fast Payment Module (Eswatini), Salon Pement Swich (Sierra Leone), and SIPS (Somalia). The IPS "type" is based on its interoperability arrangements and determines the PSPs it allows to participate (see Box 2.2).

Box 2.2 | IPS types

An IPS can fall into any one of four types:

Cross-domain IPS are characterized by their ability to facilitate all-to-all interoperability between various types of financial institutions and their respective account types. This includes enabling transactions between traditional banks, mobile money operators (MMOs), microfinance institutions (MFIs), and fintech companies, allowing all licensed payment providers to participate. All-to-all interoperability includes the ability for end users to transact between wallet accounts at different MMOs, between mobile money accounts and bank accounts, and across bank accounts.

Bank IPS are primarily operated by or for traditional banking institutions. These systems often focus on facilitating real-time transfers between accounts held at different banks and primarily serve existing bank account holders.

Mobile money IPS are primarily designed to facilitate instant payments within and between different mobile money platforms.

Sovereign digital currency IPS only process transactions in central bank digital currencies.

Cross-domain is the dominant IPS type in Africa, with **16 of the live domestic systems** currently adhering to this type, and is followed by **mobile money IPS (10), bank IPS (six),** and **sovereign digital currency IPS (one) (See Table 2.2)**.

The increasing prevalence of cross-domain IPS across Africa underscores interoperability's importance in building a mature and inclusive digital payments ecosystem. The wide geographic distribution of countries that have implemented cross-domain IPS highlights that this is a continent-wide movement towards enhanced financial integration aimed at pairing the extensive reach of mobile money with the stability of traditional banking institutions.

Beyond the 16 domestic cross-domain IPS, seven countries have multiple live IPS of different types, some of which are interoperable.[9] The countries that achieve interoperability by connecting multiple IPS of different types include Egypt, where IPN and Meeza Digital are connected;[10] Nigeria, where eNaira and Nigeria Mobile Money operate on the NIP rail; and Ghana, where Ghana MMI runs on the GIP rail. Notwithstanding the trend toward cross-domain approaches, limited interoperability persists in eight countries.[11]

Table 2.2 | Domestic IPS by type

Country	IPS Name	Type
Algeria	Switch Mobile	Cross-domain
Angola	Kwanza Instantâneo (KWiK)	Cross-domain
Egypt	Instant Payment Network (IPN)	Cross-domain
Egypt	Meeza Digital	Mobile money
Eswatini	Eswatini Payment Switch (EPS) Fast Payment Module	Cross-domain
Ethiopia	EthSwitch	Cross-domain
The Gambia	Gamswitch	Bank
Ghana	GhIPSS Instant Payment (GIP)	Bank
Ghana	Ghana Mobile Money Interoperability (MMI)	Mobile money
Kenya	Kenya Mobile Money	Mobile money
Kenya	PesaLink	Cross-domain
Lesotho	LeSwitch	Mobile money
Libya	LYPay	Bank
Madagascar	Madagascar Mobile Money	Mobile money
Malawi	Natswitch	Cross-domain
Mauritius	Mauritius Central Automated Switch (MauCAS)	Cross-domain
Morocco	Switch Al Maghrib (SWAM)	Mobile money
Morocco	Virement Instantané	Bank
Mozambique	Sociedade Interbancaria de Moçambique (SIMO)	Cross-domain
Nigeria	Nigeria Instant Payment (NIP)	Cross-domain
Nigeria	Nigeria Mobile Money	Mobile money
Nigeria	eNaira	Sovereign digital currency
Rwanda	eKash	Cross-domain
Sierra Leone	Salon Pement Swich	Cross-domain
Somalia	Somalia Instant Payment System (SIPS)	Cross-domain
South Africa	PayShap	Bank
South Africa	Real-Time Clearing (RTC)	Bank
Tanzania	Tanzania Instant Payment System (TIPS)	Cross-domain
Tanzania	Tanzania Mobile Money	Mobile money
Tunisia	Tunisia Mobile Money	Mobile money
Uganda	Uganda Mobile Money	Mobile money
Zambia	National Financial Switch (NFS)	Cross-domain
Zimbabwe	Zimswitch Instant Payment Interchange Technology (ZIPIT)	Cross-domain

9 The countries with multiple IPS are Egypt, Ghana, Kenya, Morocco, Nigeria, South Africa, and Tanzania.

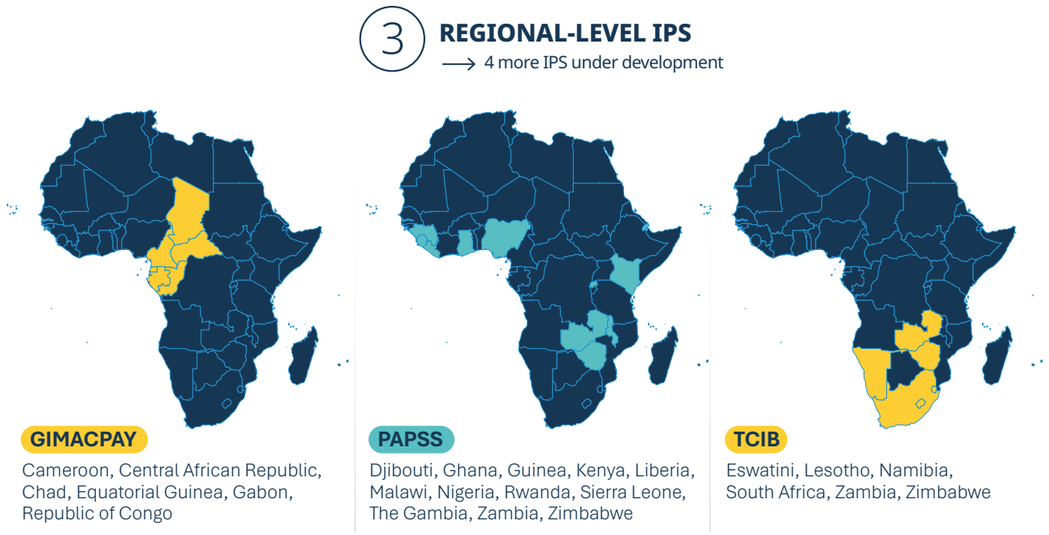
10 IPN Egypt is an indirect participant of Meeza Digital through the operator, Egypt Bank Company (EBC), and Meeza Digital is an indirect participant in the IPN scheme through EBC.

11 The Gambia, Lesotho, Libya, Madagascar, Morocco, South Africa, Tunisia, and Uganda do not have domestic cross-domain IPS. Morocco and South Africa have multiple IPS of different types, but these are not yet connected to achieve interoperability.

Nigeria's eNaira remains the only sovereign digital currency IPS in Africa. Multiple African countries have conducted feasibility studies on Central Bank Digital Currencies (CBDCs). The latest CBDC tracker reports that Algeria, Botswana, Côte d'Ivoire, Egypt, Eswatini, Ethiopia, Madagascar, Malawi, Mauritania, Mauritius, Morocco, Namibia, Rwanda, South Africa, Sudan, Tanzania, Tunisia, Uganda, and Zambia are still in the research phase, with no new updates to the state of their feasibility studies since the SIIPS 2024 report. Ghana's e-Cedi is still in the pilot phase, with no announced plans for launch (CBDC Tracker, 2025). Zimbabwe's ZiG (the Zimbabwe Gold) was launched in 2024 but is considered a variant of CBDC due to its uncertainty around whether it is applied as an institutional security, wholesale instrument, or retail CBDC. Furthermore, it does not have an IPS network or exchange system.

In addition to the 33 domestic IPS shown in the map above, **three regional IPS** are live in 2025, the same as in 2024. These regional IPS cover various geographic regions across the continent (see Map 2.2). GIMACPAY serves the Economic and Monetary Community of Central Africa (CEMAC) region; PAPSS aspires to a continental scope; and TCIB serves the Southern Africa Development Community (SADC).

Map 2.2 | There are three regional IPS active across 22 countries in Africa as of June 2025



GIMACPAY supports both domestic and regional instant payment functionality for the CEMAC member countries: Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, and Gabon (GIMAC, 2025). With the addition of these six countries, 31 countries in Africa have access to a live IPS. Groupement Interbancaire Monétique de l'Afrique Centrale (GIMAC) continues to implement initiatives that enhance interoperability and drive digital payments in the region. These activities include enhancing merchant payment use cases to boost economic growth and inclusion, assessing the impact of interoperability on digital payments, and integrating QR codes to improve the ease and security of transactions. [Full Disclosure: GIMAC is working on these initiatives with AfricaNenda as part of a Memorandum of Understanding (MoU) signed in 2023 (AfricaNenda, 2023a).]

PAPSS was initially piloted in the six West African Monetary Zone (WAMZ) countries—The Gambia, Ghana, Guinea, Liberia, Nigeria, and Sierra Leone. Commercial banks are now integrated from 12 countries in the Economic Community of West African States (ECOWAS), of which the WAMZ countries are a part. Five banks from an additional four countries connected to PAPSS in 2025—Kenya, Malawi, Rwanda, and Zambia (PAPSS, 2025a). The Central Bank of Egypt has recently signed an agreement to participate in the system, although no commercial banks from Egypt have yet joined (CBE, 2025a). Note, however, that PAPSS declined to provide information directly to AfricaNenda. The list of countries with a live connection is therefore unverified.

The SADC system, TCIB, continues to expand its reach, with First National Bank (FNB) in South Africa launching the country's first cross-border transactions in November 2024 (TechAfrica News, 2024). The system is currently available for cross-border transactions in six countries: Eswatini, Lesotho, Namibia, South Africa, Zambia, and Zimbabwe. Other participants include Botswana, the Democratic Republic of Congo, Malawi, Mozambique, and Tanzania, although live corridors are not yet active in these countries. TCIB's goal is to expand to all 16 SADC countries (TCIB, 2025).

UPI in India and the BUNA system, owned by the Arab Monetary Fund, are also worth noting in the context of regional IPS. Though neither is an African system, Mauritius connects to UPI to enable cross-border payments to and from India, including remittances. Several banks in six Arabic-speaking African countries furthermore participate in BUNA, enabling cross-border payments across that system's network, including with their African counterparts. The African BUNA countries include Algeria, Djibouti, Egypt, Libya, Morocco, and Tunisia.[12]

While efforts are underway to expand the reach and enhance the capabilities of regional IPS, their coverage and scalability remain limited, in part due to varying regulatory frameworks across jurisdictions (Stakeholder interviews, 2025).



Taking domestic and African regional IPS together, there are **36 live IPS** across the continent, covering **31 countries**. Of these 31 countries, **all 31** have domestic IPS functionality, while **28 countries** have access to regional IPS functionality.[13] A total of **25 countries** have both domestic and regional functionality, either by enabling cross-border capabilities within their domestic IPS or through integration with regional payment systems.

IPS in development could significantly expand the reach of IPS in Africa

Several IPS that were in development in 2024 remain in development in 2025. In total, **19 domestic IPS across Africa are at different stages of development**. Benin, Botswana, Madagascar, Namibia, and South Sudan have IPS that are expected to launch over the short term (see Table 2.3).

12 See the following for a list of live BUNA participants: https://one.buna.co/download?path=http://one.buna.co/uploads/media/file_context/0001/01/ab3b764e2cedc8c0b36872bafa53b0e0260ed2ea.pdf

13 The six GIMACPAY countries do not have their own live domestic IPS, but they access domestic IPS functionality through the regional GIMACPAY platform. Meanwhile, seven countries operate multiple live IPS platforms, bringing the total number of countries with domestic IPS capabilities to 31. Algeria, Djibouti, Egypt, Libya, Morocco, and Tunisia have access to cross-border functionality via the regional IPS BUNA, enabling connectivity within North Africa and the broader Arab region. MauCAS has cross-border functionality through India's UPI. This brings the total number of countries with cross-border functionality to 28.

Table 2.3 | Domestic IPS in development and the timeline to launch

Country	Status	Timeline[14]
Benin	Plateforme Nationale des Paiements Electroniques (Platform PNPE) is currently in development.	Short-term
Botswana	Botswana's National Payment Switch is at the vendor procurement stage (BW Techzone, 2024).	Short-term
Burundi	Mojaloop has commenced proof-of-concept implementations of an IIPS in Burundi. However, Bi-Switch—Burundi's national payments switch—has been inactive on social media and news channels since February 2023. The website is also offline (Mojaloop, 2025).	Medium-term
Cabo Verde	AfricaNenda Foundation is engaging with Cabo Verde on its IPS deployment (AfricaNenda, 2025b).	Medium-term
Comoros	PayLogic was awarded a project for an interoperable payment switch (PayLogic, 2025).	Medium-term
Congo, Dem. Rep.	No further activity beyond the stakeholder consultations reported in the SIIPS 2024 report.	Long-term
Djibouti	No further activity beyond the funding as of March 2025.	Long-term
Guinea	AfricaNenda Foundation is engaging with Guinea on the deployment of its IPS.	Medium-term
Kenya	The Central Bank of Kenya (CBK) began talks with industry players on a new IPS and formed a working group: the Central Bank of Kenya Industry Technical Working Group.	Medium-term
Liberia	The Central Bank of Liberia is still setting up the project management unit (PMU) to develop a national payment switch (CBL, 2024b).	Medium-term
Madagascar	The central bank governor has announced that the launch is imminent (Central Banking, 2025).	Short-term
Mauritania	The bid for an IPS technology vendor was opened in January 2025 with a due date in April 2025 (Tenders Info, 2025).	Medium-term
Namibia	The Bank of Namibia has signed an agreement with the National Payments Corporation of India (NPCI) to deploy a white-label version of the Unified Payment Interface (UPI) system used in India. The IPS is currently under development. Testing is scheduled for late 2025, beginning with the disbursement of select government grants through the system (Bank of Namibia, 2025).	Short-term
São Tomé and Príncipe	No further activity beyond the stakeholder consultations reported in the SIIPS 2024 report.	Long-term
Seychelles	There is no indication from the Central Bank of Seychelles (CBS) that they plan to launch an IPS. However, the CBS and Central Bank of the United Arab Emirates (CBUAE) signed an MoU that involves interlinking the Instant Payments Platform (IPP) that is being developed in the UAE with Seychelles to enable cross-border capabilities (Seychelles News Agency, 2024).	Long-term
South Sudan	Mojaloop has begun proof-of-concept implementations of an IPS in South Sudan (Gates Foundation, 2024). The Bank of South Sudan (BOSS) announced an initiative to launch the country's first National Instant Payment System in collaboration with the AfricaNenda Foundation (AfricaNenda, 2025a).	Short-term
Sudan	No further updates since the stakeholder discussion phase that was reported in the SIIPS 2024 report.	Long-term
Togo	No further updates since the stakeholder discussion phase that was reported in the SIIPS 2024 report.	Long-term
Uganda	NPCI and the Bank of Uganda are engaging in discussions for the implementation of UPI-like IPS in Uganda (High Commission of India, 2025).	Medium-term

14 "Short term" refers to IPS that are currently in the pilot phase or expected to enter it within the next 1–2 years. "Medium term" refers to IPS projected to enter the pilot phase within 3–5 years. "Long term" refers to IPS for which there have been no recent activity, updates or announcements from the relevant IPS or central bank.

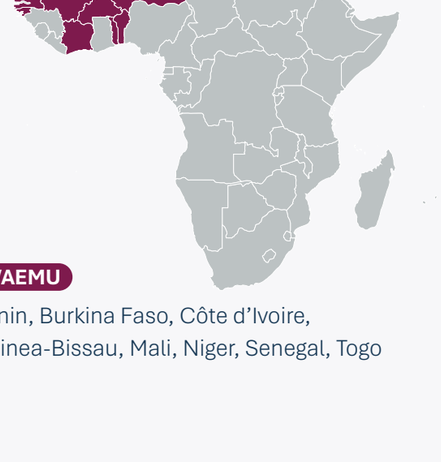
In addition to the above-listed domestic IPS in development, there are **four** regional IPS in development (see Map 2.3). These IPS have been in development since 2023 (see Box 2.3).

Map 2.3 | Regional IPS in development as of June 2025



COMESA

Burundi, Comoros, Congo, Dem. Rep., Djibouti, Egypt, Eritrea, Eswatini, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Tunisia, Uganda, Zambia, Zimbabwe



EAC

Burundi, Congo, Dem. Rep., Kenya, Rwanda, Somalia, South Sudan, Tanzania, Uganda

ECOWAS

Benin, Cabo Verde, Côte d'Ivoire, Ghana, Guinea, Guinea-Bissau, Liberia, Nigeria, Sierra Leone, Senegal, The Gambia, Togo

WAEMU

Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo



Box 2.3 | Status of the four regional IPS in development

COMESA: Common Market for Eastern and Southern Africa: According to the COMESA Business Council, strategic rollout of the Digital Retail Payments Platform (DRPP) in the pilot nations (e.g., Egypt, Ethiopia, Kenya, Malawi, Mauritius, Rwanda, Uganda, and Zambia) was planned for 2025, with plans for progressive expansion beyond the initial pilot countries to welcome more member states (COMESA Business Council, 2025; Gates Foundation, 2024).

EAC: East African Community: The EAC cross-border payment system master plan was launched in May 2025 with the goal of overcoming hindrances faced by cross-border payments in the East African region (EAC Secretariat, 2025). The master plan includes a strategic framework for developing a regional instant retail payment switch to reduce transaction times and costs related to cross-border payments.

ECOWAS: Economic Community of West African States: The African Digital Financial Inclusion Facility (ADFI) has undertaken a project to provide technical assistance in cooperation with the World Bank and African Development Bank (AfDB) to provide detailed functional designs and business rules for the regional instant retail payment system and real-time gross settlement (RTGS). The West African Monetary Agency (WAMA) has launched a request for expressions of interest for a consulting firm to undertake the harmonization of existing payment system infrastructure across ECOWAS in 2024 (WAMA, 2024).

WAEMU: West African Economic and Monetary Union: The WAEMU regional IPS is in the pilot phase with 90 participants. The first pilot cohort included 25 financial institutions in the eight WAEMU countries (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo). A second cohort of 65 financial institutions, including nine electronic money institutions (EMIs) and 14 microfinance institutions, joined the pilot phase in August 2024 (The African Report). The Central Bank of West Africa States (BCEAO) launched its regional IPS for the countries of the West African Economic and Monetary Union (WAEMU), in September, 2025. As this is outside the data collection period for the SIIPS 2025 report, it is not reported as live in this edition.

Barring any changes or new projects, when the regional systems in planning become fully operational and serve all the countries they are expected to, Mauritania, São Tomé and Príncipe, and Somaliland will be the only countries in Africa without cross-border functionality.

2.2 | IPS performance

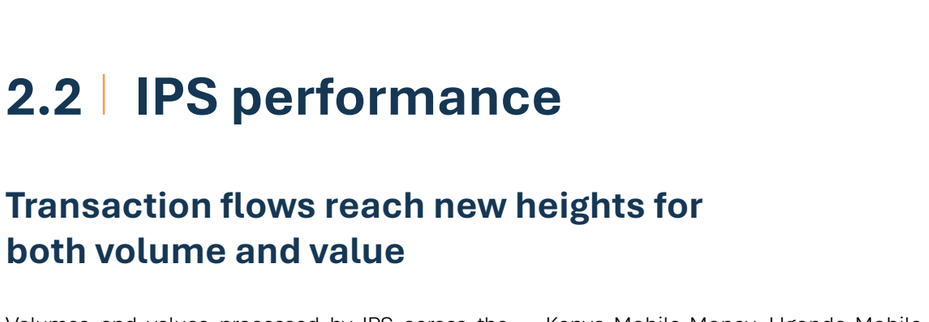
Transaction flows reach new heights for both volume and value

Volumes and values processed by IPS across the continent continue to grow. Between 2020 and 2024, they achieved average annual growth rates of 35% and 26%, respectively (refer to Figures 2.1 and 2.2).

Total transaction volumes across all IPS rose from 19.7 billion in 2020 to 64.6 billion in 2024 (Figure 2.1). Between 2023 and 2024, bank IPS recorded the highest volume increase of 50%, followed by cross-domain IPS, which achieved 29% growth, and mobile money IPS, which achieved 25% growth. Mobile money IPS maintained its position as the type processing the highest transaction volume, consistent with trends observed in 2023. Kenya Mobile Money, Uganda Mobile Money, and Tanzania Mobile Money contributed the largest volumes from 2023 to 2024, at 65%, 15%, and 13%, respectively, underscoring the popularity of mobile money transactions in East African markets.

The IPS with the highest volume growth rates between 2023 and 2024 (in descending order) were TCIB (SADC), PayShap (South Africa), ZIPIT (Zimbabwe), and IPN (Egypt); their high performance is likely grounded in the fact that these systems are young and were gaining momentum.[15] All except for PayShap (South Africa) are cross-domain systems, reinforcing the increased presence of this system type.

Figure 2.1 | Transaction volumes (billions of transactions) 2020-2024 (n=30)



	2020	2021	2022	2023	2024	2023/2024 Growth
Cross-domain IPS	2.1	3.5	5.3	10.5	13.6	29%
Bank IPS	0.1	0.2	0.3	0.4	0.7	50%
Mobile money IPS	17.5	23.1	29.9	40.2	50.3	25%
Total	**19.7**	**26.8**	**35.4**	**51.1**	**64.6**	**26%**

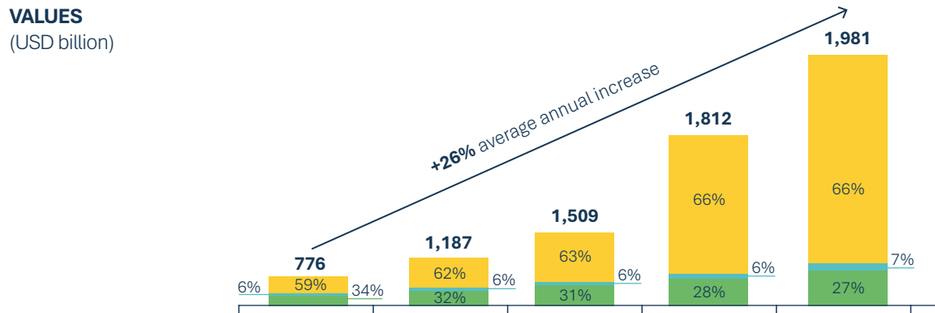
Note: Volume and value data were unavailable for four of the new systems—Switch Mobile (Algeria), LYPay (Libya), Salon Pement Swich (Sierra Leone), and SIPS (Somalia)—and no data was received from PAPSS (continent-wide). Volume data was available for SIMO (Mozambique), but value data was not; therefore, their transaction data is not included in the analysis. As a result, these calculations include 30 IPS. As eNaira (Nigeria) is the only sovereign digital currency IPS, and its data were included in the NIP (Nigeria) data, sovereign digital currency IPS are excluded from the IPS performance analysis.

15 Each of these systems had a full year of data for 2023 to enable comparison. KWiK in Angola had a higher growth rate, yet it was launched in 2023 and therefore was not considered, as there was not a full year of data.

The total transaction value also increased from $775.7 billion[16] in 2020 to $1,980.6 billion in 2024 (Figure 2.2 and Table 2.5).[17] Bank IPS saw the highest transaction value growth rate between 2023 and 2024 of 28%, outpacing cross-domain (9%) and mobile money IPS (7%). Cross-domain IPS had the largest share of the total transaction values in 2024. Two cross-domain systems accounted for over half (54%) of the increase in transaction value between 2023 and 2024: IPN (Egypt) and NIP (Nigeria). New systems launched in late 2023 and early 2024 (for which transaction data was available for the first time in 2024), KWiK (Angola) and LeSwitch (Lesotho), contributed only 0.05% of the growth between 2023 and 2024.

In descending order, the IPS with the highest transaction value growth rates between 2023 and 2024 were TCIB (SADC), Tunisia Mobile Money, PayShap (South Africa), and IPN (Egypt). Growth in transaction value and volume from TCIB indicates that the regional system may be gaining traction.

Figure 2.2 | African IPS transaction value (USD billion) 2020-2024 (n=30)



	2020	2021	2022	2023	2024	2023/2024 Growth
Cross-domain IPS	460	732	943	1,195	1,299	9%
Bank IPS	50	71	96	114	147	28%
Mobile money IPS	266	383	470	502	535	7%
Total	**776**	**1,187**	**1,509**	**1,812**	**1,981**	**9%**

Note: Volume and value data were unavailable for four of the new systems—Switch Mobile (Algeria), LYPay (Libya), Salon Pement Swich (Sierra Leone), and SIPS (Somalia)—and no data was received from PAPSS (continent-wide). Volume data was available for SIMO (Mozambique), but value data was not; therefore, their transaction data is not included in the analysis. As a result, these calculations include 30 IPS. As eNaira (Nigeria) is the only sovereign digital currency IPS, and its data were included in the NIP (Nigeria) data, sovereign digital currency IPS are excluded from the IPS performance analysis.

16 All dollar currency references refer to United States dollars (USD).

17 To ensure year-on-year comparability over the time in question and to eliminate the impact of local currency fluctuations against the US dollar, all transaction values were converted using the World Bank's estimated exchange rate using their Atlas method. An exception is made for Zimbabwe, where the IMF period average exchange rate was used. Transaction value calculations using the current USD exchange rate are provided in Annex C.

Mobile money IPS have the lowest average transaction value, $11, which is consistent with prior years, indicating that mobile money IPS process high-volume, low-value transactions. This is consistent with end users relying on mobile money accounts to make low-value transactions (Table 2.4).

The average transaction value for bank IPS has decreased since 2020, from $251 to $154. The downward trend over the last four years suggests that end users may be leveraging bank IPS for more low-value transactions.

Cross-domain IPS have also seen their average transaction value decrease year on year, perhaps because the increase in the number of cross-domain IPS in Africa since 2020 has made them accessible to more people.

Table 2.4 | Average value (USD) per transaction per IPS type, 2020-2024 (n=30)

IPS Type	2020	2021	2022	2023	2024
Cross-domain IPS	225	208	179	114	95
Bank IPS	251	232	207	165	154
Mobile money IPS	16	17	17	14	11

Three IPS—Kenya Mobile Money, NIP (Nigeria), and eKash (Rwanda)—provided gender-disaggregated data for 2024.[18] Analysis of this data reveals that transactions initiated by men on these systems made up the majority of transaction volumes and values (see Figures 2.3 and 2.4). The average transaction size of women's transactions was also lower than men's across all three systems (Table 2.5).

Figure 2.3 | Percentage difference in transaction volume by men and women for 2024

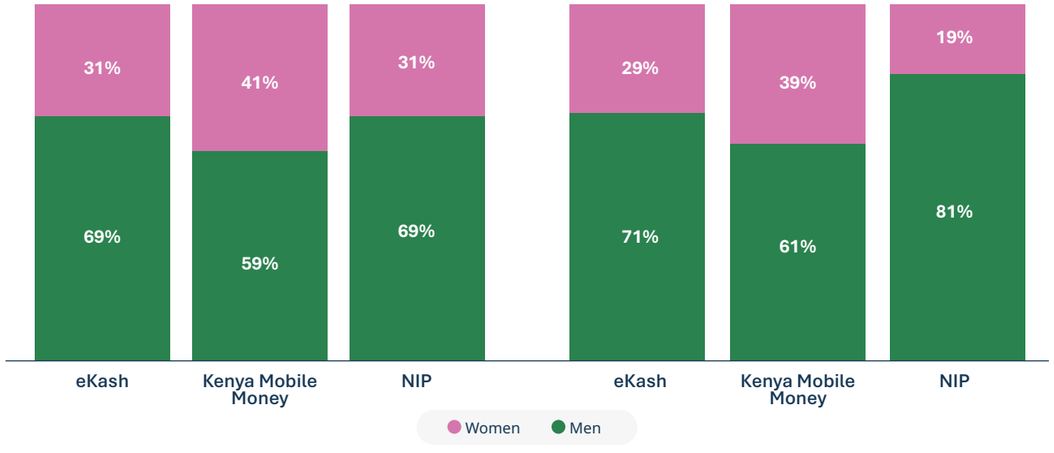


Figure 2.4 | Percentage difference in transaction value by men and women for 2024

18 These IPS are of different types and operate in very different economies. As such, the data should be considered in context and not as typical of women's and men's digital payment activity across Africa. AfricaNenda advocates for women's inclusion in the financial system and encourages other IPS to provide gender-disaggregated data on volumes and values to allow for more robust gender analysis.

Table 2.5 | Average value per transaction disaggregated by gender (USD, 2024) (n=3)

IPS	Women	Men
eKash	3	3
Kenya Mobile Money	8	9
NIP	66	121

We can assess the role an IPS plays in an economy by analyzing the IPS transaction values as a share of Gross National Income (GNI) (see Figure 2.5). In Nigeria, IPS processed over four times the country's GNI (403%). Kenya and Uganda also had substantial IPS transaction values relative to GNI (242% and 144%, respectively).

Six IPS reported both on-us and off-us values. They include EthSwitch (Ethiopia), Kenya Mobile Money and PesaLink (Kenya), Natswitch (Malawi), SWAM (Morocco), and Tanzania Mobile Money.

Figure 2.5 | 2024 IPS transactions relative to GNI (n=30)

All IPS have either USSD or app channels available

In 2025, mobile phone applications (apps) emerged as the most widely supported channel across IPS (33 systems), followed by other self-initiated channels such as unstructured supplementary service data (USSD), used by 25 systems, and browser-based internet banking channels, supported by 22 systems (Figure 2.6). The widespread enablement of mobile apps signals a shift toward smartphone-centric design, aligning with recent data indicating that smartphone penetration in Sub-Saharan Africa has reached 54% (GSMA, 2025).

Despite the growth in smartphone adoption, basic phones remain prevalent across the continent, particularly among low-income and rural populations. A GSMA survey of six low- and middle-income countries—Egypt, Ethiopia, Kenya, Nigeria, Senegal, and Uganda—found that smartphone ownership in rural areas is significantly lower than in urban areas. This suggests that many individuals in rural regions rely solely on basic feature phones or do not have a device (GSMA, 2024a). Therefore, USSD-based channels remain important, since they do not require internet access or smartphones. Notably, several IPS, including IPN (Egypt), MauCAS (Mauritius), SWAM and Virement Instantané (Morocco), RTC (South Africa), SIPS (Somalia), and Tunisia Mobile Money, do not support USSD. In Egypt, Mauritius, Morocco, and Tunisia, mobile money adoption is relatively low, and the user base is more reliant on smartphones, making app-based channels to banks or other regulated financial providers more relevant; in South Africa, almost all mobile money account owners also have bank accounts, and three-quarters of mobile phone owners have smartphones, both of which make app-based channels more accessible (World Bank 2025b). However, in Somalia, where mobile money adoption, activity, and accessibility are high according to GSMA's mobile money prevalence index (GSMA, 2023), the absence of USSD functionality may exclude low-income and rural users who rely on this functionality.

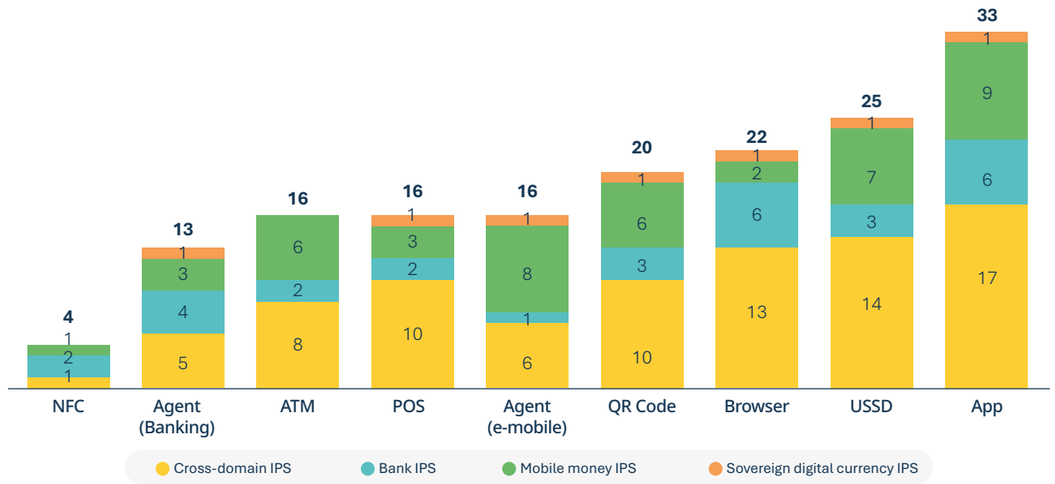
Twenty IPS have QR code channels enabled in 2024, compared to 13 in 2023. Of the five IPS that launched between 2024 and 2025, four launched with QR code capabilities already enabled: Switch Mobile (Algeria), LYPay (Libya), SAPS (Sierra Leone), and SIPS (Somalia). Most systems offering QR code support include both static and dynamic options, catering to a broader range of merchant and consumer use cases.

Near field communication (NFC) is the least common IPS channel; only four IPS have enabled it: Meeza Digital (Egypt), Natswitch (Malawi), eNaira (Nigeria), and Uganda Mobile Money.

Human-assisted channels (e.g., branches and e-money agents) remain common. In 2025, 13 IPS had integrated with bank branches and 16 with e-money agents. While these channels are less widespread than digital options, they remain essential for users with limited digital or financial literacy, and they support onboarding and transaction execution in markets where full self-service may not yet be feasible.



Figure 2.6 | Supported payment channels by IPS type (multiple selections)

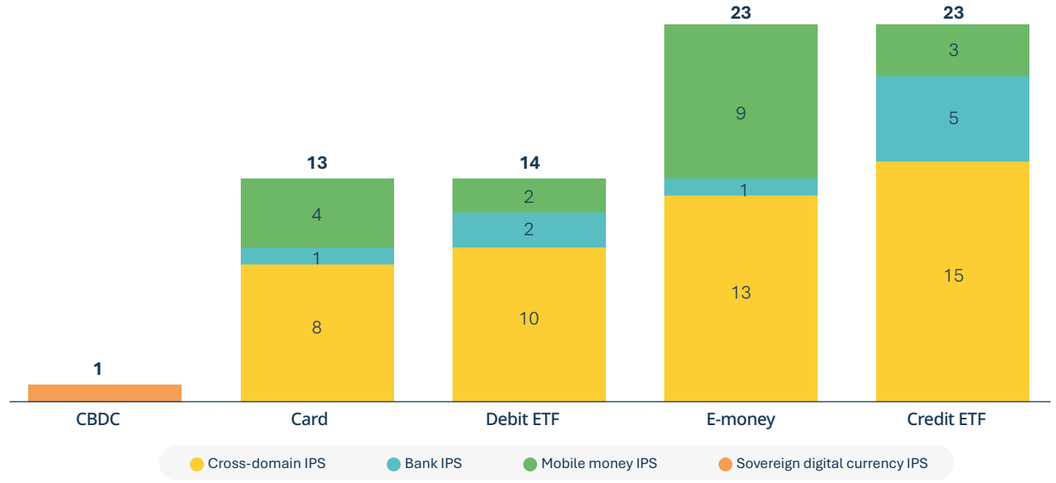


Note: Out of 36 IPS, 35 are included in the channel analysis. No use case data was received from PAPSS.

Credit electronic funds transfer (EFT) and e-money are the most prevalent instruments

Credit EFT and e-money are the most widely supported instruments, with 22 IPS supporting each (Figure 2.7). The majority of IPS supporting both credit and debit EFT are cross-domain systems. eNaira is the only IPS that has a CBDC instrument.

Figure 2.7 | IPS instruments by IPS type (multiple selections)



Note: Out of 36 IPS, 35 are included in the instrument analysis. No use case data was received from PAPSS.

All IPS have at least the P2P payment use case enabled, with a growing number enabling P2B and cross-border payments

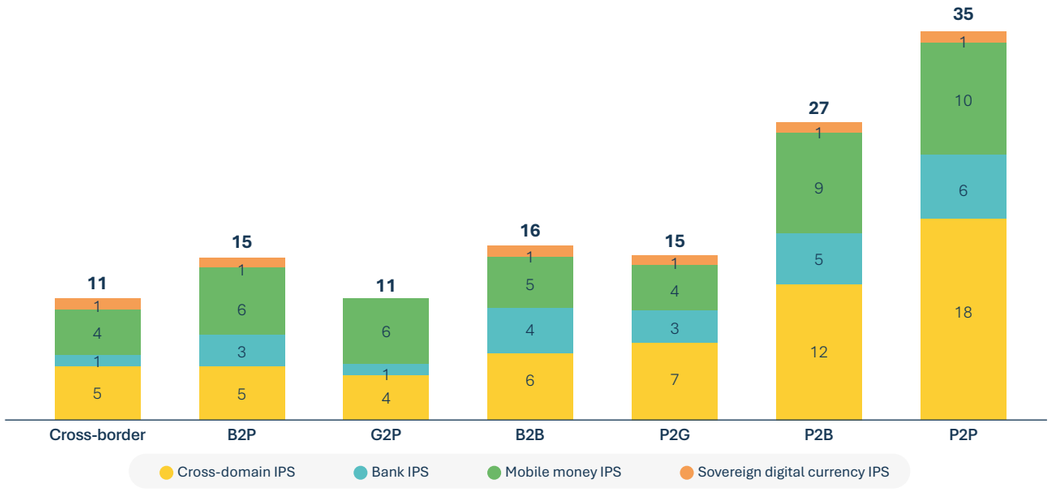
All domestic IPS for which data was collected support the P2P use case. This foundational use case is crucial for initial adoption, enabling individuals to send money to family and friends. Only five IPS—KWiK (Angola), LeSwitch (Lesotho), Natswitch (Malawi), Virement Instantané (Morocco), and SAPS (Sierra Leone)—support only P2P payments. TCIB (SADC) supports only cross-border P2P payments.

Two IPS expanded their enabled use cases to include P2B payments in 2025: eKash (Rwanda) and PayShap (South Africa), resulting in a total of 27 IPS enabling the P2B payment use case. This reflects the importance of digital payments for businesses.

The third most widely enabled use case is B2B payments, enabled by 16 IPS to facilitate transactions between businesses for goods and services. Fifteen IPS support B2P payments for salaries and wages, reflecting the increasing shift toward digital payroll systems; 15 support person-to-government (P2G) payments, such as taxes and fees, offering a more efficient way for citizens to interact with government services (Figure 2.8).

Although the G2P and cross-border payment use cases are less likely to be enabled than other, more popular payment use cases, like P2P and P2B, both have grown in 2025. Eleven IPS offered the G2P use case in 2025, up from six in 2024: Meeza Digital (Egypt), EthSwitch (Ethiopia), GIP and Ghana MMI (Ghana), PesaLink (Kenya), SWAM (Morocco), NIP (Nigeria), TIPS and Tanzania Mobile Money, Tunisia Mobile Money, and Uganda Mobile Money. The changes include six new IPS offering G2P functionality and one previously included—Madagascar Mobile Money—that was removed. Eleven IPS supported cross-border transactions in 2025, up from six in 2024. These include IPN and Meeza Digital (Egypt), Kenya Mobile Money, Madagascar Mobile Money, MauCAS (Mauritius), NIP and eNaira (Nigeria), Tanzania Mobile Money, GIMACPAY (CEMAC), PAPSS (continent-wide), and TCIB (SADC). Four systems added cross-border functionality since the 2024 report: IPN and Meeza Digital (Egypt), Kenya Mobile Money, and Tanzania Mobile Money.

Figure 2.8 | Enabled use cases by IPS type (multiple selections) (N=36 systems)



Note: Out of 36 IPS, 35 are included in the instrument analysis. No use case data was received from PAPSS.



Commercial banks remain the most common direct participants, with an increasing number of IPS allowing non-banks to participate directly in their systems

In 2025, out of 1,810 total participants across all IPS, 755 (42%) were direct and 1,055 (58%) were indirect.[19] NIP (Nigeria) had the highest number of participants at 699 (accounting for 39% of IPS participants on the continent). GIP (Ghana) and GIMACPAY (CEMAC) followed NIP with the second- and third-largest participant numbers, at 286 (16%) and 109 (6%), respectively.

Commercial banks represented the largest group of direct IPS participants across all IPS at 463. Fifteen IPS allowed direct participation of non-banks, with e-money issuers (81) and MFIs (24) being the most common non-bank direct participants. The 15 IPS that permit licensed non-banks to directly participate are KWiK (Angola), Meeza Digital (Egypt), EthSwitch (Ethiopia), Ghana MMI and GIP (Ghana), PesaLink (Kenya), MauCAS (Mauritius), SWAM (Morocco), SIMO (Mozambique), eKash (Rwanda), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money, National Financial Switch (Zambia), and ZIPIT (Zimbabwe). The emphasis on allowing direct participation of non-banks stems from the need for enhanced inclusivity in the decision-making processes that govern these payment systems. Direct participants often have a more significant role in shaping the rules and development of the IPS than do indirect participants. The remaining 21 IPS enabled non-bank financial institutions to join via sponsorship.

19 This figure excludes eNaira and Nigeria Mobile Money and PAPSS (continent-wide), Madagascar Mobile Mobile, Switch Mobile (Algeria), LYPay (Libya), and Uganda Mobile Money, as the total number of participants for these systems was not available.

Box 2.4 | List of central banks or IPS operators that completed the SIIPS 2025 IPS survey

As already noted, this report includes transaction data for 30 IPS. Eleven IPS operators and 13 central banks provided volume and value data through written survey feedback. We would like to thank the following stakeholders for their contribution (the list is in alphabetical order by country, followed by the regions). We would also like to thank Salon Pement Swich (SAPS) and Somalia Instant Payment System (SIPS) for submitting their responses. Because SAPS and SIPS launched within the last year, transaction data was not yet available. SIMO did not submit transaction value data.

System	Data provided by the central bank
KWiK (Angola)	National Bank of Angola
IPN and Meeza Digital (Egypt)	Central Bank of Egypt
EPS Fast Payment Module (Eswatini)	Central Bank of Eswatini
Ghana MMI (Ghana)	Bank of Ghana
Kenya Mobile Money (Kenya)	Central Bank of Kenya
LeSwitch (Lesotho)	Central Bank of Lesotho
Madagascar Mobile Money (Madagascar)	Banque Centrale de Madagascar
MauCAS (Mauritius)	Bank of Mauritius
SWAM and Virement Instantané (Morocco)	Bank Al-Maghrib
PayShap, RTC, and TCIB (South Africa)	South African Reserve Bank (SARB), BankservAfrica
TIPS and Tanzania Mobile Money (Tanzania)	Bank of Tanzania
Tunisia Mobile Money (Tunisia)	Banque Centrale de Tunisie
Uganda Mobile Money (Uganda)	Bank of Uganda
System	**Data provided by the IPS operator**
EthSwitch (Ethiopia)	EthSwitch
Gamswitch (The Gambia)	Gamswitch
GIP (Ghana)	GhIPSS
PesaLink (Kenya)	Integrated Payment Systems Ltd. (IPSL)
Natswitch (Malawi)	Natswitch
NIP, eNaira, and Nigeria Mobile Money (Nigeria)	Nigeria Inter-Bank Settlement System (NIBSS)
eKash (Rwanda)	RSwitch
Sociedade Interbancaria de Moçambique (SIMO) (Mozambique)	SIMO
National Financial Switch (Zambia)	Zambia Electronic Clearing House Limited (ZECHL)
ZIPIT (Zimbabwe)	Zimswitch
GIMACPAY (CEMAC)	Groupement Interbancaire Monétique de l'Afrique Centrale (GIMAC)

2.3 | Enabling factors

The successful deployment of an IPS depends not only on its core functionality, such as use cases and channels, but also on critical enabling factors that shape how it is governed, financed, operated, and experienced by end users. Key enablers include governance and ownership structures, funding and fee models, technology standards, proxy identifiers, and advanced end-user-facing features, such as pull requests to pay, third-party connections, real-time confirmation messaging, and transaction validation.

IPS ownership

IPS ownership in Africa continued its steady pivot toward more public ownership. Of the 36 live systems, central banks own 17, up from 11 in 2024. A further nine IPS operate as public-private partnerships (often defined by the central bank sharing ownership with participants or with an industry association), and 10 operate as participant-owned IPS (see Table 2.6). In an ownership shift, the South African Reserve Bank has taken a 50% stake in BankservAfrica, a move consistent with the expanding view of payments as digital public infrastructure (DPI) on par with national ID (BankservAfrica, 2024a). Under greater public control, IPS may increasingly hard-code interoperability, design their fee structures according to a cost-recovery model, and crowd-in participants who will compete by delivering a compelling customer experience rather than by trying to own the payment rails.

Overall, the 2025 landscape shows governments doubling down on instant payment rails as foundational DPI, using ownership and governance levers to balance universal access, pricing, and private-sector innovation.

Table 2.6 | IPS ownership overview

Ownership model	IPS name	IPS type	Country/ region	Ownership typology
Regulator-owned (17 IPS)	Switch Mobile	Cross-domain	Algeria	Central bank-led
	KWiK	Cross-domain	Angola	Central bank-led
	IPN	Cross-domain	Egypt	Central bank-led
	Meeza Digital	Mobile money	Egypt	Central bank-led
	EPS Fast Payment Module	Cross-domain	Eswatini	Central bank-led
	Ghana MMI	Mobile money	Ghana	Central bank-led
	GIP	Bank	Ghana	Central bank-led
	LYPay	Bank	Libya	Central bank-led

Ownership model	IPS name	IPS type	Country/ region	Ownership typology
Regulator-owned (17 IPS)	MauCAS	Cross-domain	Mauritius	Central bank-led
	eNaira	Sovereign digital currency	Nigeria	Central bank-led
	SAPS	Cross-domain	Sierra Leone	Central bank-led
	SIPS	Cross-domain	Somalia	Central bank-led
	TIPS	Cross-domain	Tanzania	Central bank-led
	SWAM	Mobile money	Morocco	Industry-led
	LeSwitch	Mobile money	Lesotho	Public-private partnership
	Virement Instantané	Bank	Morocco	Public-private partnership
	TCIB	Cross-domain	SADC	Public-private partnership
Participant-owned (9 IPS)	Kenya Mobile Money	Mobile money	Kenya	Industry-led
	PesaLink	Cross-domain	Kenya	Industry-led
	Madagascar Mobile Money	Mobile money	Madagascar	Industry-led
	Natswitch	Cross-domain	Malawi	Industry-led
	eKash	Cross-domain	Rwanda	Industry-led
	RTC	Bank	South Africa	Industry-led
	Tanzania Mobile Money	Mobile money	Tanzania	Industry-led
	Uganda Mobile Money	Mobile money	Uganda	Industry-led
	Tunisia Mobile Money	Mobile money	Tunisia	Public-private partnership
Jointly owned (10 IPS)	PayShap	Bank	South Africa	Industry-led
	EthSwitch	Cross-domain	Ethiopia	Public-private partnership
	Sociedade Interbancaria De Mocambique (SIMO)	Cross-domain	Mozambique	Public-private partnership
	NIP	Cross-domain	Nigeria	Public-private partnership
Jointly owned (10 IPS)	Nigeria Mobile Money	Mobile money	Nigeria	Public-private partnership
	Gamswitch	Bank	The Gambia	Public-private partnership
	National Financial Switch	Cross-domain	Zambia	Public-private partnership
	Zimswitch Instant Payment Interchange Technology (ZIPIT)	Cross-domain	Zimbabwe	Public-private partnership
	GIMACPAY	Cross-domain	CEMAC	Public-private partnership
	PAPSS	Bank	Continent-wide	Public-private partnership

Funding and fee structures

The funding and fee structures for IPS vary, reflecting the diverse contexts and objectives of each initiative. Schemes typically cover startup costs through a mix of funding sources, including development partners, central banks or government institutions, commercial operators, and occasionally private equity or shareholder contributions from commercial banks or mobile money operators.

IPS business models fall into one of three categories: *not-for-loss* (cost recovery), *not-for-profit*, or *for-profit*. Twenty systems operate under *not-for-loss* or *not-for-profit* models, emphasizing sustainability and affordability over commercial returns.

Fee structures are a critical element of IPS design, influencing both end-user adoption and the long-term viability of the system. However, most IPS implement a combination of fee types to support cost recovery. These may include joining or onboarding fees for participants, as well as monthly or annual membership fees. IPS also often charge transaction fees, which are typically fixed or tiered, with the tiers based on the participants' transaction value or volume. Participants may pass on any or all of these fees to their end users, though some IPS have sought to drive early adoption by eliminating or waiving fees for participants (they include Egypt IPN for end users and MauCAS (Mauritius) and TIPS (Tanzania)). The balance between user affordability and operator financial sustainability is a key consideration in the design and evolution of fee structures.

Technology standards

The dominant **messaging standards** continue to be ISO 8583 and ISO 20022, which provide structured formats for financial message exchange and interoperability. Of these, ISO 20022 offers a richer data structure and enhanced flexibility, which supports a wider range of financial services and compliance requirements. Currently, 14 IPS are using ISO 20022 messaging standards; 12 IPS are using ISO 8583. Notable adopters of ISO 20022 include the newly launched Switch Mobile (Algeria), SAPS (Sierra Leone), and SIPS (Somalia), all of which illustrate how emerging systems are aligning with global best practices from the outset.

Open APIs are now virtually universal: out of the 32 IPS for which data on open APIs was available, only National Financial Switch (Zambia) reported not having API functionality.[20] The newly launched LYPay IPS in Libya is the only IPS that has published a fully documented API on its developer portal. While this "API availability by default" posture has normalized non-bank access and streamlined onboarding, richer API-enabled functionality remains uneven. Only 11 IPS currently permit third-party connections beyond core participants: Meeza Digital (Egypt), Kenya Mobile Money and PesaLink (Kenya), EthSwitch (Ethiopia), SIMO (Mozambique), NIP (Nigeria), Salon Pement Swich (Sierra Leone), SIPS (Somalia), PayShap (South Africa), Uganda Mobile Money, and TCIB (SADC). Real-time payment confirmation is live on 23,[21] and transaction validation via API is live on 20,[22] signaling the ongoing adoption of API functionality beyond access and onboarding.

Aliases or proxy IDs

Aliases or proxy IDs allow users to initiate transactions without needing to enter complex account details. Mobile phone numbers are the most used proxy IDs, supported by 23 IPS, due to their widespread ownership and familiarity among users, particularly in mobile-first economies.[23] Bank account numbers are followed closely, supported by 22 IPS, and serve as a direct link to users' financial institutions.[24] As digital commerce expands, merchant IDs are also gaining traction, with nine IPS now employing them to streamline business payments and improve transaction traceability for retailers and service providers. Additionally, seven IPS have introduced proprietary ID schemes: TIPS (Tanzania), KWiK (Angola), eKash (Rwanda), IPN (Egypt), Tunisia Mobile Money, ZIPIT (Zimbabwe), and TCIB (SADC).

20 Data for Switch Mobile (Algeria), Madagascar Mobile Money, Nigeria Mobile Money, and PAPSS was unavailable.

21 KWiK (Angola), IPN and Meeza Digital (Egypt), GIP (Ghana), EPS Fast Payment Module (Eswatini), Kenya Mobile Money and PesaLink (Kenya), LeSwitch (Lesotho), MauCAS (Mauritius), SWAM and Virement Instantané (Morocco), SIMO (Mozambique), NIP (Nigeria), eKash (Rwanda), Salon Pement Swich (Sierra Leone), SIPS (Somalia), PayShap and RTC (South Africa), Tunisia Mobile Money, Uganda Mobile Money, ZIPIT (Zimbabwe), GIMACPAY (CEMAC), and TCIB (SADC).

22 KWiK (Angola), EPS Fast Payment Module (Eswatini), IPN and Meeza Digital (Egypt), GIP (Ghana), Kenya Mobile Money and PesaLink (Kenya), MauCAS (Mauritius), Virement Instantané (Morocco), SIMO (Mozambique), NIP (Nigeria), eKash (Rwanda), Salon Pement Swich (Sierra Leone), SIPS (Somalia), PayShap (South Africa), Tunisia Mobile Money, Uganda Mobile Money, National Financial Switch (Zambia), ZIPIT (Zimbabwe), and TCIB (SADC).

23 IPS Supporting mobile phone numbers as proxy IDs are KWiK (Angola), IPN and Meeza Digital (Egypt), EPS Fast Payment Module (Eswatini), EthSwitch (Ethiopia), GIP (Ghana), PesaLink and Kenya Mobile Money (Kenya), LeSwtich (Lesotho), Natswitch (Malawi), SWAM (Morocco), SIMO (Mozambique), eKash (Rwanda), Salon Pement Swich (Sierra Leone), PayShap (South Africa), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money, Uganda Mobile Money, National Financial Switch (Zambia), ZIPIT (Zambia), and GIMACPAY (CEMAC).

24 IPS supporting bank account numbers are KWiK (Angola), IPN (Egypt), EPS Fast Payment Module (Eswatini), EthSwitch (Ethiopia), GIP (Ghana), PesaLink (Kenya), Natswitch (Malawi), MauCAS (Mauritius), Virement Instantané (Morocco), SIMO (Mozambique), NIP (Nigeria), eKash (Rwanda), SIPS (Somalia), PayShap (South Africa), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money, Uganda Mobile Money, National Financial Switch (Zambia), GIMACPAY (CEMAC), and TCIB (SADC).



User-centric innovations that enhance inclusivity

Advanced features enhance the user experience and influence adoption. They facilitate faster and more convenient transactions, contribute to building trust, and encourage the broader adoption of digital payments.

Pull "request to pay" functionality

This feature streamlines transactions by allowing a payee to send a digital request for funds to a payer. The payer receives this request, often through their banking app or a third-party fintech app, and maintains control over whether to authorize the payment. This simplified approach eliminates the need for payers to manually enter payment details or navigate complex payment portals, providing a more convenient alternative to payer-initiated "push" payment methods. The "request to pay" messaging maintains the aspect of a "pull" payment whereby the receiver initiates the request, while ensuring the payer still pushes the funds. In this way, request-to-pay functionality maintains the risk benefits of push payments (The Level One Project, 2019). Despite its benefits for consumers and businesses, including improved cash flow for payees and enhanced control for payers, this feature is not yet universally implemented by all IPS; only 13 have enabled it.[25]

Third-party connections

In 2025, only 11 IPS have enabled third-party connections.[26] Evidence from regions like Europe and countries like India and the United States

25 Switch Mobile (Algeria), IPN and Meeza Digital (Egypt), EthSwitch (Ethiopia), GIP (Ghana), Kenya Mobile Money and PesaLink (Kenya), MauCAS (Mauritius), SWAM (Morocco), NIP (Nigeria), PayShap (South Africa), Uganda Mobile Money, and GIMACPAY (CEMAC).

26 Meeza Digital (Egypt), EthSwitch (Ethiopia), Kenya Mobile Money and PesaLink (Kenya), SIMO (Mozambique), NIP (Nigeria), Salon Pement Swich (Sierra Leone), SIPS (Somalia), PayShap (South Africa), Uganda Mobile Money, and TCIB (SADC).

demonstrates that third-party integrations can significantly accelerate the adoption of digital payments by allowing end-users to make payments through various applications beyond their mobile money or banking apps. The Indian experience with UPI is a compelling example of the impact of third-party integrations on digital payment adoption. UPI has emerged as the leading payment system in India, processing 82% of all digital payments by volume (BIS, 2024b).

Real-time payment confirmation messaging

The ability to receive immediate feedback confirming the successful (or unsuccessful) completion of a payment transaction is paramount, especially in the digital realm, which lacks the tangible nature of a cash exchange. This capability benefits end users by significantly enhancing trust in the system. The significance of real-time payment confirmation is further underscored by its inclusion as a key component of the Level One Project (L1P) principles, which emphasize the importance of end-user impact and trust.[27] The prevalence of real-time payment confirmation across 23 IPS (out of the 26 IPS that provided data on this point) indicates a strong industry-wide recognition of its importance.

Transaction validation

Transaction validation encompasses a range of mechanisms designed to verify payment details before finalizing a transaction. Payment pre-validation processes verify critical information, including bank account numbers, beneficiary details, PSP confirmation, beneficiary alias confirmation, and transaction amount confirmation, to ensure the payment is directed to the intended recipient. Real-time data validation verifies the accuracy of bank account information against up-to-date banking data, thereby minimizing the risk of failed transactions. By identifying and addressing errors or inconsistencies before a transaction is finalized, transaction validation helps prevent unintentional mistakes and deliberate fraudulent activities (AFP, 2025). This payment capability benefits end users by reducing errors and preventing fraud, as demonstrated by its implementation in markets such as Kenya and Nigeria (BMGF, 2019). Twenty IPS had transaction validation enabled in 2025.[28]

Whether transaction validation prevents fraud depends on the infrastructure and interoperability among participants. If institutions lack robust APIs or shared validation layers, implementing real-time validation can be challenging, and sometimes counterproductive, since overly rigid validation protocols can create delays, lead to false positives, and cause legitimate transactions to be rejected. This increases user frustration and drop-off rates. Optimal transaction validation should therefore balance security with user experience, allowing systems enough flexibility to handle common data mismatches (such as minor typographical errors) while catching real cases of fraud. The goal is for payment systems to be both accurate and inclusive. To achieve those dual goals, validation protocols must recognize local constraints and be adaptable as infrastructure matures.

27 The Level One project guide by the Gates Foundation outlines design principles for open, inclusive, and interoperable digital payment systems designed to advance financial inclusion.

28 KWiK (Angola), IPN and Meeza Digital (Egypt), EPS Fast Payment Module (Eswatini), GIP (Ghana), Kenya Mobile Money and PesaLink (Kenya), MauCAS (Mauritius), Virement Instantané (Morocco), SIMO (Mozambique), NIP (Nigeria), eKash (Rwanda), Salon Pement Swich (Sierra Leone), SIPS (Somalia), PayShap (South Africa), Tunisia Mobile Money, Uganda Mobile Money, National Financial Switch (Zambia), ZIPIT (Zimbabwe), and TCIB (SADC).



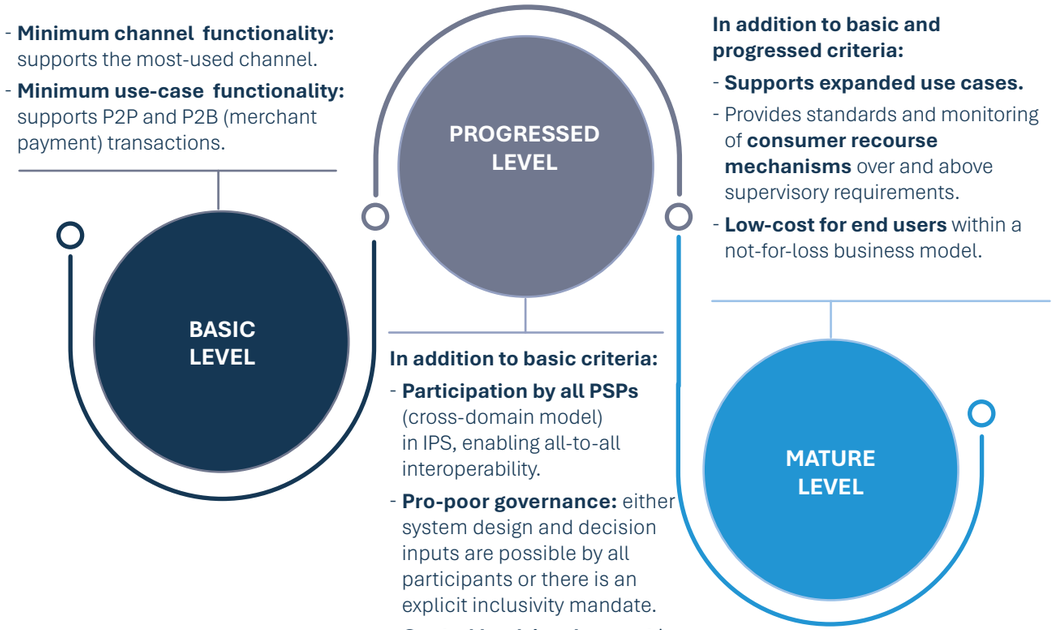
2.4 More IPS have achieved basic and progressed status, with the first IPS achieving mature status

The aggregate influence of the aforementioned factors—governance, structure, interoperability, and the depth and breadth of channels, functionality, and use cases—collectively determines the inclusivity potential of the IPS. Based on data provided by the IPS in Africa, AfricaNenda has developed a systematic classification framework that positions each system along an inclusivity spectrum. This spectrum categorizes systems according to three distinct developmental stages: basic, progressed, or mature (see Figure 2.9 for the summarized criteria for each level and Annex A for the full descriptions).

Inclusivity is a distributed responsibility rather than the obligation or accomplishment of any single stakeholder within an IPS ecosystem. Achieving it requires coordinated contributions from multiple payment value chain participants, each fulfilling specific roles. IPS regulators and policymakers, operators, and/or IPS participants, for example, collectively deliver the platform and product functionality at different points along the value chain.

Regulators, supervisors, and policymakers fulfill a critical enabling function within national and regional contexts by establishing the policy and regulatory environments that govern IPS operators and PSPs. The evolution of inclusivity in payment systems corresponds with the development of policy and regulatory frameworks that enable more inclusivity.

Figure 2.9 | The 2025 AfricaNenda IPS Inclusivity Spectrum



An enabling policy and regulatory environment

- **National Financial Inclusion Strategy** and/or national development plan that prioritizes financial inclusion.
- Payments license that allows for **e-money issuance by non-banks.**
- **Agent banking regulation** or payment agent license to expand the reach of end-user access points.
- **Tiered customer due diligence requirements** to allow for simplified due diligence of lower-risk customers (Tiered KYC)
- **Regulations for Anti-Money Laundering and Counter Financing of Terrorism.**

- **Digital payments policy and roadmap** that guides the longer-term development of digital retail payments.
- All-to-all **interoperability mandated** and/or promoted in guidelines.
- **Tiered payments licensing** regime to allow for a range of payment services (including cross-border payments).
- **eKYC regulation and guidance** that enables end-to-end digital onboarding and verification.
- **Financial Consumer Protection Act,** including consumer recourse.

- **Enabling regulation for DPI:** open banking, digital ID data, privacy, and cybersecurity.
- **Risk-based payments license regime** to drive innovation in payments; activity- and outcomes-based licensing rather than inputs-focused.
- **Risk-based customer due diligence requirements** to allow for fit-for-purpose KYC processes.
- **Outcomes-based financial consumer protection framework.**

Multiple IPS have advanced to the basic and progressed levels of inclusivity

Based on the established criteria, 15 IPS achieved the **basic** level, 10 achieved the **progressed** level, and one achieved the **mature** level of inclusivity (see Figure 2.10). Ten IPS were not ranked, either because they did not fulfill the basic criteria or due to insufficient data availability.

Figure 2.10 | Mapping IPS across the Inclusivity Spectrum[29]



29 Ghana MMI runs on the GhIPSS GIP rail. Through this integration, the two Ghana systems jointly achieve the progressed level of inclusivity.

Of the ten IPS that were not ranked, six failed to meet the minimum use case functionality criteria because they do not support P2B (merchant) payments: KwiK (Angola), LeSwitch (Lesotho), Virement Instantané (Morocco), PesaLink (Kenya), Salon Pement Swich (Sierra Leone), and EPS Fast Payment Module (Eswatini) (see Table 2.7). Only SIPS (Somalia) failed to meet the minimum channel requirements. No data was obtained from PAPSS (continent-wide); it is therefore not ranked because it could not be confirmed whether it meets the criteria for basic inclusivity. Natswitch moved from the progressed level of inclusivity in 2024 to not ranked, based on data provided in the AfricaNenda survey, confirming that the system infrastructure is not yet configured to support P2B payments.

Table 2.7 | Not ranked category breakdown

	Basic		Progressed			Mature		
	Minimum channel functionality[30]	Minimum use case functionality	Participation by all PSPs	Pro-poor governance	Central bank involvement	Expanded use cases supported	Provide additional recourse	Serve end users at low cost
KWiK (Angola)	✗	-	✗	✗	✗	-	-	✗
EPS Fast Payment Module (Eswatini)	✗	-	-	✗	-	-	-	-
LeSwitch (Lesotho)	✗	-	-	✗	✗	-	✗	✗
Natswitch (Malawi)	✗	-	✗	✗	✗	-	✗	-
Virement Instantané (Morocco)	✗	-	-	✗	✗	-	-	-
PesaLink (Kenya)	✗	-	✗	✗	✗	-	-	✗
Salon Pement Swich (Sierra Leone)	✗	-	✗	-	✗	-	✗	-
SIPS (Somalia)	-	✗	✗	✗	✗	-	✗	✗
PAPSS (continent-wide)	-	-	-	-	-	-	-	-
TCIB (SADC)	-	✗	✗	-	✗	-	✗	-

30 The primary local channel was determined by using the GSMA Mobile Money Prevalence Index. If mobile money prevalence is classified as high/very high for a given country, the primary local channel is classified as USSD. If the mobile money prevalence is medium, low, or very low, the primary local channel is classified as an app. Libya is the only country not featured in the Index. Global Findex 2025 data indicates that account ownership is 66%; therefore, the primary local channel was determined as "app." For regional IPS, the country where the IPS is headquartered was used as the reference for primary local channels. PAPSS is headquartered in Egypt, GIMACPAY is headquartered in Cameroon, and TCIB is headquartered in South Africa.

A total of 15 IPS were ranked at the basic level, up from 12 in the 2024 report (see Table 2.8). Gamswitch (The Gambia), Meeza Digital (Egypt), Kenya Mobile Money, Madagascar Mobile Money, SIMO (Mozambique), SWAM (Morocco), eNaira and Nigeria Mobile Money (Nigeria), Tanzania Mobile Money, RTC (South Africa), and Uganda Mobile Money remained on the basic level of inclusivity. PayShap (South Africa) and Tunisia Mobile Money moved from not ranked to basic, having enabled the P2B use case. The newly launched Switch Mobile (Algeria) and LYPay (Libya) launched at the basic level of inclusivity. Although Meeza Digital (Egypt), Gamswitch (The Gambia), SWAM (Morocco), Tunisia Mobile Money, and Uganda Mobile Money allow the direct participation of banks and non-banks, all-to-all interoperability is not enabled. Therefore, they do not meet the "all licensed PSPs can participate" criterion that would be necessary for them to advance to the progressed level of inclusivity.

Table 2.8 | Basic category breakdown

	Basic		Progressed			Mature		
	Minimum channel functionality	Minimum use case functionality	Participation by all PSPs	Pro-poor governance	Central bank involvement	Expanded use cases supported	Provide additional recourse	Serve end users at low cost
Switch Mobile (Algeria)	✗	✗	✗	-	-	-	-	-
Meeza Digital (Egypt)	✗	✗	-	✗	✗	-	✗	-
Gamswitch (The Gambia)	✗	✗	-	-	✗	-	✗	-
Kenya Mobile Money[31]	✗	✗	-	-	✗	-	-	-
LYPay (Libya)	✗	✗	-	-	✗	-	-	-
Madagascar Mobile Money[32]	✗	✗	-	-	✗	-	✗	-
SIMO (Mozambique)	✗	✗	✗	✗	-	-	-	-
SWAM (Morocco)	✗	✗	-	✗	✗	-	-	-
eNaira (Nigeria)	✗	✗	-	-	✗	-	✗	-
Nigeria Mobile Money	✗	✗	-	-	✗	-	-	-
PayShap (South Africa)	✗	✗	-	✗	✗	-	✗	✗
RTC (South Africa)[33]	✗	✗	-	✗	✗	-	-	✗
Tanzania Mobile Money	✗	✗	-	-	✗	✗	✗	-
Tunisia Mobile Money[34]	✗	✗	-	-	✗	-	✗	-
Uganda Mobile Money[35]	✗	✗	-	✗	✗	-	✗	✗

31 Data on Kenya Mobile Money's participants was missing; therefore, it could not be determined whether the IPS met these criteria.

32 Data on Madagascar Mobile Money's participants and pro-poor governance was missing; therefore, it could not be determined whether the IPS met these criteria.

33 Data on RTC's additional recourse mechanism was missing; therefore, it could not be determined whether the IPS met this criterion.

34 Data for Tunisia Mobile Money's business model was missing; therefore, it could not be determined whether they serve end users at a low cost.

35 Data on Uganda Mobile Money's participants were missing; therefore, it could not be determined whether the IPS allows participation by all PSPs.

Ten IPS were classified as having progressed inclusivity in 2025 (Table 2.9), up from 9 in 2024. EthSwitch (Ethiopia) advanced from the basic ranking, while IPN (Egypt) and eKash (Rwanda) jumped from being unranked to progressed. GIP (Ghana), Ghana MMI, MauCAS (Mauritius), NFS (Zambia), TIPS (Tanzania), ZIPIT (Zimbabwe), and GIMACPAY retained their progressed status. Note that while GIP and Ghana MMI are bank and mobile money schemes, respectively, they achieve cross-domain interoperability through bilateral integration; this is in contrast to Nigeria Mobile Money and eNaira, which use the NIP rail for processing transactions but are not bilaterally integrated with it, and therefore neither can support a full range of PSPs.

A significant factor preventing any IPS in the progressed category from reaching the mature level of inclusivity is the failure to support the required use cases. Most IPS in the progressed category do not enable G2P and cross-border payment use cases. EthSwitch and GIMACPAY appear to be closest: GIMACPAY needs to enable the G2P use case, while EthSwitch currently has only P2P, P2B, and B2B use cases enabled.

Table 2.9 | Progressed category breakdown

	Basic		Progressed			Mature		
	Minimum channel functionality	Minimum use case functionality	Participation by all PSPs	Pro-poor governance	Central bank involvement	Expanded use cases supported	Provide additional recourse	Serve end users at low cost
IPN (Egypt)	×	×	×	×	×	-	-	×
EthSwitch (Ethiopia)	×	×	×	×	×	-	×	×
GIP (Ghana)	×	×	×	×	×	-	-	×
Ghana MMI (Ghana)	×	×	×	×	×	-	-	×
MauCAS (Mauritius)	×	×	×	×	×	-	×	-
eKash[36] (Rwanda)	×	×	×	×	×	-	-	-
TIPS (Tanzania)	×	×	×	×	×	-	×	-
National Financial Switch (Zambia)	×	×	×	×	×	-	×	-
ZIPIT[37] (Zimbabwe)	×	×	×	×	×	-	×	-
GIMACPAY (CEMAC)	×	×	×	×	×	-	×	×

36 Data for eKash (Rwanda)'s business model was missing; therefore, it could not be determined whether it serves end users at low cost.

37 Data for ZIPIT (Zimbabwe)'s business model was missing; therefore, it could not be determined whether they serve end users at low cost.

Improving its standing from 2024, NIP (Nigeria) became the first IPS to achieve a mature inclusivity ranking in 2025. It did this by meeting the additional criteria for recourse mechanisms (see Table 2.10).

Table 2.10 | Mature category breakdown

	Basic		Progressed			Mature		
	Minimum channel functionality	Minimum use case functionality	Participation by all PSPs	Pro-poor governance	Central bank involvement	Expanded use cases supported	Provide additional recourse	Serve end users at low cost
NIP (Nigeria)	×	×	×	×	×	×	×	×



2.5 | Conclusion

IPS stakeholders are increasingly recognizing that inclusivity is essential for enabling fair access for all licensed service providers, equal opportunities for system participants, and high value for end-users. At the ecosystem level, growing customer demand for convenience and a seamless user experience is also propelling the move toward all-to-all interoperability across the continent.

In the next chapter, we turn our attention to those end users, focusing on the needs and experiences of individuals and small businesses in four countries across North, Southern, and West Africa, each with distinct digital payment environments: Angola, Côte d'Ivoire, Madagascar, and Tunisia. We describe the market context in those countries and share data on the prevalence of digital payments, demographic trends in their use, the dominant channels and use cases, and the barriers and enablers end users face at different stages of the digital payments customer journey.



Case Study

NIP Nigeria

Origin Story

Challenge

The Nigeria Inter-Bank Settlement System (NIBSS) launched its instant payment system (IPS) in 2011 with the explicit goal of increasing financial inclusion. Only 30% of Nigeria's 85 million adults had access to formal financial services at that time (World Bank 2011). NIBSS Instant Payment (NIP) grew out of a strategic framework established by the Central Bank of Nigeria (CBN) in 2007, known as the Cashless Policy and Payment System Vision 2020. This framework established a roadmap for transitioning from cash-dominated to digital payment systems, with NIP as a supportive element.

At launch, NIP was available 24/7. However, its immediate impact on financial inclusion was constrained by the fact that excluded populations lacked digital access. For example, adults in rural areas had limited opportunities to access financial services due to a lack of banking infrastructure (6.8 branches per 100,000 adults) (EFInA, 2010). Internet penetration was also low, and agent networks in rural areas were sparse. As NIP evolved, however, it transformed into a financial inclusion enabler that helped address accessibility and affordability barriers.

Adding value

NIBSS was established in 1992 by the Bankers' Committee—a collaborative body for the CBN and the country's deposit-taking banks—as a shared service to help streamline interbank payments and settlements and promote electronic payments. Before the development of NIP, Nigeria's payment ecosystem was dominated by cash transactions (CBN, 2021d). The limited electronic payment options included:

- **NIBSS Electronic Funds Transfer (NEFT):** A non-real-time electronic transfer system that typically took 24-48 hours to settle.
- **Cheque clearance:** Processing required between three and five days through multiple clearinghouses.
- **Card payments:** Limited to ATM withdrawals.
- **Over-the-counter transfers:** Manual, paper-based processes requiring physical branch visits.

The resulting payment landscape was inefficient, with long settlement times, high operational costs, and limited accessibility, particularly in rural areas. According to the EFInA A2F survey from 2010, only 22% of Nigerian adults made electronic payments.

NIP was designed to address the heavy reliance on cash by offering an electronic alternative with comparable benefits—including immediate settlement, universal access, and continuous availability—but without the security risks and inefficiency inherent in the use of physical currency (Babalola, 2022). Since its inception, NIP has evolved significantly, expanding from a basic electronic funds transfer (EFT) service into a comprehensive payment system that is the backbone of Nigeria's digital financial ecosystem.

NIP's value proposition centers on six key elements:

1. **Immediacy and reliability**: The system provides 24/7 instant payment capabilities with a maximum transaction processing time of 20 seconds; most transactions take less than one second (NIBSS, 2025b). This represents a significant improvement from the 45-second maximum reported in SIIPS 2022, enhancing both user experience and operational efficiency.
2. **Universal interoperability**: NIP connects all financial institutions in Nigeria through a hub-switch model, ensuring seamless transactions between banks, microfinance

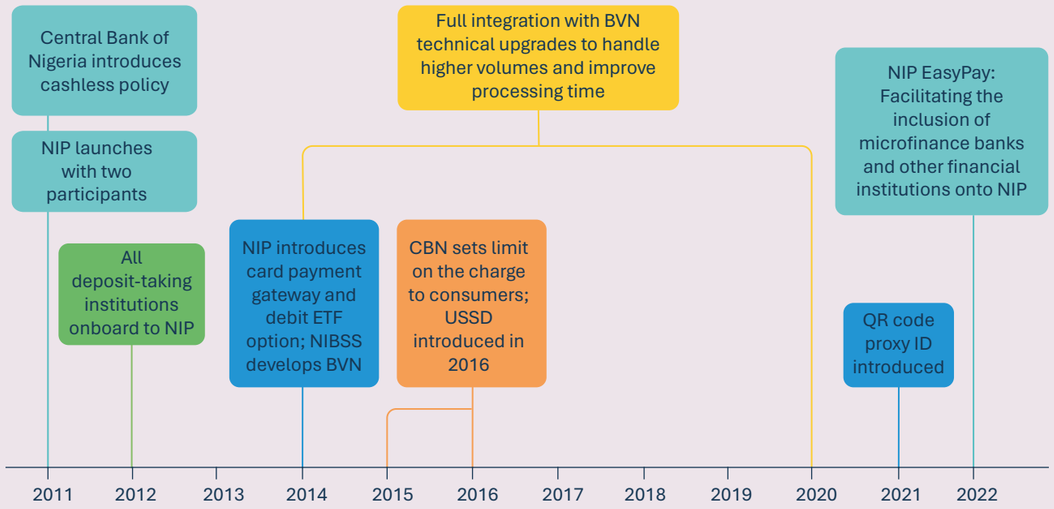
institutions (MFIs), mobile money operators (MMOs), and other non-bank payment service providers (PSPs).

3. **Diverse channel options**: The system supports various channels, including USSD, mobile apps, web interfaces, ATMs, POS terminals, and QR codes.
4. **Comprehensive use cases**: NIP facilitates a wide range of payment use cases, including government collections (P2G), business-to-business transfers (B2B), salary disbursements (B2P), and government-to-person payments (G2P). Recent enhancements include cross-border payment capabilities through the Pan-African Payment and Settlement System (PAPSS).
5. **Immediate liquidity for merchants:** Through integration with the AfriGo card scheme, NIP offers instant settlement for merchants. This rapid access to funds is particularly beneficial for small and medium-sized enterprises that require immediate liquidity.
6. **Price reduction over time:** NIBSS has progressively reduced its pricing for participants; the current rate is a flat fee of NGN 3.75 ($0.0024) per transaction, from NGN 46 ($0.03) in 2021.(All dollar currency references refer to United States dollars (USD). Fee rates from 2021 were shared during AfricaNenda's expert interviews with NIBSS.) By lowering costs, NIP aims to make digital payments more affordable for end users. This has facilitated strategies like "free transfers" by emerging fintechs and commercial banks (Sterling Bank, 2025).

Since its launch, NIP has played a crucial role in reducing Nigeria's reliance on cash. The COVID-19 pandemic accelerated the shift to digital payment methods; stakeholders described the impact of the pandemic on the payments sector as "night and day." Even after the crisis subsided, behavioral patterns favoring digital payments continued.

According to NIBSS leadership, "NIP has become synonymous with transactions in Nigeria." The system continues to evolve through technological advancements, with ongoing development of a "National Payment Stack." This aims to position NIP to support Nigeria's broader digital public infrastructure (DPI) objectives by integrating with national identity systems and enabling enhanced data exchange across public and private sectors.

NIBSS development timeline



Before broader deployment, NIP was initially limited to two participating institutions to allow for controlled implementation and assessment. In 2012, the system onboarded all deposit-taking institutions to NIP, enabling a network effect across Nigeria's financial system. In October 2012, Nigeria issued its first National Financial Inclusion Strategy. This gave the cashless policy momentum and led to a 2012 pilot in Lagos, followed by further piloting in 2013 in five additional states and the Federal Capital Territory (FCT).

NIP achieved further regulatory and technical advancements from 2014 through 2025, as follows:

In 2014, NIP integrated card payment gateway functionality and debit Electronic Funds Transfer (EFT) options. The CBN developed the Bank Verification Number (BVN) system, which would later enhance transaction security and provide biometric identity verification for financial services, reducing fraud risk. The cashless policy helped to advance nationwide coverage in the remaining 30 states (CBN, 2014).

In 2015, the CBN established transaction fee limits for instant payments to ensure affordability while maintaining system sustainability.

In 2016, NIP integrated USSD as a transaction channel, significantly broadening NIP's reach to include basic phone users without smartphone or internet access. The system also increased the number of settlement windows from once to twice daily (it would later expand to four times daily in 2020), improving liquidity management for participating institutions and mitigating settlement risk. The settlement requirements were formalized in the 2018 Regulation on Instant (Inter-Bank) Electronic Funds Transfer Services in Nigeria, a regulatory framework for instant payments (CBN, 2018).

In 2020, NIP integrated with the Bank Verification Number (BVN) system. By 2021, QR code functionality expanded accessibility and use cases, particularly for merchant payments.

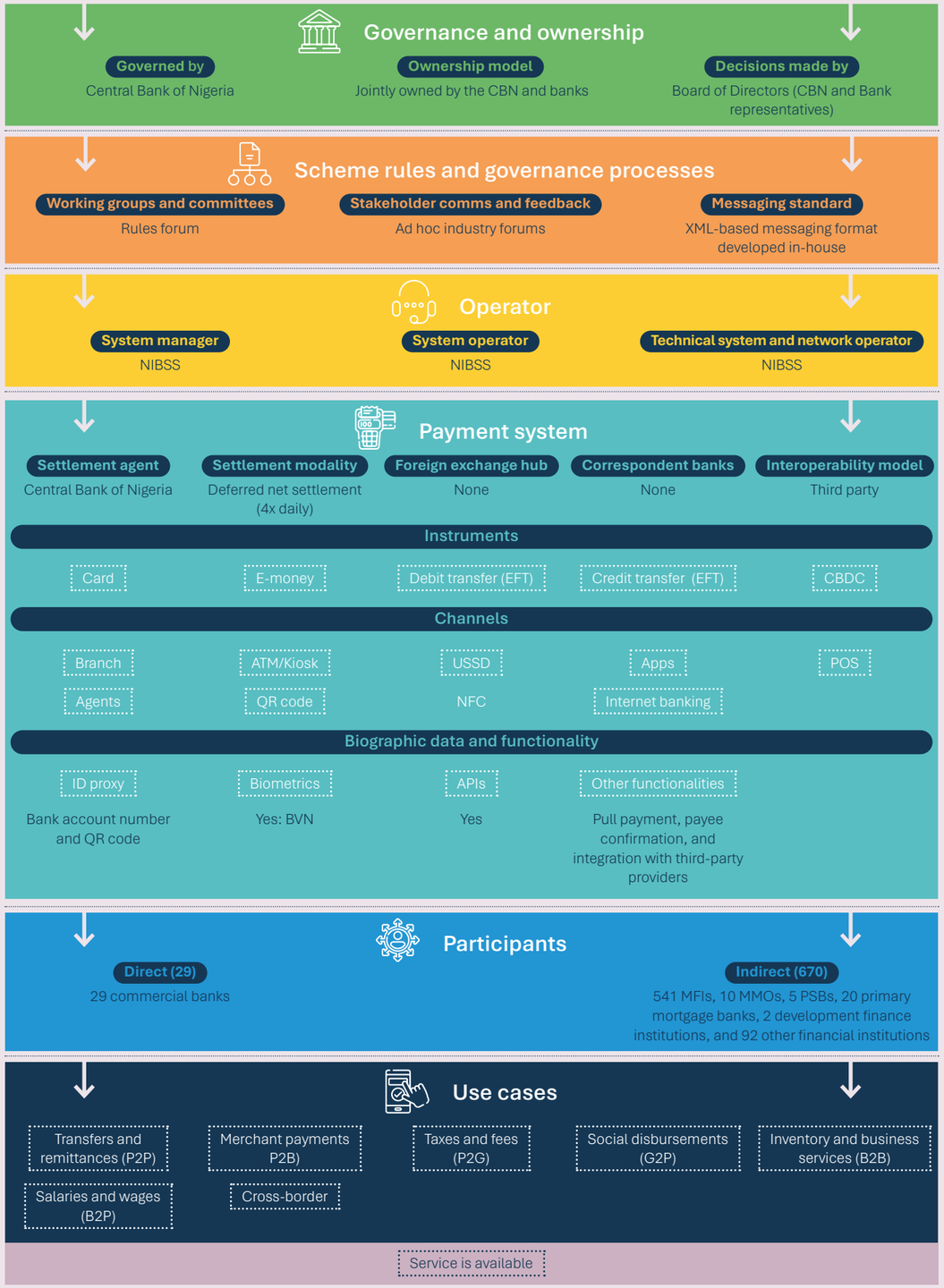
In 2022, NIP assumed the role of aggregator for PAPSS in Nigeria, positioning it as a central component of the regional financial infrastructure. Easy Pay and AfriGo launched in 2023. EasyPay facilitates instant payments for non-bank financial service providers (FSPs). AfriGo is Nigeria's domestic card scheme linked to NIP for instant merchant settlement (Afrigopay, 2023a).

In 2025, NIBSS is actively transitioning to the ISO 20022 messaging standard. It expects the initial transactional phases to be completed within the year. Strategically, the CBN positions NIP as a comprehensive "National Payment Stack," forming the payment component of Nigeria's digital public infrastructure (DPI). This evolution aligns with the global trend toward integrated digital infrastructure to support economic progress.



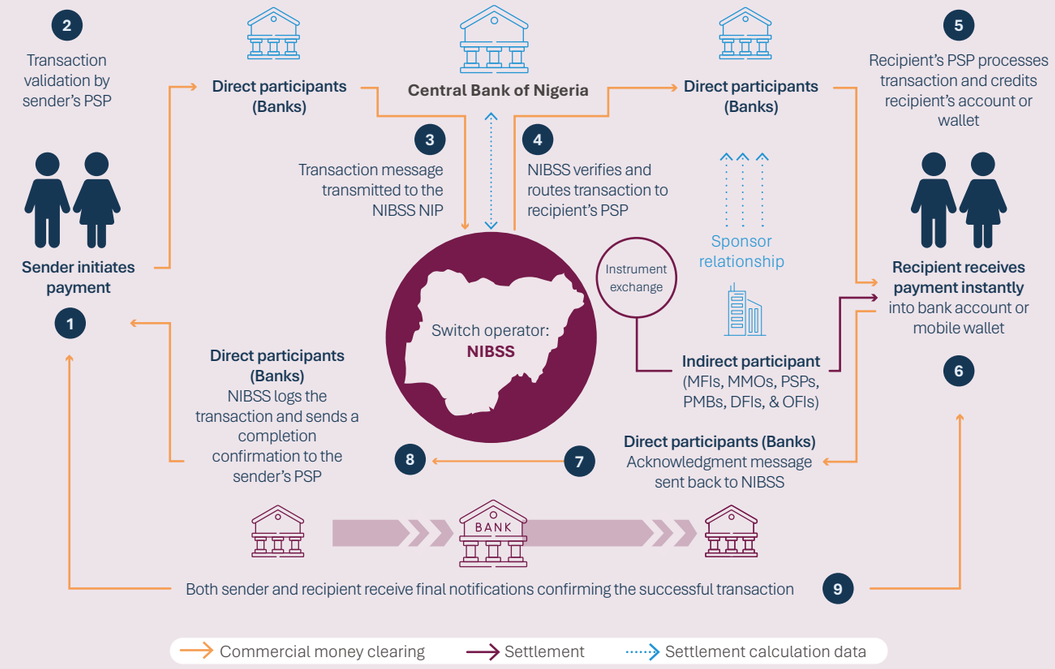
Governance and operations

Payment system overview



The NIP system operates a centralized hub-and-spoke clearing model that connects all licensed financial institutions and PSPs in Nigeria. The system integrates 29 commercial banks directly and 670 non-bank financial institutions, including 541 MFIs, 10 MMOs, five PSBs, 20 primary mortgage banks, two development finance institutions, and 92 other financial institutions. Participation is mandatory for all deposit-taking institutions, per the Regulation on Instant (Inter-Bank) Electronic Funds Transfer Services in Nigeria 2018.

NIBSS NIP transaction flow



NIP transactions are available 24/7/365, with real-time funds availability to beneficiaries regardless of settlement timing. Recipient institutions provide immediate credit to beneficiaries, while settlement between institutions occurs at predefined intervals.

Settlement operations utilize a deferred net settlement (DNS) mechanism through the CBN Real-Time Gross Settlement (RTGS) system. All participating institutions maintain dedicated settlement accounts at the CBN, ensuring that final settlement occurs with central bank money, eliminating counterparty risk, and providing settlement finality. The system processes settlements four times daily at 10:00, 15:00, 15:30, and 18:00 local time (CBN, 2020). To mitigate associated credit risk, participating institutions must maintain collateral in the form of Federal Government Treasury Bills at levels corresponding to 110% of their largest historic net debit positions.

As mentioned, NIBSS functions as the designated aggregator for cross-border payments through PAPSS. The system converts ISO 20022 messaging formats used by PAPSS into local messaging formats used by Nigerian institutions to enable currency conversion and settlement. Domestic transactions settle in Nigerian Naira (NGN); cross-border transactions settle through corresponding arrangements with central banks in participating countries and are coordinated through PAPSS. This eliminates the need for dollar-denominated intermediation, reducing transaction costs and foreign exchange dependencies while promoting intra-African trade.

Governance structure

The NIP system operates under a hybrid governance structure that combines industry participation with central bank oversight. This structure reflects the NIBSS ownership model, which includes all licensed commercial banks in Nigeria and the Central Bank of Nigeria (CBN), creating a collaborative governance framework.

The NIBSS board of directors includes a deputy governor from the CBN (in charge of financial system stability) and the CEOs of deposit-taking banks as non-executive directors. This structure encourages shared responsibility across industry and regulators for guiding NIP's strategic direction and major policy decisions.

As the operator of the NIP system, NIBSS is responsible for the day-to-day functioning of the payment infrastructure, including processing transactions, maintaining the technology platform, and ensuring interoperability among participants.

As chief regulator of NIP, CBN is responsible for regulatory supervision, ensuring compliance with relevant laws and guidelines, and monitoring the system's overall stability and efficiency. The CBN also functions as the settlement agent for the NIP system and is responsible for the final and irrevocable transfer of funds between participating financial institutions to settle payment transactions.

The NIBSS board of directors holds significant decision-making power. NIBSS ensures broader participation from other stakeholders through focus group meetings and regular industry engagement sessions, allowing for input from all system participants regarding development and operations.

Functionality

NIP serves as a real-time interbank payments system in Nigeria, designed to handle high volumes of retail transactions.

The NIP system supports a wide array of channels, including USSD, agent networks (e-money and banking), apps, browsers, QR codes (both static and dynamic), POS terminals, and ATMs. The system also enables transactions using various instruments such as credit EFT, debit EFT, e-money, and central bank digital currency (CBDC).

Identity aliases/proxies, including account numbers and QR codes, are a key feature. NIP has integrated the Bank Verification Number (BVN), a biometric-based financial sector ID, to enhance security and enable convenient authentication at ATMs. Furthermore, NIBSS introduced the NQR platform to facilitate real-time, account-based QR payments for the person-to-business (P2B) use case. The system also supports requests to pay and integration with third-party providers, such as Google Wallet and Apple Pay.

Operationally, NIP has a maximum transaction time of 20 seconds, though most transactions are processed in under a second. The system offers real-time payment confirmation messages (notifications) and transaction validation (payee confirmations).

Technical standards

NIP utilizes a hub-switch model with the Nigerian Central Switch connecting directly to commercial banks, microfinance institutions, and MMOs, and supporting various functionalities through APIs. Additionally, the NQR platform, which facilitates real-time, account-based QR payments within the NIP system, was designed to be Europay/Mastercard/Visa (EMV) compliant.

The NIP system is based on messaging standards developed in-house for domestic transactions. However, NIBSS is upgrading to the ISO 20022 messaging standard, with the initial transactional phases targeted for completion in 2025. This transition aims to create a more flexible and adaptable infrastructure capable of handling various financial and non-financial messages customized for local needs. ISO 20022 has already been implemented for cross-border payment requests via PAPSS.

When it was initially conceived, NIP only supported P2P payments and P2B push EFTs; the NIP system now supports a wider range of use cases, including P2P, P2B, B2B, and B2P transactions. It also facilitates government collections (P2G) and government-to-person (G2P) payments. Additionally, NIP enables various cross-border payment scenarios (P2P, P2B, B2B) through its integration with PAPSS.

Business model

NIP's development was funded and created in-house by NIBSS. The initial build was intentionally limited to manage upfront investment, with plans for later improvements and upgrades. The phased approach to technical development, starting with basic EFT credit transfers and gradually adding functionality, allowed for controlled and internally funded expansion.

NIP operates on a not-for-loss business model, which aims to achieve the organization's mission while maintaining overall financial sustainability. In this model, any surplus is reinvested to further the organization's mission. NIBSS itself operates on a cost-recovery model where pricing is set to match the cost of offering the service alone without profit. As mentioned, participants on NIP pay a flat fee of $0.0024 per transaction to NIBSS, lower than $0.03 in 2021. This reduction has enabled strategies like "free transfers" offered by emerging fintechs, such as Opay, and leading banks, such as Sterling Bank.

Distinct from participant fees are consumer/end-user fees, which the CBN limits. Currently, the CBN-approved charges are $0.05 per transaction for values above $54, $0.03 per transaction for values between $5 and $54, and $0.01 per transaction for values less than $5 (CBN, 2019). These limits were introduced in response to customer complaints of price gouging. They aim to increase consumer confidence, ensure fairness, and drive use.

Scheme rules

The NIP is governed by detailed national financial regulations published by the CBN, known as the Regulation on Instant (Inter-Bank) Electronic Funds Transfer Services in Nigeria, and last amended in 2019 as the Regulation on Electronic Payments and Collections for Public and Private Sectors in Nigeria. This regulation includes guidelines for all NIP participants (direct and indirect). These rules are available to all participants and to the public on the CBN website. This public availability ensures transparency, allowing all stakeholders to understand the operational framework of the system, which includes payment processing, risk management, and participant responsibilities within the NIP ecosystem.

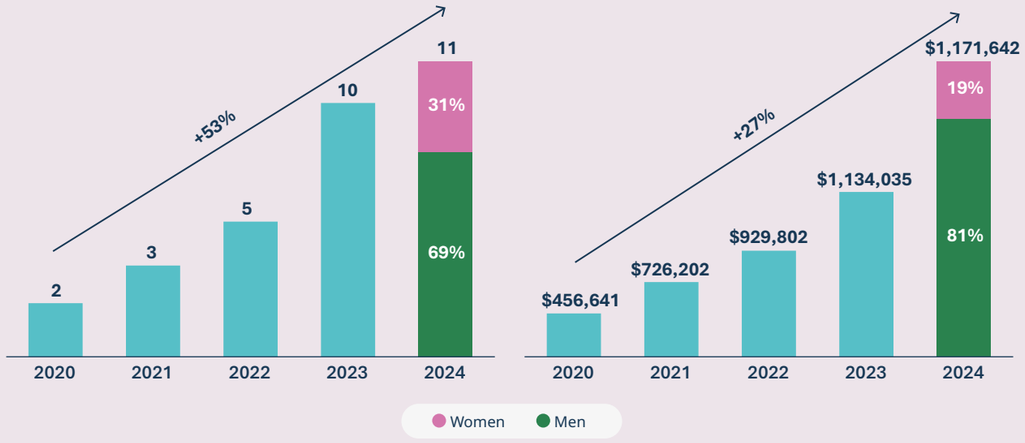
NIP scheme rules regarding management and enforcement involve several key mechanisms. NIBSS has a dispute resolution system (DRS) specifically for NIP that outlines consumer recourse requirements. DRS requires banks to resolve transaction disputes within 72 hours, with automatic triggers for systemic defaults if the participant does not meet this timeline. Furthermore, the scheme rules provide an escalation path for consumer complaints to the CBN consumer protection department. Since its founding in 2012, the CBN consumer protection department has managed dispute resolution, arbitration, and sanctions for non-compliance. This multi-layered approach, involving both NIBSS's internal mechanisms and CBN oversight, ensures adherence to the scheme rules and protects the interests of participants and end-users.

Volumes and values processed by the payment system

The NIP system has 57.7 million unique users, 52% of the adult population. NIP data for 2020 to 2024 shows an increase in transaction volumes from 2 billion in 2020 to 11 billion in 2024, representing a compound annual growth rate (CAGR) of 53%

over five years. Transaction values grew from $457 billion to $1.1 trillion, a CAGR of 27%. The gender distribution has remained heavily skewed toward males, who accounted for 69% of transaction volumes and 81% of transaction values in 2024, suggesting a significant gender gap in economic and financial inclusion.

NIBSS transaction volumes (billions) and values (millions)



The growth in NIP transaction volumes and values is attributable to several factors. First, the CBN cashless policy has been a key driver for increasing reliance on digital transactions. The COVID-19 pandemic further advanced the use of digital payment channels for both individuals and organizations, and transaction volumes remained high even after the pandemic subsided. Furthermore, the phased development of NIP, beginning in 2011, started with limited functionality consistent with the low level of digital inclusion at the time, and gradually added more use cases. The CBN's regulation of consumer fees helped to encourage adoption, especially among lower-income populations. More recently, the emergence of fintechs offering free transactions to gain traction in the market has driven additional momentum and forced established banks to follow suit. Lastly, the increasing preference for account-to-account transfers over card payments, based on faster dispute resolution, avoidance of card restrictions, quicker merchant settlement, and cost considerations, has contributed to NIP's growth.

Regulatory framework

The CBN has issued guidelines and regulations that shape NIP's operation, covering areas such as instant electronic funds transfer services, risk management, consumer recourse mechanisms, and PSP licensing. Key regulatory instruments include the Guidelines on Instant (Inter-Bank) Electronic Funds Transfer Services (2015), amended as the Regulation on Electronic Payments and Collections for Public and Private Sectors in Nigeria (2019), the Nigerian Payments System Risk and Information Security Management Framework (2019), and the Guide to Charges by Banks, Other Financial and Non-Bank Financial Institutions. Participants in the NIP system must obtain a license and comply with all relevant regulatory requirements.



Inclusivity learnings

NIP has made remarkable progress in its inclusivity journey, advancing from a basic level on the AfricaNenda inclusivity framework in the SIIPS 2022 report to the progressed level in the SIIPS 2024 report and finally to the mature status in 2025. NIP is Africa's first IPS to reach mature inclusivity status. The system now supports most use cases, meeting basic requirements like minimum channel, use case, and instrument functionality, as well as progressed requirements including cross-domain participation for all licensed PSPs, pro-poor governance mechanisms, and central bank governance involvement. The system has also implemented additional recourse mechanisms and not-for-loss provisions, ensuring consumer protection, fair pricing, and trust. This evolution reflects Nigeria's commitment to financial inclusion through a digital payments infrastructure that serves diverse stakeholder needs.

NIP has embraced the following drivers of inclusion:

- **A phased-development approach to building a fit-for-purpose system.** NIBSS developed NIP in-house and launched it with limited functionality and only two participating banks. This approach helped to limit the upfront investment, especially given the nascent state of the digital payments sector at that time. As the value proposition of instant payments became apparent, more participants joined; as of the publication of this case study, NIP has 699 direct and indirect participants. NIBSS has continuously enhanced the system and mandated upgrades for participants to ensure it remains adaptable and responsive to market needs. In-house development fostered the necessary skills and knowledge for these continuous improvements.

- **NIP promotes smooth system performance, crucial for building trust and ensuring sustainability.** Initially, NIP aimed for a transaction clearing time of 50 seconds. Not all providers could meet this standard, which negatively affected the customer experience and threatened the reputations of all connected banks. To address this, NIBSS improved its technical capacity and transaction processing system so as to shorten the total processing time. The result is a shortened clearing time of 20 seconds. Furthermore, NIBSS sends each participant bank CEO an Independent Weekly Efficiency Rating report that ranks its average transaction processing time and other variables against the industry average. This aims to incentivize banks to improve service quality and meet higher standards, fostering healthy competition and driving better uptime and performance.

- **Digital identity infrastructure, particularly the Bank Verification Number (BVN) system.** The biometrically enabled BVN underpins various authentication methods. It allows customers to verify their identity and conduct transactions through channels like ATMs using their fingerprint and BVN number. This enhances convenience and security. Furthermore, NIBSS developed and launched the Financial Authentication Service (FAS) to validate and verify national identity numbers (NIN) and BVN numbers, with potential for future integration into the NIP payment flow to strengthen identity verification and broaden access points for individuals across different demographics.

- **Enabling many use cases and supporting all payment channels except NFC.** Initially supporting only P2P and P2B push EFTs, NIP has expanded to accommodate most use cases, including B2P, B2B, G2P, P2G, and cross-border transactions. It also supports channels such as USSD, mobile apps, browsers, POS, ATMs, QR codes, agents, and branch.

- **Fee transparency and fairness.** Initially, banks set the fees for instant EFT services with limited price transparency, leading to customer complaints about price gouging. The CBN intervened by issuing regulations that capped customer fees between NGN 10 and NGN 50, according to transaction size. This regulatory action increased consumer confidence and reduced the price variation charged by different providers. The relatively low cost also encourages use among lower-income populations sensitive to fees, making the system more inclusive.

- **A tiered participation model.** While most direct participants are commercial banks, CBN-licensed non-banking financial institutions can participate indirectly through sponsorship and client settlement arrangements with direct participants. Indirect participants include MFIs, MMOs, and PSPs. This model enables a broader range of financial service providers to offer instant payment services to their customer base, extending the reach of NIP to underserved segments of the population who may not directly interact with traditional commercial banks.

- **The introduction of an NIN as the basic requirement for account opening.** CBN has allowed the use of the NIN to open tier-one bank accounts. This initiative lowers the barriers to access to formal financial services. While tier-one accounts may have certain transaction limits, account holders have access and the possibility of upgrading to accounts with more features after providing further identification, such as the BVN.



3

Evolving end-user behavior

Digital payment adoption and usage are higher among individual end users in the surveyed countries. Merchant adoption and sustained usage hinge on trust, broad acceptance within the ecosystem, and tailored support for diverse user profiles.

As with previous editions of the SIIPS report, AfricaNenda Foundation carried out in-depth end-user research to better understand the experiences and perspectives of individuals and micro, small, and medium enterprises (MSMEs) with digital payments. This year's research took place in Angola, Côte d'Ivoire, Madagascar, and Tunisia. Between February and April 2025, we surveyed one hundred end users in each country and conducted forty in-depth interviews. There were a total of 437 participants, about half of whom were individuals and half were business owners, including those of microenterprises and small businesses. See Annex A for the full methodology.

The research aimed to uncover the specific needs of excluded and underserved segments, particularly women and rural micro-enterprises. It also sought to understand why some users start and then stop using digital payments. The study focused on rural, peri-urban, and urban areas where digital payment services are available, but services are either inaccessible or not optimally used by the population.

The findings from the 2025 end-user research are consistent with those from previous SIIPS studies. In brief, individual users who have access to and understand the value of digital payments use them frequently, often daily or weekly. Frequent income earners are particularly likely to be active users, though age and gender influence adoption and usage patterns. Merchant adoption is not automatic, however. Instead, it depends on customer demand and easy access to digital payment instruments.

With that overview, this chapter unfolds first by summarizing the digital payment context for each of the four study countries, followed by the usage patterns found within each and analyzed according to the different user groups: individuals versus merchants; women versus men; "younger" adults between the ages of 18 and 29 versus "older" ones who are older than 30; and micro-enterprises with no or one employee versus small businesses with between two and five employees.

New with this year's research are five qualitative profiles of the end users represented in the sample, which we use to highlight common perceptions and behaviors across the sample and how they drive the digital payment enablers and barriers across the customer journey.

3.1 | Country context

The research methodology used in the SIIPS 2025 research draws closely from previous studies, using the same approach to categorize the market in each country as either nascent, emerging, or leading. This ranking is based on the share of adults with accounts and using digital payments, as quantified by the Global Findex 2025 (AfricaNenda used FinScope data to classify Angola, due to a lack of Global Findex data for the country). Countries where 30% or less of the adult population use digital payments are nascent; usage rates between 31% and 65% are emerging; and above 66% are leading. By that metric, Angola and Côte d'Ivoire are emerging markets; Madagascar and Tunisia are nascent (Table 3.1). AfricaNenda also examined the related aspects of account ownership, connectivity, and mobile technology access using complementary data from the International Telecommunication Union (ITU) and GSMA.

Table 3.1 | Overview of digital and financial inclusion per country

Country		Angola	Côte d'Ivoire	Madagascar	Tunisia
Classification		**Emerging**		**Nascent**	
Financial inclusion					
Digital payment inclusion	Proportion of the population using digital payments over the past year [Global Findex 2025].	36%* *(FinScope Angola 2022)*	56%	22%	24%
Financial account penetration	Proportion of the adult population that owns a formal account [Global Findex 2025].	39.7%** *(FinScope Angola 2022)*	58%	24%	37%
No. of mobile money agents	Number of registered mobile money agent outlets per 1,000 km^2 [IMF, 2022].	1.90	1,318	199	5.6 (2023)
No. of bank branches	Number of commercial bank branches per 100,000 adults [IMF, 2022].	7.16 (2023)	4.20	1.63 (2023)	22 (2023)
Digital inclusion					
Mobile network coverage	Proportion of the population within range of at least 4G/LTE mobile-cellular signal [ITU, 2023].	76.8%	91.5%	33.6%	96%
Internet penetration	Proportion of the population using the internet from any location over the past 3 months [ITU, 2023].	44.8%	40.7%	20.4%	72.4%
Mobile phone penetration	Proportion of the population that owns a mobile (cellular) phone or smartphone with at least one active SIM card for personal use [ITU, 2023].	55.5%	66.5%	42.4%	90.9%
Smartphone penetration	Proportion of individuals who own a smartphone with at least one active SIM card for personal use [GSMA, 2025].	47.2%	111%	36.3%	107.3%

Country		Angola	Côte d'Ivoire	Madagascar	Tunisia
Classification		Emerging		Nascent	
User adoption					
Individual weekly users	Proportion of the sampled respondents using digital payments weekly (N=270).	88%	86.4%	88%	67.7%
Merchant weekly users		100%	92.9%	95.8%	44.5%

***** Angola: Proportion of adults who have a transactional platform or account that allows them to transact digitally via a bank account. ****** Angola: Proportion of adults who use a formal financial account (mix of bank and non-bank).

Data marked with a year in brackets indicates that more recent data was available.



Angola: Angola is an *emerging market* with low levels of digital payment adoption and limited transaction account ownership, leaving a large share of the population excluded from formal financial systems. Though major commercial banks have driven uptake in card usage and point-of-sale (POS) transactions, making these the most common digital payment channels, the majority of the population still relies on cash.

The payment market is dominated by MULTICAIXA Express (MCX), a payment platform that provides the financial infrastructure on which most banks rely for payments via cards, POS terminals, QR, and ATM transactions. The provider also acts as a clearinghouse for interbank payments, direct debits, and fund transfers. In July 2023, Empresa Interbancária de Serviços (EMIS) and the Bank of Angola launched Angola's new instant payment system (IPS), Kwanza Instantâneo (KWiK), to increase financial inclusion by catering to users without bank accounts.

Long ATM queues during peak times are encouraging the shift to digital channels, particularly through cards and mobile apps. While mobile network coverage is relatively widespread, low internet usage and moderate smartphone penetration continue to limit the expansion of more sophisticated digital services. Mobile money prevalence is low, and the sparse distribution of mobile money agents limits mobile money access, especially in rural areas.



Côte d'Ivoire: Classified as an *emerging market*, Côte d'Ivoire ranks highest in digital payment inclusion and financial account penetration among the countries in this year's study. Digital payment usage is moderate at 48%, supported by high mobile phone ownership, strong internet availability, and growing adoption of mobile money accounts. The significantly higher number of mobile money agents offsets the relatively low number of commercial bank branches.

Mobile wallets, especially those linked to mobile money providers, are the most used digital payment tools. Mobile money operators (MMOs) and fintechs dominate the payments landscape, offering QR-enabled payments, web payments, and cross-border transfers. Smartphone access, while still facing gaps in usage for digital payments, holds strong potential; Côte d'Ivoire is among the top six countries in Africa for smartphone adoption,

according to GSMA. Despite this, end users still rely on cash-in/cash-out (CICO) agents. Internet usage lags due to cost and reliability constraints. Other issues, such as limited bank-to-mobile wallet cross-network interoperability and high transaction costs, are key barriers.



Tunisia: A *nascent market* in digital payments usage and adoption, Tunisia remains predominantly a cash-based society, and a significant portion of the population remains outside the formal financial system. Mobile money usage is low, despite high network coverage, mobile phone and smartphone access, and internet coverage, as well as existing e-money regulations.

The Tunisian postal service, La Poste Tunisienne, plays a significant role in increasing access to digital payments and advancing financial inclusion. The Central Bank of Tunisia's regulatory sandbox and the Startup Act aim to facilitate the startup and growth of new financial technology companies. Foundational infrastructure, including strong mobile network coverage and a growing internet user base, creates opportunities for more people to be included in formal financial services.



Madagascar: Madagascar is categorized as a nascent market. It has the lowest adoption of digital payments across the countries included in this year's research, with low account ownership and few mobile money agents. Key inhibitors include challenges with mobile network coverage, mobile phone penetration, internet coverage, and smartphone penetration, all important foundational issues that must be addressed before widespread digital payments can be realistically achieved. Despite this, several concerted efforts have been made to drive digital financial inclusion, driven by a combination of private sector innovation by MMOs and fintechs and strategic government intervention through the Central Bank of Madagascar.

The main drivers of digital payment growth have been the country's MMOs. Led by Orange Money, Airtel Money, and MVola by Telma, they offer payment services as well as savings, credit, insurance, etc. The Central Bank of Madagascar has also been instrumental in laying the foundation for the expansion of financial inclusion, recently launching the National Financial Inclusion Strategy (2024-2028) aimed at increasing the access and use of financial services. In addition, the apex bank spearheaded the digitalization of government-to-person (G2P) payments, like teachers' salaries and student stipends, and person-to-government (P2G) payments by enabling tax collections. The central bank has also been instrumental in driving the digital currency pilot, dubbed e-Ariary. The microfinance institutions (MFIs) in the country have also started disbursing digital loans to their customers.



3.2 Digital payments usage patterns and trends

Summary findings on usage patterns

The 2025 end-user research shows trends consistent with SIIPS findings from 2024 and 2023. In all countries, the majority of digital payment users make digital payments daily or weekly. Age, gender, and income frequency all influence use. Respondents older than 30 years of age (hereafter referred to as "older" users for this report) use digital payments more frequently than respondents between the ages of 18 and 29 ("younger" users). However, the age gap is less pronounced in mobile money markets like Côte d'Ivoire and Madagascar, where financial accounts are more easily accessible. Recurring digital income—such as wages, customer payments, and remittances from family—is associated with higher adoption of digital payments. Among respondents in Tunisia, salaried employees also earn gift vouchers, which are widely accepted in restaurants and local markets. Women respondents are interested in digital payments but face limited support, lower confidence, and concerns about fraud. Gender norms that contribute to reducing women's participation in household financial decision-making also drive the tendency to use shared accounts rather than opening their own.

> **"I am comfortable with bank transfers being done by my husband in his account when paying the import suppliers. I do not feel the need to open my bank account."**
>
> — Woman, merchant, Côte d'Ivoire

On average, for all countries, two-thirds of sampled respondents use digital payments frequently, and one-third rarely use them. For this latter group, cash is prevalent because it is convenient, and people face digital payment access barriers.

To supplement the analysis by gender and age, AfricaNenda has constructed behavior "profiles" that emerged from this year's qualitative interviews. The five distinct digital payment profiles are:

- **The digital mover** embraces a fully digital lifestyle but can occasionally encounter usability issues and inconsistent features. Around 15% of the sample conforms to this profile.
- **The situational user** opts for digital payments when they offer clear benefits, but reverts to cash when digital is unavailable or less reliable than cash. About 35% of sample respondents conform to this profile.
- **The cash-first user** is an individual who earns money through casual work or from a farm stand or micro-enterprise kiosk. They prefer familiarity and simplicity and often face digital literacy and access gaps, which force them to rely on family members for support in navigating digital channels. Their experience highlights the looming digital divide if there are no improvements to the user experience. Ten percent of sample respondents conform to this profile.
- **The structured boss** runs a formal business and wants digital payment systems that are safe and fast, and make it easy to track expenses, supervise employees, and offer great experiences for customers and suppliers. Around 15% of respondents conform to this profile.
- **Juggling merchants** run micro businesses, and their customers differ in their payment preferences, requiring them to manage both cash and digital payment inflows. Over 25% of sample respondents conform to this profile.

These profiles resurface throughout the chapter. For now, they offer a simplified lens representative within the study sample through which to understand the qualitative user motivations and perceptions behind the quantitative usage patterns.

Digital payment user group analysis

User groups within each country exhibit varying levels of weekly digital payment usage (see Table 3.2). Weekly usage captures both daily and less frequent use. A larger share of individual customers than merchant respondents use digital payments at least once a week in all countries except for Angola, where merchants are the more dominant users.

Overall, digital payment adoption between individuals and merchants is uneven, and uptake is slow among the general population. Merchants also face distinct barriers, including cash flow variability, which makes digital payments less relevant at times (see Box 3.2).

Table 3.2 | Country-specific digital payment user group analysis

	All respondents			Individual respondents	Merchant respondents
	Merchants vs. individual customers	Age	Gender	Frequency of income	Size of business
Angola	Merchants use more (20%)	Older adults use more (24%)	Men use more (11%)	Frequent earners use more (34%)	No significant variance
Côte d'Ivoire	Individuals use more (12%)	Older adults use more (11%)	Men use more (7%)	No significant variance	Smaller use more (16%)
Madagascar	No significant variance	Older adults use more (7%)	Women use more (7%)	No significant variance	Larger use more (39%)
Tunisia	Individuals use more (9%)	Older adults use more (25%)	Men use more (10%)	Frequent earners use more* (31%)	Larger use more (19%)

Legend: Gap in percentage points (pp) between the share of users making digital payments at least once a week.
Numbers in parentheses represent the size of the gap in pps.
N = Individual customers 229; Merchants 208; All respondents 437.
Younger means 18-29 years old. Older means 30+ years old as the median age of respondents ranges between 33-36 years in all countries.
By smaller, we mean micro-enterprises with 0 or 1 employee, and by larger, we mean small businesses with between 2 and 5 employees.
Color legend: lightest orange 5-9 pp., medium orange 10-20 pp., and darkest orange larger than 20 pp.



Individual customer usage trends

Receiving regular income into an account is the clearest driver of digital payment use across use cases. Nearly two-thirds of respondents receive income digitally. Customers with frequent earnings tend to use digital payments weekly and for a broader variety of use cases, including utility payments as well as everyday spending. This pattern holds across most countries. Madagascar is the exception, as cash remains dominant.

In Angola and Madagascar, around one-third of respondents receive income in cash; a smaller share of income earners are paid in cash in Côte d'Ivoire and Tunisia, and respondents in Tunisia may also receive physical vouchers, which are accepted in restaurants and markets.

> **"I always pay in cash, and sometimes I use the restaurant vouchers given to me at work. I can use them to eat at restaurants or pay for goods at the market."**
>
> — Woman, individual user, peri-urban, Tunisia

Convenience is another major driver of digital adoption. It takes many forms, from avoiding queues or enabling quick payment to enabling online transactions. Digital payments are also more convenient in contexts that require payment records, for instance, to prove that one has paid school fees, or when users want to monitor and manage their finances to maintain control and accountability.

> **"I find that mobile money makes our lives easier, especially the app is easier to use, but with [Provider A], for example, you need an internet connection to transact."**
>
> —Woman, merchant, urban, Côte d'Ivoire

Age and location influence usage. Older respondents above the age of 30 use digital payments more frequently than younger ones. The difference is larger in Angola and Tunisia. One reason may be that the older respondents are also more likely to be frequent income earners. In addition, some younger respondents lack access to a national ID, which prevents them from signing up for digital payments or limits the transaction amounts they can send or receive with digital wallets. Nonetheless, younger users are more likely than older adults to use digital payments for non-routine purchases, such as tickets and online shopping. These types of purchases are especially high among students or those without household responsibilities. Overall, age differences are less pronounced in mobile money markets like Côte d'Ivoire and Madagascar, where mobile accounts are more accessible.

There are also clear differences in how urban respondents use digital payments compared with rural respondents. Urban respondents use digital payments more, likely because digital payment adoption is higher in urban environments, making it possible to pay more individuals and merchants digitally. Urban environments also have financial infrastructure, such as mobile networks, mobile money and/or banking agents, ATMs, and bank branches. Urban businesses are bigger and serve many customers, making digital payments more practical than handling cash. Finally, account ownership is generally lower in rural areas, where the lack of agents and branches, as well as poor network coverage, makes them harder to access and use.

Notwithstanding the rural-urban digital payment usage gap, rural respondents whose income comes from a trade, a formal job, or a larger business still use digital payments, reinforcing the impact of regular income on digital payment adoption.



Gender insights

Similar to the age and rural usage variations, there are also gender differences in digital payment usage among study participants. Women respondents are 7 percentage points more likely than men to say they need support registering for digital payments (64% vs. 57%; N=437). Women respondents are less likely to have formal jobs and more likely to have lower incomes, creating less opportunity to use digital payments (see Box 3.1).

Women respondents tend to have lower confidence using digital payments than men do, often due to fears of fraud, technical errors, and difficulty resolving disputes. Women get their information through word-of-mouth, not from provider channels, which increases exposure to misinformation. Some women respondents also share an account with a spouse or other household member rather than having one of their own. Despite these barriers, women acknowledge the convenience of digital payments, especially for receiving remittances or for purchasing household goods or business supplies.

Box 3.1 | Digital payment gender insights

Gender norms actively shape how the women in the SIIPS 2025 sample engage with digital payments. Some women only need minimal support using digital payments. At the other extreme, some defer entirely to their husbands or rely on shared accounts and may not see the need for their own bank account. Receiving family remittances—especially through digital channels—encourages use.

> **"...With digital payments, a transaction can be completed quickly: just swipe a card or make a transfer. However, the only thing we are concerned about is security—whether these systems and applications are safe or not. This is the main concern for all merchants."**
>
> —Woman, merchant, Tunisia

Among women merchants, the speed and security of digital payments are essential features:

> **"Nobody ever came to speak to me about this payment method—the benefits. So, there's nothing pulling me to go register."**
>
> —Woman, merchant, Angola

Women express a strong interest in learning about digital payments through in-person engagements with providers. Many also need support to understand the sign-up process and requirements.



Merchant usage trends

Digital merchant payment adoption is growing fast, driven by increases in financial inclusion among micro-businesses and low-income users, and enabled by non-bank payment providers that offer visibility, digital records, and simplified tax compliance tools. Merchants nonetheless need tailored solutions that support cash flow reconciliation and management.

Weekly use of digital payments is more common than daily usage among merchants in the sample. Usage frequency is closely tied to the level of business formality. In Madagascar and Tunisia, for example, the merchants with a larger number of employees are more likely to use digital payments regularly. In Côte d'Ivoire, small and informal merchants use personal mobile wallets for business transactions (see Table 3.2). Despite this evidence of increasing use, digital payment adoption is slow, and merchants—many of them informal—typically are paid in cash and use cash in turn. This can lead to considerable cash flow variability throughout the day. Depositing the cash they receive may be difficult if there are no agents nearby or the agents are closed when the merchant is available to visit one. Lack of agent liquidity also limits access to large-value deposits. The merchants, furthermore, need some cash during the day to purchase supplies and provide customers with change; however, in the evening, high cash balances increase security risks.

Digital payments, in contrast, enable more customer choice, even if some platforms can be unreliable and lack reconciliation features, which hinders effective sales tracking and delays next-day planning. For these merchants, having agents nearby is critical to ensure they can make deposits into their digital accounts.

Agent operations also drive merchants' digital payment use. Merchants who serve as agents find digital payments more valuable because they benefit from transaction commissions. This is particularly evident in Angola, where merchants help bridge service gaps due to limited cash-out infrastructure. Inconsistent POS network uptimes and high transaction fees nonetheless continue to inhibit digitalization.



Digital payment user behavior profiles

Five end-user profiles help humanize the quantified usage patterns by highlighting the distinct motivations and behaviors that influence digital payment behavior (see Figure 3.1).

Figure 3.1 | Key digital payment user profile overview *

Digital mover: Wants a fully digital life, motivated by speed and the ability to track expenditures.

- Digital movers manage their money through multiple accounts and channels, each for different purposes, including savings. Paying in cash is frustrating but may be inevitable in some contexts. Regardless, they seek control and a frictionless user experience.
- Individuals who exemplify this profile are typically tech-savvy and have a recurring income received directly into an account.

Cash-first user: Wants familiarity, not surprises, but is curious about digital payments.

- Simplicity and staying connected with family through remittances are primary motivators for people fitting this profile. They have low digital confidence but are curious about digital options if they understand them.
- End users in this profile typically rely on remittances. They may not have a mobile phone or a government-issued ID, but may be financially included through a shared financial account. Some may operate a seasonal household kiosk or engage in smallholder farming.

Situational user: Wants convenience but will forego it for cash if the cost and context are not right.

- Digital payment habits are motivated by the degree of effort and costs compared to cash, especially for large, urgent, or remote transactions. Lower fees and cashbacks entice situational users to adopt a new platform.
- Individual customers in this profile typically receive income in cash or withdraw it to spend in cash.

Structured boss (merchant): Plans payments to ensure accountability and prioritizes speed and reliable systems.

- Structured bosses want a system that works and is safe, fast, and professional, so that it is easier to track expenses, supervise employees, and offer a great experience for customers and suppliers.
- Merchants in this profile typically have two or more employees, a business financial account, and accept payments through multiple digital channels.

Juggling merchant: Wants to have and provide options with their money but finds juggling cash and digital channels stressful.

- The need to balance customer preferences with the demands of running a small, dynamic business requires a supportive and low-risk platform. Using multiple digital channels alongside cash often complicates end-of-day reconciliations.
- Merchants in this profile are typical microbusinesses, either self-run or with one employee.

* See Annex Table 3.1a for definitions of the user profiles based on the quantitative data.

Payment use cases

Individual end users

Trust in digital payments drives the adoption of different use cases by individuals. P2P transfers remain a key entry point for adoption, especially for respondents who first signed up for mobile wallets or financial accounts to receive money from family members. This underscores the role social networks play in introducing excluded or lower-income segments to digital payments.

Digital payment adoption has nonetheless expanded beyond the P2P use case in all four countries. Receiving salaries, saving money, and person-to-business (P2B) merchant payments all hold growth potential (see Table 3.3). Individuals in the sample use digital payments to settle bills with companies and governments—driven by convenience and seamless integration with service provider systems. This is especially true for recurring payments such as subscriptions, electricity, and airtime. Merchant payments are also on the rise, particularly where digital infrastructure is improving. In Côte d'Ivoire, for example, QR-based payments integrated into private taxi services are driving uptake of P2B payments. Formal salary payments drive the business-to-person (B2P) use case in Tunisia, as shown in the section on merchant use case adoption. However, digital payment use remains limited for people who receive their incomes in cash.

Table 3.3 | The top payment use cases and their level of digitalization among individual customer respondents

	#	Angola	Côte d'Ivoire	Madagascar	Tunisia
Top three digital use cases, ranked.	1	Pay a utility bill (P2B)	Pay a utility bill (P2B)	Pay a merchant (P2B)	Receive salary (B2P)
	2	Pay a merchant (P2B)	Send money to family (P2P)	Pay a utility bill (P2B)	Pay a utility bill (P2B)
	3	Send money to family (P2P)	Pay a merchant (P2B)	Send money to family (P2P)	Send money to family (P2P)

Use cases for which less than 40% of respondents conducted a digital transaction over the past 2 weeks.

Use cases for which between 40% and 70% of respondents conducted a digital transaction over the past 2 weeks.

Use cases for which more than 70% of respondents conducted a digital transaction over the past 2 weeks.

Note: Ranking is based on the respondents' experiences. Given limited coverage for the G2P/P2G use cases, this is not an exhaustive mapping. | N=Individual respondents 229

Merchant end users

Receiving customer payments digitally is usually the first use case that merchants embrace. Person-to-business (P2B) or merchant payments are the leading digital use case in Angola and Côte d'Ivoire. In Madagascar and Tunisia, it is the second most used digital payment use case (see Table 3.4). For business owners, digital payments solve real problems by reducing risks from handling cash. Digital merchant payments also offer tangible benefits, such as enhancing accountability for employees and providing records to use for reconciliation and regulatory compliance.

> **"We pay suppliers by digital transfer payment, as we can use the reference of payment for our taxes and other governmental issues."**
>
> —Man, merchant, rural, Tunisia

Beyond receiving digital payments, most merchant respondents also make digital payments to pay business-related bills like electricity, internet, or licenses (e.g., B2B/B2G payments). Merchants prefer making these types of payments digitally because they receive payment confirmation. Paying in cash would also require the merchant to close the business to travel to the payment location, potentially losing sales. In one illustrative case, a woman-owned hair salon in Côte d'Ivoire uses mobile to support productive business operations—such as accessing electricity in small, flexible amounts.

Supplier payments are also increasingly digitalized, driven by the growth of e-commerce and supplier preferences for digital channels. For supplier transactions, larger merchants often prefer bank transfers due to their reliability and suitability for larger sums. In contrast, micro-businesses, such as grocery vendors, mainly use cash to pay suppliers. This reflects persistent financial inclusion gaps, including limited access to mobile phones, point-of-sale (POS) devices, and formal business financial accounts. In Angola, for example, POS agents facilitate digital payments in the markets where merchants source their supplies and where cash usage remains prevalent. A few merchants in the sample also pay employee salaries digitally. Many employees have a strong preference for cash; however, or lack accounts in which to receive wages. Beyond employee payments, B2P transfers are a common way merchants move funds to personal wallets to cover household needs or support family members.

> **"We pay the casual workers directly in cash because their wages are low."**
>
> —Woman, merchant, urban, Côte d'Ivoire

Although formal saving was a less common use case, merchants often use multiple digital wallets to allocate funds for different needs, including short-term savings. Features such as fund locking for specific goals are increasingly available on mobile platforms, though their uptake remains limited. Informal savings groups continue to play a central role, with some merchants preferring to hold cash so they can contribute to them. Others use lock boxes and cash registers to accumulate earnings, which they deposit at the bank weekly. These patterns suggest that expanding digital savings platforms could help reduce reliance on cash. In Côte d'Ivoire, for example, a microfinance institution is digitalizing cocoa farmers' savings groups (tontines) to promote formal savings behaviors (Riquet et al. 2016).

Table 3.4 | The top merchant payment use cases and their level of digitalization

	#	Angola	Côte d'Ivoire	Madagascar	Tunisia
Most popular digital merchant use case ranked	1	Receive customer payments (P2B)	Receive customer payments (P2B)	Bill payments (B2B)	Send money (B2P)
	2	Bill payments (B2B)	Bill payments (B2B)	Receive customer payments (P2B)	Receive customer payments (P2B)
	3	Send money (B2P)	Send money (B2P)	Send money (B2P)	Bill payments (P2B)

Use cases for which less than 40% of respondents conducted a digital transaction over the past 2 weeks.

Use cases for which between 40% and 70% of respondents conducted a digital transaction over the past 2 weeks.

Use cases for which more than 70% of respondents conducted a digital transaction over the past 2 weeks.

Note: Send money (B2P) refers to transfers from a business to a personal account, typically for household expenses, family support, or savings. | N=Merchants respondents–208

Payment channels

Mobile apps are the most widely used payment channel among individuals and merchants in Côte d'Ivoire, driven by relatively higher smartphone penetration compared to other sampled countries. Use of cards and POS infrastructure was limited, primarily due to low bank account ownership among surveyed respondents (see Table 3.5). While both banks and mobile money providers offer mobile-based channels, the lack of interoperability across platforms keeps people relying on human-assisted channels, particularly agents, and limits the potential of QR codes for digitalizing retail merchant payments.

In Madagascar, in contrast, respondents primarily use USSD, as basic phones are more common. In general, such self-initiated mobile channels offer ease of use for some. However, the user experience can still be challenging due to low literacy levels, limited smartphone penetration, and access gaps due to high internet costs.

Merchants often find it necessary to adopt multiple payment channels to accommodate diverse customer needs, but face constraints such as limited access to POS devices, lack of dedicated merchant accounts, and delayed transaction settlements (see Box 3.2). POS and agents are the primary payment channels in Angola and Tunisia, respectively. In Angola, one dominant payment system operator offers interbank payments through a mobile app, POS, or ATM, but has yet to gain traction beyond some early adopters who have embraced digital payments to avoid long ATM queues. In Tunisia, La Poste Tunisienne promotes digital payments through its vast branch network and e-wallets, though the latter offer only a few use cases and have transaction value limits, making them less useful for everyday needs.

Table 3.5 | The most used digital payment channels

Country	Most used channel	Second most-used channel	Third most-used channel
Angola	POS	Mobile app	Agent
Côte d'Ivoire	Mobile app	USSD	QR code
Madagascar	USSD	Mobile app	Branch
Tunisia	Agent	Branch	ATM

Primary digital payment channel for less than 25 percent of respondents

Primary digital payment channel for 25-50 percent of respondents

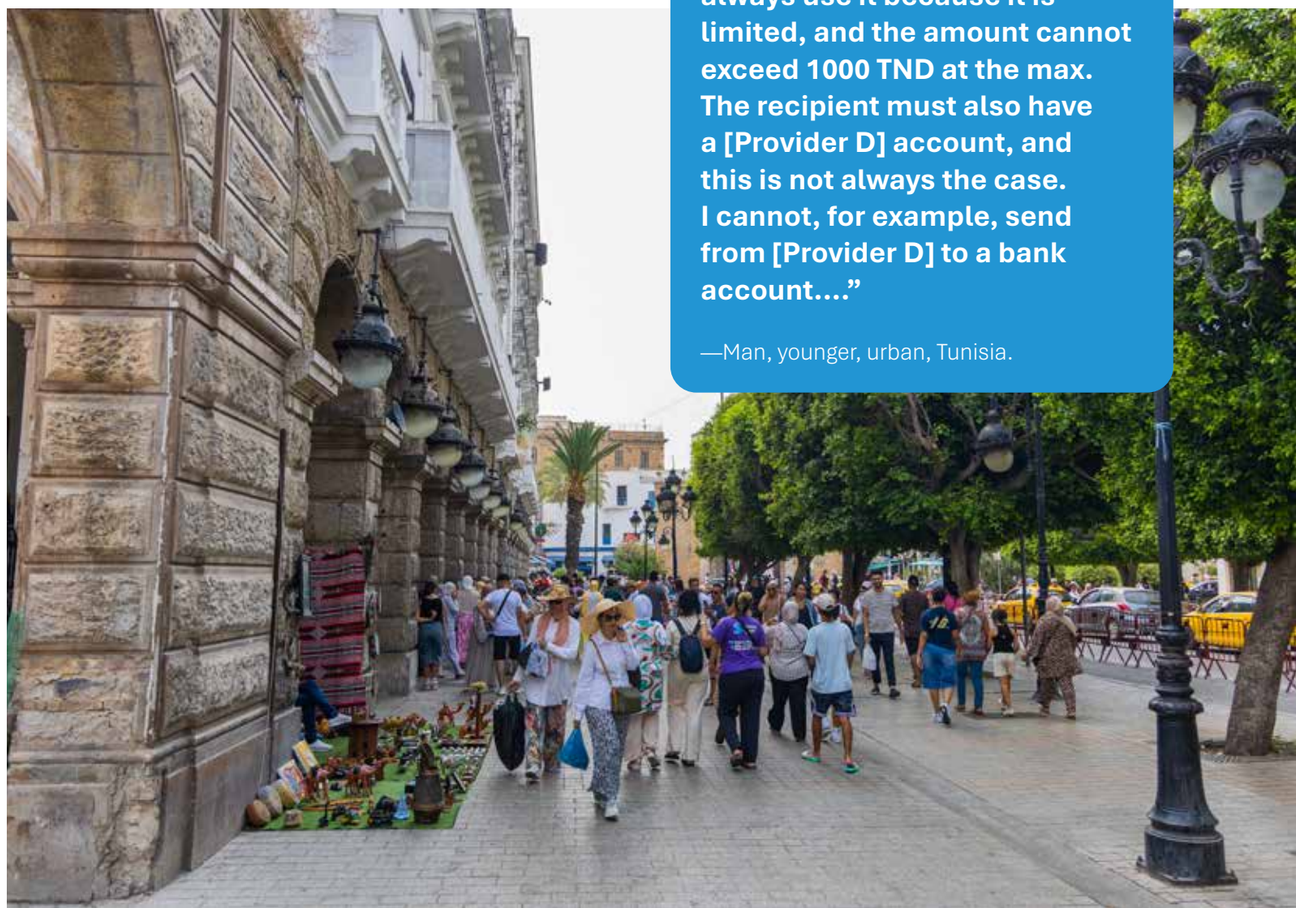
Primary digital payment channel for 50-80 percent of respondents

Primary digital payment channel for more than 80 percent of respondents

Note: Responses are not mutually exclusive; users may take advantage of multiple channels.
Total sample of individual and merchant respondents–437

"...With [Provider D], I couldn't always use it because it is limited, and the amount cannot exceed 1000 TND at the max. The recipient must also have a [Provider D] account, and this is not always the case. I cannot, for example, send from [Provider D] to a bank account...."

—Man, younger, urban, Tunisia.

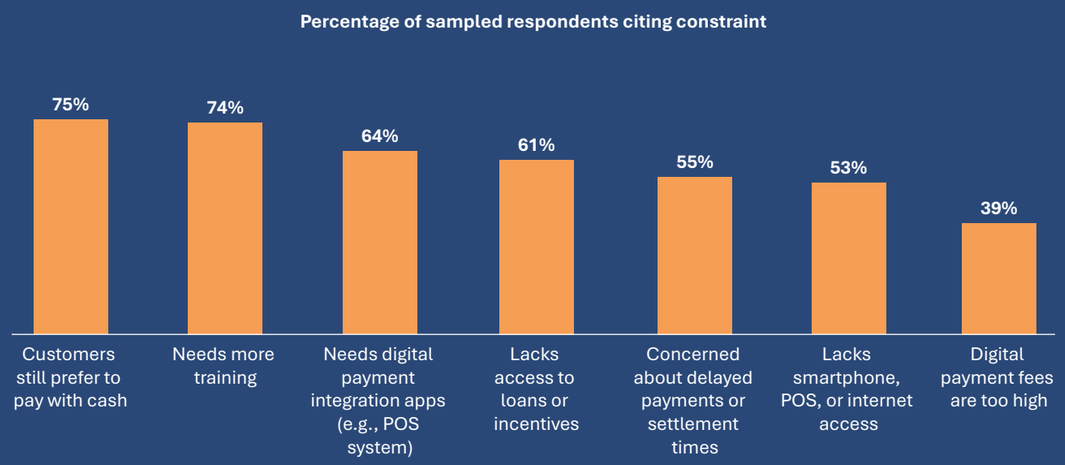


Box 3.2 | Merchant payment channel preferences

Merchant payment channel adoption is influenced by their familiarity with digital channels, customer demand for digital or cash payments, and the availability of value-added services such as credit and digital tools. Nonetheless, many merchants lack the necessary hardware to accept digital payments, such as POS devices or smartphones.

Digital payments also present some challenges, including transaction fees and delays in real-time settlement for card payments, as well as delayed SMS confirmations on mobile channels. Merchants may also prefer cash due to past bad experiences, such as fraudulent reversals, transaction errors, or perceived unfair fees.

Figure B3.2.1 | Merchant-reported channel constraints (%)



Total sample of merchant respondents: N=208



3.3 | Digital payment enablers and barriers

Data from the surveys and in-depth interviews reveal clear opportunities to increase awareness of digital payments and expand both access and usage in the sample countries. Further, it explains some of the reasons behind the relatively low early adoption rates and suggests opportunities to ease the transition from initial access to habitual use of digital payments.

In previous editions of SIIPS, we analyzed the stages of the digital payments customer journey to identify how enablers and barriers affect usage patterns at each stage of access, early use, and habitual use. For this 2025 edition, we have added awareness and drop-off as key stages in the customer journey to provide a more holistic understanding of non-access barriers that shape decisions to use digital payments in the first place and keep using them over time (see Figure 3.2).

Figure 3.2 | Pathway to habitual use of digital payments

Individual end users and merchants were asked to select the top three challenges they experience using digital payments from a list of defined options. Similarly, they were asked to name the top three reasons they would use cash over digital. Their responses were analyzed based on the respondents' profile segments (see Table 3.6). We then used qualitative data to understand the respondents' sentiments related to the barriers and enablers at each step in the customer journey.

Table 3.6 | Respondent samples used to evaluate users in the customer journey

Stage	Awareness	Access	Early use	Habitual Use
Customer	All users	Cash-first user	Situational user	Digital movers
Merchant			Juggling merchant	Structured boss
Sampled users	All users	Digital non-users (mostly cash)	Hybrid (cash + digital) users	High digital users (mostly digital)
N	437	171	171	95

The five end-user profiles help highlight the frictions that shape user engagement.

Awareness and access:
Cash-first users are at the first stage in the adoption journey because their limited engagement with digital payments reflects foundational barriers, including low awareness, limited capability, and limited access.

Early use:
At this stage, people have tried using digital payments in a limited number of contexts and for certain use cases, but trust is still forming. The *situational user and juggling merchant profiles* contextualize the mindset of users navigating early-use barriers and frequently switching between cash and digital methods.

Habitual use:
The *digital mover* and *structured boss* exemplify what habitual usage looks like. Even these users encounter system inefficiencies and evolving needs that future IPS must address to sustain usage.

The following section discusses these enablers and barriers across the customer journey stages.



Awareness

Before engaging with digital payments, users must first become aware of the services they have available to them. The awareness stage includes knowing what digital payments are, how they function, the benefits they offer, and the channels through which they are available. Awareness is often shaped by peer influence, media exposure, and trust in institutions or providers. Building awareness requires providers to demystify common fears around fraud, scams, and high fees.

To understand their level of awareness, we asked respondents about different payment instruments and how they learned about them (see Table 3.7).

Table 3.7 | Top three digital payment instruments respondents know about and how they heard of them

Rank	Angola	Côte d'Ivoire	Madagascar	Tunisia
Digital payment services/instruments respondents are most aware of				
1	POS/Card	Mobile money	Mobile money	POS/Card
2	Mobile bank app	POS/Card	Mobile bank app	Bank transfer
3	App/e-wallet	Mobile bank app	QR/POS	Branch/agent
Most used source of information about digital payment services				
1	Media	Social networks	Media	Social networks
2	Social networks	Media	Service provider	Media
3	Service provider	Service provider	Social networks	Service provider

Note: Media includes social media, television, radio, and other media sources, while social networks include family, friends, and peers (including colleagues for individual users and other businesses for merchants).

In each of the countries, the level of awareness of digital payments was commensurate with the level of effort the service providers put into making their services known through media advertising. For example, in Côte d'Ivoire and Madagascar, where mobile money is the most widely used digital payment method, mobile money providers have invested in extensive agent networks and in integrations with financial service providers. This has enabled the availability and reach of mobile money services as well as broader financial services use cases. In Angola and Tunisia, banks have driven card and POS awareness, but mobile money awareness ranks lower. In some countries, users felt that the service providers were not doing enough to create the kind of awareness that would lead to a higher level of adoption.

Social networks, including family members, friends, and businesses, play a pivotal role in facilitating peer learning among individuals and merchants. Guidance from social networks can help users feel more confident and promote and validate the services, leading to more user onboarding.

Digital payment adoption depends on both merchants and individual end users being aware and ready to use them at complementary levels.

> **"Commercial banks should educate consumers… go to markets, inform people about the type of service, what its benefits are, and how it will improve people's lives."**
>
> —Man, merchant, urban, Angola

> **"I have an idea about [digital payments], but I don't use it in my work because most of the clients don't use it, or they don't even know about it."**
>
> —Man, merchant, urban, Tunisia

If merchants are aware and willing to adopt digital payments but individual end users are not, it creates a demand gap that discourages merchants from fully adopting these solutions, limiting ecosystem growth.



Access

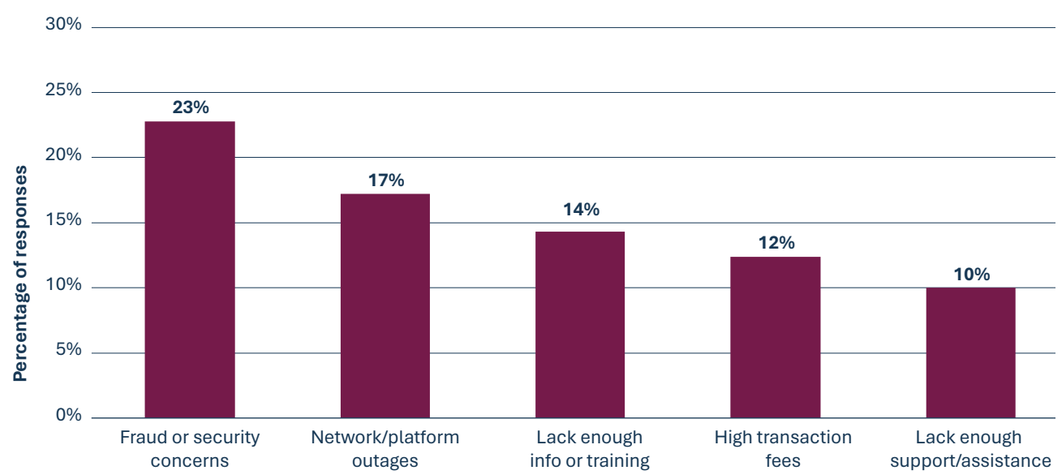
Once aware, users need practical access to participate. This means having a funded transaction account, either with a mobile money provider or a financial institution, and the digital infrastructure to support usage.

Cash-first users develop their perceptions of digital payments based on what their peers say. They may not fully understand the system, but they appreciate the potential barriers and enablers. Their current emotional and risk-related concerns also influence them.

Access barriers

A large proportion of cash-first users engage with digital payments only occasionally and then supplement their knowledge with what they hear from peers. They rank fraud and security, and poor or no network access, high among their barriers to access (see Figure 3.3). Insufficient information or training on digital payments is the second most commonly perceived barrier.

Figure 3.3 | Top access barriers according to cash-first users



Total responses (could select as many responses as relevant, N = 412)

Fraud and risk concerns are notably high in Angola and Côte d'Ivoire. In Angola, this perception may drive the lack of uptake (compounded by a lack of mobile phones, which cash-first respondents rank as their third-most important barrier). In Côte d'Ivoire, where mobile penetration is high, fraud and risk concerns may make people ambivalent about digital payments.

> **"I usually make my payments with cash. I don't make digital payments because… I don't use tools that allow me to have apps and other things. Nowadays, there are a lot of scams and clones, so I prefer to go to the bank, withdraw the money at the counter, keep the money, and do my things normally."**
>
> —Man, merchant, urban, Angola

In Madagascar, cash-first users are most likely to mention high transaction fees among their main barriers, while in Angola, Côte d'Ivoire, and Tunisia, users highlight the lack of enough information and training on digital payments.

> **"I don't have enough information... I can't fully trust a payment method unless I know it well enough."**
>
> —Man, individual cash-first user, urban, Tunisia

Access enablers

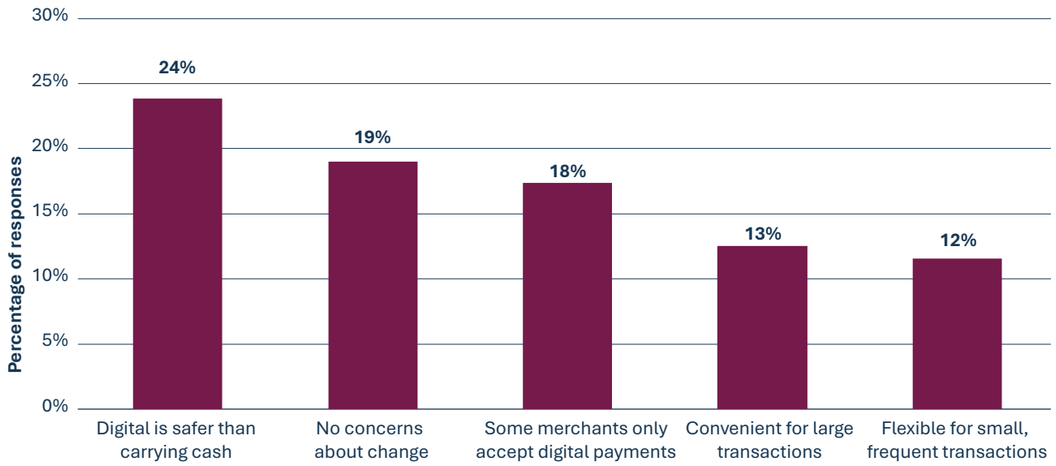
When asked what would drive them to use digital payments, cash-first users prioritized enablers they perceived would help them manage their daily lives. For instance, they prioritized safety (digital is safer than cash), convenience (eliminates concerns about needing to carry change), and high acceptance from the merchants they frequent (in the case of individuals) or use by customers (in the case of merchants) (see Figure 3.4).

Cash users recognize that carrying cash exposes them to theft, loss, or robbery. Safety is a compelling reason to transition from cash to digital, especially in rural and informal urban markets. Cash-first user respondents in Angola and Madagascar rank safety as the most important access enabler, whereas respondents in Tunisia and Côte d'Ivoire rank it as the second most important.

The focus on safety also highlights end-user fears about losing money through digital systems. Knowing how to resolve any problems that may arise can be a strong behavioral driver.

> **"I might be interested if the security is stronger than my current platforms."**
>
> —Man, merchant, urban, Madagascar

Figure 3.4 | Top access enablers according to cash-first users



Total responses (could select as many responses as relevant, N = 409)

In Tunisia, cash is the preferred method for everyday purchases due to its familiarity. If more essential services shifted towards digital-only transactions, more individuals and merchants would transition away from cash.

In Côte d'Ivoire, users associate mobile money with small-value payments that help them bypass the need to carry change. Cash-first users in the country, therefore, see digital payments as a convenience.

The value chain plays an important role in driving access. Individuals who receive wages into a bank or mobile account are likely to push merchants to accept digital payments, which would allow them to keep their money in their account. The same is true when suppliers drive merchants to pay digitally.

> **"We predominantly utilize bank transfers for supplier payments, a method that has superseded the use of checks following recent legislative changes."**
>
> —Man, merchant, rural, Tunisia



Early use

Even after users register for a digital payment service, there is no guarantee that they will actively use it. Early adoption depends on the users' perception of value: is the digital option better, safer, cheaper, or more convenient than cash? Behavioral factors such as trust, fear of fraud, comfort with technology, peer influence, and the initial user experience play a crucial role in user retention (see Figure 3.5).

One outcome is that the user tries the service and is motivated to continue using it for different needs. Positive early interactions, such as fast transfers, helpful support, and discounts, can convert first-time users into repeat users. Conversely, a single negative experience can prompt new users to become inactive or switch providers.

Figure 3.5 | Top early use barriers according to hybrid users



Total responses (could select as many responses as relevant, N = 430)

Early use barriers

Security and fraud perceptions and their impact on early use of digital payments

Worries about fraud and security exist in all countries. At the early-use stage, security perceptions can serve as both a motivator and a barrier. People who fear physical theft lean toward digital; those who fear digital fraud stay with cash. The dominant fear determines which payment method a user adopts for a given scenario (see Table 3.8).

Table 3.8 | Cash vs. digital risks

	Main concern/fear		
	Trust balance	**Cash risks**	**Digital/platform risk**
User concerns	Which fear dominates?	Robbery, loss of cash, fake currency, defaced notes, long ATM lines, and a lack of CICO agents.	Hacking, cloning, scams, accidental transfers, digital identity theft, and system failure.
User behavior	Determines the type of payment method used.	Motivated to switch to digital payments.	Discourages digital use.
Impact on digital adoption	Creates biased use of cash vs. digital. Builds or stalls transition to habitual use.	Digital is seen as safer and easier to carry.	User sticks to cash or uses digital payments cautiously.
User quote	**"I use my bank card to avoid carrying cash due to insecurity."** —Man, individual, urban, Madagascar **"Cash is easy except when you go to places where digital is compulsory, like in the government's office."** —Man, individual, urban, Angola	**"Despite the relative ease of cash transactions, we have experienced a significant security breach involving the theft of approximately 5,000 dinars from our home cash register. This incident underscores the inherent risk associated with handling and storing large amounts of cash."** —Man, merchant, urban, Tunisia	**"I don't trust using my wallet [Provider S] a lot, as it may have many risks in security."** —Woman, user, urban, Tunisia

Platform outages refer to the connectivity interruptions users may experience when making digital payments, resulting in delays or failed transactions. In Angola, Côte d'Ivoire, and Madagascar, network issues and platform outages frequently occurred for both individual end users and merchants. Both ranked outages as a top barrier to early digital payments usage. In Tunisia, the digital literacy gap played an important role in preventing early usage.

Unexpected fees for certain types of digital payments or in certain contexts where cash is free may also discourage early individual users. This is particularly the case in Angola and Madagascar. Merchants who discover that they need to pay processing fees to service providers may think of it as a tax, as they do in Angola and Tunisia.

> **"Every time I close or open a POS terminal, I also get [charges]... one hundred and seventy kwanzas."**
>
> —Man, merchant, urban, Angola

> **“When there was a promo and customers received cash back, it was good (many customers liked to pay digitally) because they had a benefit. Now they pay the fees and see no benefit.”**
>
> —Woman, individual, urban, Côte d’Ivoire

Most early-use end users embrace digital payments, even though they still accept cash as a backup for when the platform fails or when they need cash flow. As a result, both individual end users and merchants may alternate between cash and digital payments, depending on the occasion.

Early-use enablers

At the early-use stage of the customer journey, end users have adopted the services, but only experimentally. They have firsthand experience with digital payments, allowing them to see which aspects work for them and which ones do not. In the study countries, respondents rank the enablers of early usage according to the same pattern as the enablers of access.

> **“The more payment options available, the better. People have different banks today, and if we have different services, when one fails, we can use the other.”**
>
> —Woman, merchant, peri-urban, Angola

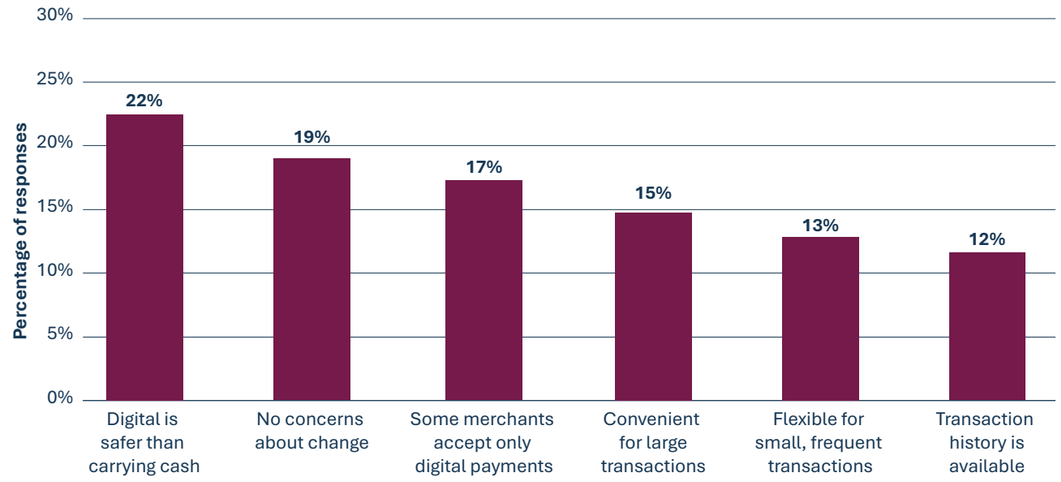
> **“We do not use [Provider C], and clients come wanting to pay using [Provider C]; we lose the client. So, if more people have [Provider C], it would incentivize us [to register and use it too].”**
>
> —Woman, merchant, rural, Angola

At the individual country level, the highest-ranked enablers in Côte d’Ivoire, Madagascar, and Tunisia remain the same as those ranked by cash-first users: namely, that digital payments are safer than carrying cash, digital payments are accepted everywhere, and digital eliminates the need to have exact change. This consistency suggests that there is a continuum in user perceptions from the access stage to the early use stage, as people cement their optimism about digital payments through experience.

Once they start using digital tools, customers are motivated by merchants accepting digital payments and by the desire to see more merchants accepting them, especially during peak times of the day, week, or month when ATMs are congested. Interoperable platforms also become increasingly important as users experiment with different use cases and payments across various providers.

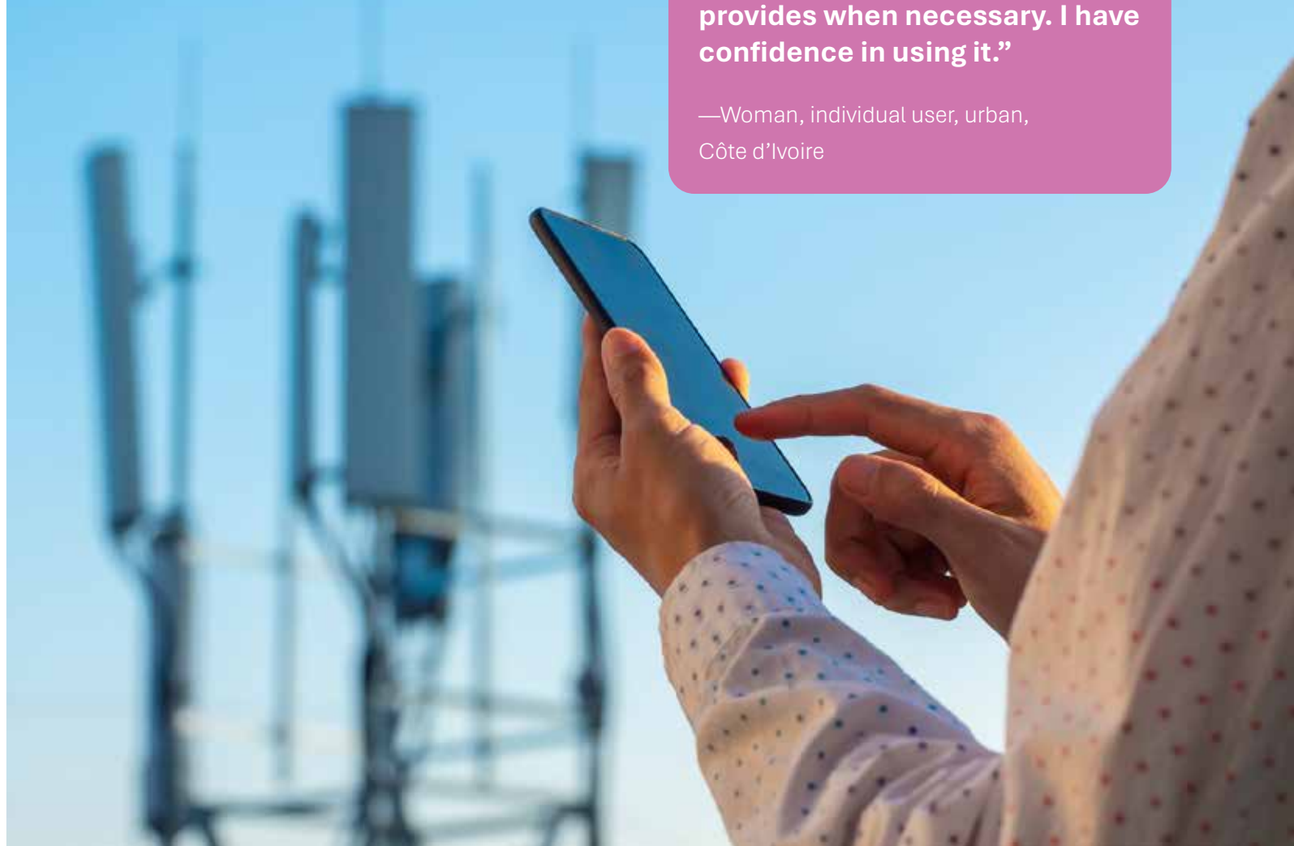
Early users are motivated by positive user experiences on digital platforms, including easy transaction processes, friendly and supportive customer care, incentives, speed, availability, and affordability. For merchants, digital payment acceptance is driven by the desire to keep customers and offer a payment method they prefer.

Figure 3.6 | Top early use enablers according to hybrid users



Total responses (could select as many responses as relevant, N = 245)

> **“What encourages me to use mobile money more often is the quick assistance it provides when necessary. I have confidence in using it.”**
>
> —Woman, individual user, urban, Côte d’Ivoire



Habitual use

With time, successful users integrate digital payments into their daily lives. This transition from early to habitual use occurs as end users gain familiarity with payment services. Key enablers of habitual use include ease of use, system reliability (especially during peak hours), user recourse (customer support for issues), transaction speed, and growing digital acceptance (more people and merchants accept digital payments). Habitual users embrace diverse use cases by paying for goods and services, and even receiving income through digital platforms.

Habitual use barriers

Even for habitual users, fraud and security concerns are a significant barrier (see Figure 3.7). They are particularly prominent in Angola and Côte d'Ivoire, where past experiences or perceived vulnerability to scams discourage the use of digital payments. Users in Côte d'Ivoire face a high exposure to the risks of using digital payments.

Figure 3.7 | Top habitual use barriers according to high digital payment users

Total responses (could select as many responses as relevant, N = 245)

> **"[I would] stop using it [digital payments] ... now emerging a lot... is card cloning... several scammers who have been hacking, accessing accounts digitally. So, this would stop me from using it, and I would use physical money."**
>
> —Man, individual user, urban, Angola

In Madagascar, the leading obstacle is frequent network and platform outages, which disrupt the reliability needed for habitual use. For habitual users in Angola and Côte d'Ivoire, network and platform outages are the second most important barrier. A failed payment at a store or delays when paying bills create embarrassment, frustration, and fear, leading to anything from a permanent drop-off and reversion to cash to intermittent usage of digital payments.

> **"The networks are often down, which makes transactions difficult."**
>
> —Woman, individual user, urban, Madagascar

Habitual users expect accessible and responsive support from providers, especially in cases of dispute resolution. If support is weak, slow, confusing, or not transparent, user confidence disintegrates, leading to a drop in digital payment use.

> **"Sometimes there are overcharges. When you call to complain, it is a week later before you receive your money."**
>
> —Woman, individual user, urban, Côte d'Ivoire

In Tunisia, surveys revealed that both merchants and customers had tax-related concerns. Both user types worried about exposure to tax liabilities or compliance burdens from using digital payments. Other issues, like high transaction fees and hidden fees, are ranked high as barriers, especially in Angola and Madagascar.

Users who use digital payments occasionally (a few times a month) may not notice or worry too much about transaction fees. However, habitual users (who transact daily or a few times a week) tend to be more concerned about the cost of digital transactions, as they see total fees accumulate. Hidden or unclear charges (e.g., merchant fees, balance check fees, monthly maintenance fees, SMS charges, etc.) erode trust.

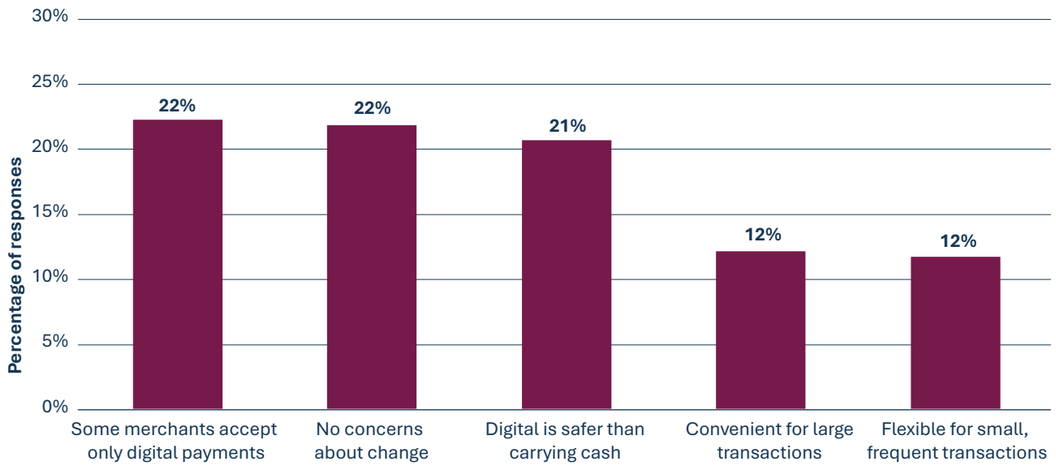
For digital payments to become habitual, users must embrace multiple use cases and sophisticated payment instruments. Without ongoing training and digital literacy support, however, users may limit their use and avoid using digital platforms for larger or more complex transactions. This could prevent people from developing financial confidence and breed overdependence on others for help. In Tunisia, the problem of insufficient information or training ranked high.

> **"If the digital payment system is not secure, it could expose the business to potential cyber-attacks, fraud, or theft. Some customers may not be familiar with digital payment methods or might not trust them yet.**
>
> —Woman, merchant, urban, Tunisia

Habitual use enablers

The most important enablers of digital payments are network effects, followed by the ability to eliminate concerns about change and safety (see Figure 3.8). Since habitual usage involves making both large and small transactions, users will start to see its convenience in both contexts.

Figure 3.8 | Top habitual use enablers according to high digital users



Total responses (could select as many responses as relevant, N = 245)

Habitual users are likely to see the benefits of using digital payments to send exact amounts and not carry small change. Merchants gain the additional benefit of having a record to help with daily reconciliation. In both cases, the savings from no longer incurring the 'invisible cost of cash' become more apparent. This is likely why respondents in Angola and Côte d'Ivoire rank the ability to eliminate concerns about change as their top enabler.

Users in Tunisia rank universal acceptance as the most important driver of habitual use, confirming that both individual end users and merchants see value in having a complete ecosystem of digital payment use.

The value of digital payments is especially apparent for individuals and merchants who regularly handle large payments and for whom carrying physical cash is impractical or risky. This may include small businesses paying suppliers or property owners collecting rent. On the customer side, it may be parents paying school fees digitally, saving both time and money, and increasing safety. The *digital mover* individuals *and structured boss* merchants have strategic reasons for wanting fully digital lives. These include the ability to integrate with existing digital income sources and keep digital records.

User attrition/churn

Not all users stay. Some who try digital payments abandon them due to poor user experience or unresolved issues. Common reasons for drop-off include technical failures, system downtime, exposure to fraud or scams, complexity of use (unintuitive interfaces), inadequate support when something goes wrong, and persistent distrust (see Table 3.9). Addressing these pain points is crucial to retaining users and preventing financial exclusion.

Table 3.9 | Common drivers of digital payment attrition

Barrier	Commonly mentioned triggers		Outcome leading to churn/attrition/ dormancy
	Individual users	Merchants	
Fraud and security concerns	• Hacked accounts, identity theft, scams, and cloned cards. • Friends and family reporting losses amplifies fear.	• Fake payment confirmation, cloned POS. • Other merchants reporting losses amplifies fear.	• After a poor experience or hearing about scams, trust is lost, and users revert to cash.
Platform downtime or network failures	• Transfer failure during an emergency.	• POS transaction failure during checkout.	• Failed transactions reduce confidence in the reliability of the system.
Lack of support or recourse	• Long wait times for customer support, or support staff are poorly trained or inaccessible.	• No clear process for dispute resolution. • No support for complex digital transactions.	• Lack of support in getting help and refunds leads to user apathy.
Hidden/high fees	• Fees are not clearly communicated. • Small, frequent charges for services that should be free.	• High interchange/MDR charges. • High fees for cross-platform or cross-bank transfers.	• Unexpected charges frustrate users who perceive digital payments as too costly or unfair.
Limited digital literacy/ Information gaps	• Confusion on how to carry out transactions correctly. • Fear of navigating apps and online menus, especially for older rural adults or new smartphone users.	• Unable to flow or trace payments for easy reconciliation. • Lack of technical know-how and understanding of how settlements work.	• Users fail to fully understand new features or how to protect themselves, leading to increased mistakes and anxiety when using digital services.
Complex and long onboarding process and requirements	• Lack of simple know-your-customer (KYC) processes. • Lack of affordable digital payment tools.	• Too many documents are required to get digital payment tools and accounts. • Long delays from the provider once the application is done.	• Users drop off at an early stage before onboarding.



> **“Sometimes… when you call to complain, it is a week later that you receive your money, but you needed it immediately. I had to delete my [Provider N] application because of this.”**
>
> —Woman, individual user, urban, Côte d’Ivoire.

3.4 | Conclusion

No one wakes up wanting to change how they pay. It takes effort and often comes at a cost. Formal information helps initially, but most people need to experience digital payments themselves to gain more trust. Alongside functionality and support, security and fraud are concerns throughout the user journey.

Looking ahead, the keys to deepening adoption of digital payments among low-income individuals and small or informal businesses will be the broader acceptance of digital payments by payees, their usefulness for small-value transactions, and easy onboarding. For active digital users, reduced fees, reliable issue resolution, and more daily use options like seamless online purchases will drive satisfaction and more consistent usage. At the system level, expanding use cases—such as rent, public transportation, utilities, and government-to-person (G2P) payments—will encourage broader adoption.

Combined, the IPS landscape elaborated in Chapter 2 and these end-user insights quantify the current state of digital payment availability and use in Africa. They also introduce the supply-side and demand-side barriers that inhibit IPS growth, scale, and inclusivity. In the next chapter, we explore a set of trends and opportunities that are poised to either help overcome existing barriers or accelerate opportunities to expand access to and usage of digital payments.



Case Study |

IPN Egypt

Origin story



Challenge

The Instant Payment Network (IPN) in Egypt emerged as part of regulatory efforts aimed at driving digital transformation and increasing financial inclusion. Egypt's Vision 2030, developed in 2016, aimed to enhance financial inclusion rates and achieve economic empowerment by making high-quality and cost-effective digital financial products and services available to all segments of society (Egypt Ministry of Planning and Economic Development, 2023). The Financial Inclusion Strategy (2022-2025) issued by the Central Bank of Egypt (CBE) complemented Vision 2030 by prioritizing financial inclusion and bringing gender inclusion to the forefront of the CBE's development policy agenda (CBE, 2021a).

The CBE's plans included efforts to bolster and promote digital payments as part of its economy's digital transformation. Toward that end, in 2020, the CBE set out to establish the Instant Payment Network (IPN) IPS to enable end users to make financial transactions (transfers/purchases) to different payment service providers (PSPs) using different payment instruments and channels (CBE, 2020). The CBE tasked the Egyptian Banks Company (EBC), its technical subsidiary, with leading the project.

At that time, the state of financial inclusion in Egypt faced several barriers, including a reliance on cash payments. As of 2021, 27% of adults in the country had a financial account (World Bank 2021g). IPN aimed to ensure the digital payment ecosystem included everyone and extended beyond the banked population to provide options for those without accounts.

Since its launch in 2022, IPN has offered an accessible, electronic alternative to cash payments while maintaining the benefits of cash and mitigating its drawbacks. Specifically, IPN offers immediate settlement, universal access, and continuous availability, eliminating the security risks and inefficiencies associated with cash.

End users can access IPN through bank channels. However, the need for a user-friendly interface for consumers prompted the creation of InstaPay, a mobile app that lets end users access IPN and send or receive money instantly between any bank account, card, or mobile wallet, 24/7 (CBE, 2025b). Through InstaPay, users can link multiple bank accounts within the app. Egypt's IPN is one of only three instant payment systems (IPS) in Africa that offer a direct-to-consumer digital channel (the others are Morocco's SWAM and Mozambique's SIMO). In contrast, most other African IPS offer only the back-end infrastructure, along with APIs that facilitate PSP integration.

The Egyptian regulator mandated that all P2P and P2B payments executed through IPN and InstaPay have zero fees. The fee waiver was designed to accelerate early adoption, demonstrate the speed and convenience of real-time payments, and advance Egypt's "Less Cash" and financial inclusion agendas. The fee waiver lasted for three years until April 1, 2025, at which time IPN allowed capped fees, which are expected to fund infrastructure upgrades without materially dampening growth (Business Today, 2025). Consumers can see the applicable fee before confirming any transaction.



Adding value

Egypt's IPN is designed to allow end users to connect bank accounts, cards, and mobile wallets to the real-time payments infrastructure. The IPN value proposition centers on the following key elements:

- **Ease and convenience:** The system was designed to be easy and accessible at any time. It simplifies the transfer process into a few steps and can execute transactions in under 10 seconds. Users can initiate transfers using easy aliases, such as mobile numbers or instant payment addresses, instead of complex bank account details.

- **Instant transfers:** It facilitates instant digital transfers and is available 24/7, including weekends and official holidays.

- **Interoperability:** Consumers can send money instantly to any bank account, mobile wallet, debit card, credit card, or prepaid card within Egypt. This broad reach connects previously disparate payment instruments and populations.

- **Expanded use cases and features:** While IPN initially supported only person-to-person (P2P) transactions, it now facilitates a wider range of payment use cases, including merchant or person-to-business payments (P2B), business-to-business payments (B2B), and cross-border payments. The inbound cross-border use case, launched in December 2024, enables recipients in Egypt to receive funds directly into their accounts or wallets.

  These use cases, along with request-to-pay, payment links, and tokenization capabilities, serve cash-heavy sectors such as commercial delivery, hospitality, and transportation. Enabling integration with fintechs via application programming interfaces (APIs) is expected to unlock even more diverse use cases in the future.

- **Affordability**: The operator initially offered IPN free of charge but introduced commercial fees in April 2025. For financial transactions, the pricing structure is 0.1% of the transaction value, with a minimum fee of 0.5 Egyptian Pounds (EGP) ($0.01) and a maximum fee of 20 EGP ($0.39).[2] Consumers pay the fees, while merchants continue to accept payments at no additional cost. IPN's low fees are a key driver of adoption, according to focus group participants.[2] In a 2025 AfricaNenda study, one participant noted that her husband now prefers InstaPay over cash because its transaction fees are capped, making it affordable. Another explained that she adopted InstaPay to simplify her daily money management, which she previously handled in cash. Several respondents have also linked their salary accounts to InstaPay, praising the service as an affordable and convenient alternative to cash.

  IPN developed the new pricing model after considering various factors, including the local economic context, historical fee structures, the costs associated with handling cash, and user feedback. The aim was to keep charges low for smaller transactions to encourage the adoption of digital payments.

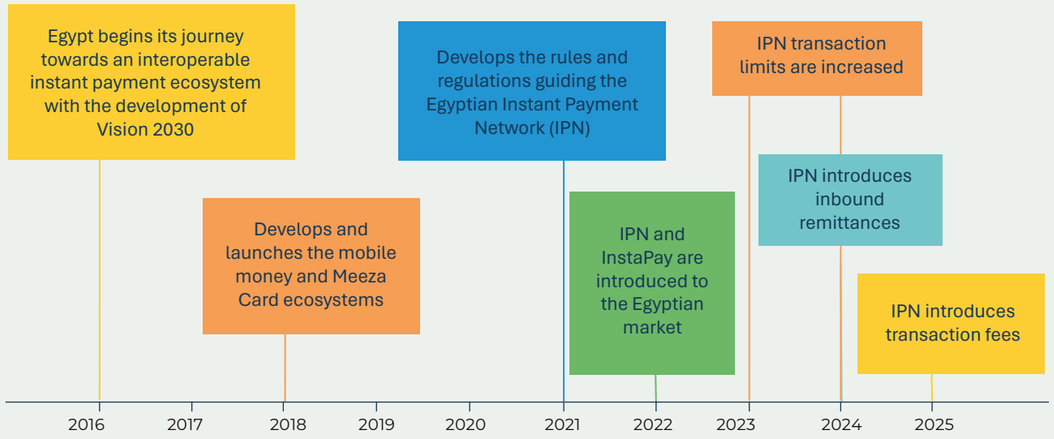
- **Non-financial interactions:** The service enables popular features such as checking account balances and viewing mini statements, providing value beyond financial transactions. These services cater to a diverse range of demographics, including older citizens. Since implementing the new fee structure, users are allowed 10 free non-financial transactions per month, after which IPN applies a fee of 0.5 EGP ($0.01) per activity. This approach helps manage system performance.

- **Trust and security:** Backed by the CBE, the system benefits from a proactive regulatory framework and prioritized cybersecurity. The CBE's explicit support fosters trust among historically cash-reliant citizens. This helped overcome initial concerns. Transaction validation, such as payee name and transaction amount, helps prevent errors like sending money to the wrong person.

- **Unified account hub:** InstaPay provides a single hub for end-user accounts. Instead of juggling multiple apps with different functionality, users can consolidate their financial activities with multiple banks in one secure platform.

- **Instant settlement:** Merchants can receive money instantly when customers or suppliers pay via IPN/InstaPay, which is a significant advantage over traditional payment gateway settlement times.

Egypt IPN development timeline



Source: Egyptian Banks Company, 2025

Prior to 2021, the automated clearing house (ACH) was the primary method for electronic transfers in Egypt. It was not available on weekends or official holidays, and stakeholders described it as complicated and inconvenient for consumers. Bank e-channels also lacked a seamless and easy consumer experience and were not interoperable with mobile wallets and cards. After studying successful IPS, such as India's UPI and Brazil's Pix, the CBE decided to build IPN. This initiative aligned with Egypt's Vision 2030 and the national goal of building a cashless economy.

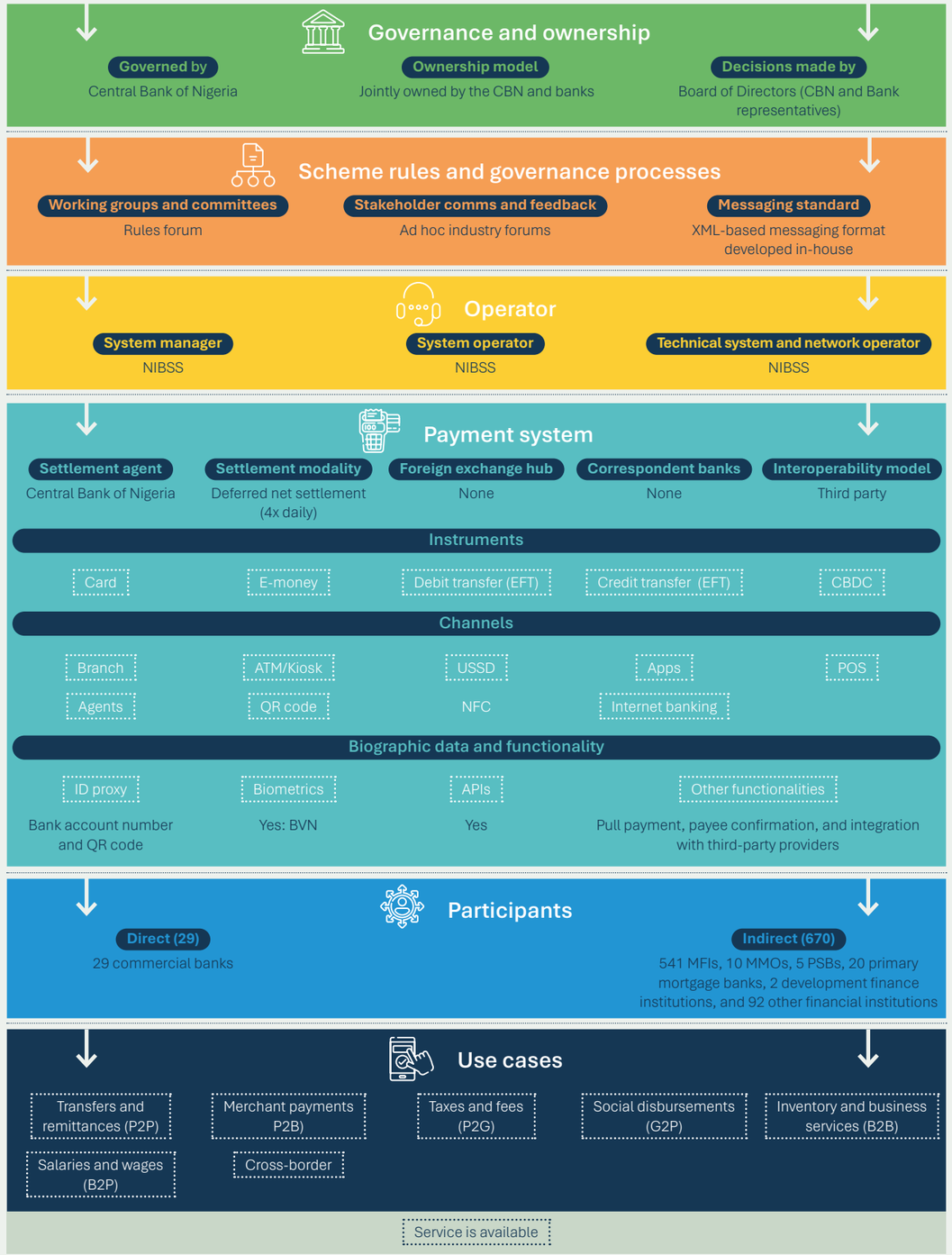
In October 2021—six months before IPN's launch—the CBE launched the IPN regulations to provide a regulatory framework and to give international and local banks in Egypt confidence that the network was covered and protected by the central bank. As noted, the IPN service was free of charge for three years, until April 2025.

The launch of instant international remittances in December 2024 marked a significant milestone during this period. This enables people to send money to Egypt via the IPN network and deposit funds directly into recipients' bank accounts or mobile wallets in Egyptian pounds.

As of 2025, IPN is working towards launching additional P2B capabilities, such as payment acceptance at the point-of-sale (POS) using dynamic and static QR codes, as approximately 1.2 million POS devices in Egypt are not linked to IPN (Daily News Egypt, 2023). Further plans include enabling cash withdrawal from ATMs via the InstaPay app, enabling fintech integration via open APIs to unlock new use cases, and facilitating cross-border transfers by establishing bilateral links with other IPS in countries like Jordan, Saudi Arabia, and the United Arab Emirates. The introduction of an electronic know-your-customer (eKYC) platform is also planned for the end of 2025, laying the foundation to enable features such as biometric authentication.

Governance and operations

Payment system overview



IPN currently includes 35 commercial banks operating in Egypt as well as InstaPay as direct participants. The system connects these participating banks, enabling interoperable instant transfers to and from various payment instruments. The network is continuing to integrate more banks, and there is a plan to enable fintechs and other non-bank companies to participate in the future, aligning with the national objectives of financial inclusion and digital transformation. IPN uses proprietary APIs to enable integration with participants and uses a proprietary messaging standard for communication.

Governance structure

The CBE manages IPN through a three-tier model that balances national policy, regulatory oversight, and operational agility. At the apex, the National Payments Council sets the broad payments strategy. The president of Egypt chairs the council, which includes key ministers, security chiefs, and the CBE governor. The CBE board translates the strategy into concrete regulations and risk oversight, approving IPN fee grids, transaction limits, and security standards. Day-to-day execution rests with the EBC board, led by the CEO and including CBE and bank representatives. EBC operates the switch, certifies participants, and drives the InstaPay product roadmap. This structure ensures political alignment on financial inclusion goals, strong regulatory safeguards, and technical agility.

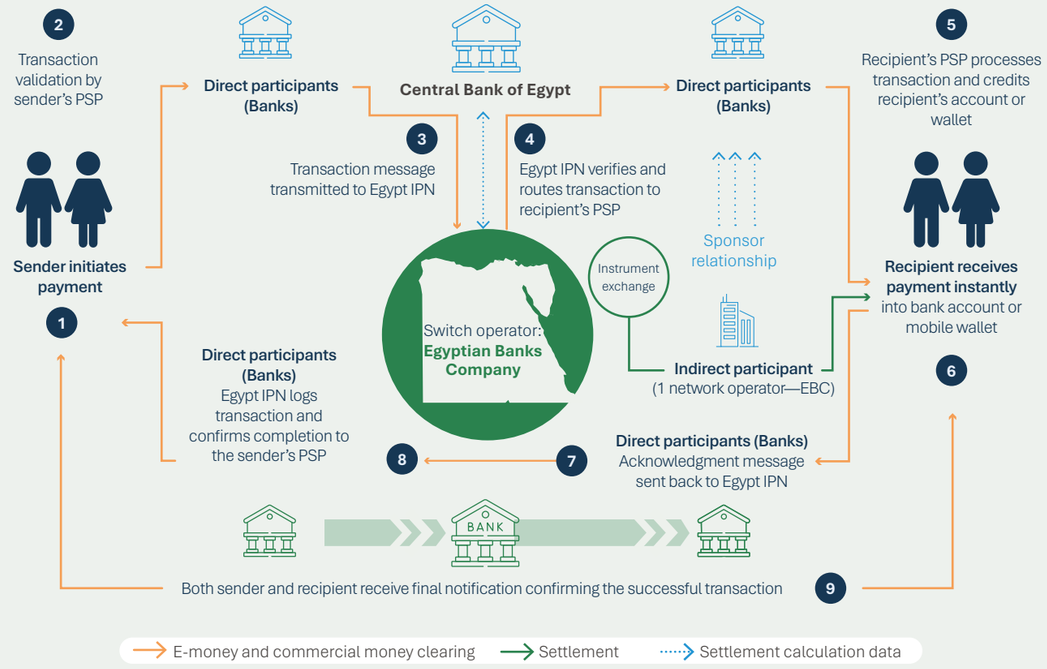
In summary, CBE centrally controls IPN governance and fulfills the roles of system owner, overseer, and settlement agent. EBC then operates IPN. This structure signals regulatory backing and oversight, building trust among participating banks and consumers.

Functionality

IPN operates a centralized clearing model, connecting all 35 participating banks to each other, as well as to 27 e-money issuers through an integration with Meeza Digital, Egypt's domestic card scheme.

Egypt IPN is designed for high transaction volumes. To ensure system resilience and performance, participating banks must meet performance standards, including the capacity to process at least five times their current transaction volumes. The operational goal for transaction speed is to complete it in under 10 seconds. Additionally, the system supports real-time payment confirmation messages and transaction validation through features such as payee confirmation. IPN utilizes proprietary messaging standards and APIs.

IPN facilitates payments across various instruments and channels, including bank accounts (retail and corporate), mobile wallets, debit cards, credit cards, and prepaid cards. ATM withdrawal and QR code acceptance solutions are in the pilot stage. Furthermore, the system supports identity aliases/proxies, such as bank account numbers, mobile phone numbers, merchant IDs, QR codes, and a system ID known as the Instant Payment Address (IPA), similar to an email address. As part of the onboarding process, users link their mobile phone by registering their SIM card at the bank, thus binding the phone's signature, SIM number, and verification using bank card details and a one-time passcode (OTP). Linking the client's mobile phone to the IPN is the first authentication factor. This, in turn, links the mobile device fingerprint (MDF) and the mobile phone number (based on the activation process) in the service provider's systems, enabling secure transactions. Users also set up an IPN PIN for transactions.



Technical standards and use cases

IPN uses proprietary messaging standards and APIs. EBC made the decision not to follow international ISO standards, such as ISO 8583 or ISO 20022. IPN believes this approach will enable greater speed and customization. The technical design standardizes interfaces for participating banks and handles the complex logic within the network, aiming to simplify the integration process.

Business model

IPN operates on a not-for-loss business model. CBE and EBC funded IPN's development in-house, and a team of developers in the EBC created the system. The team intentionally limited the initial build to manage upfront investment and to ensure sufficient functionality, with plans for later improvements and upgrades. The phased approach to technical development allowed for a controlled expansion of the system.

As noted, as of April 1st, 2025, consumers pay fees to send transactions, though IPN remains free for merchants to receive payments. This structure is designed to keep small-value transactions affordable, while higher-value transactions help subsidize the ecosystem's costs. This aligns with a self-sustainability objective rather than generating significant profits.

Scheme rules and regulations

CBE governs IPN according to detailed national regulations known as Rules Regulating Services For Instant Payment Network Inside the Arab Republic of Egypt, published in October 2021. These rules and controls are the minimum necessary for banks and PSPs authorized by the CBE to provide services

through the IPN. The original version is publicly available online through the CBE website. The most recent iterations of these rules are available only to participating banks. The regulatory guidelines take into account the needs of the ecosystem and are informed by local culture and environment, including provisions for protecting customer rights. Participants in the IPN are required to obtain a license and comply with all relevant regulatory requirements.

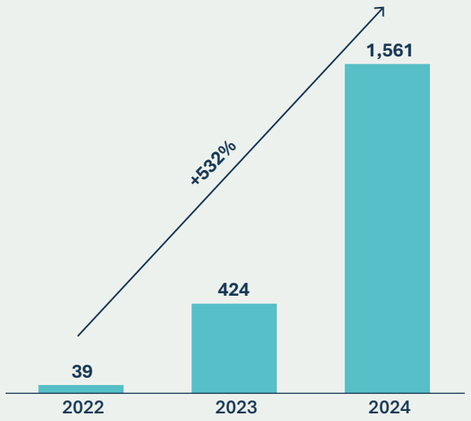
A bank wishing to obtain a license to participate in the IPN must apply for the necessary approvals from the CBE. Banks that are not able to meet technical standards may be denied access to IPN. As part of these technical standards, participants must provide the following to demonstrate their capacity to conduct real-time financial and non-financial transactions 24 hours a day throughout the year:

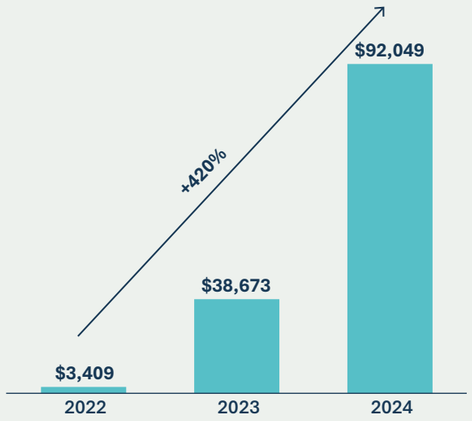
- Commitment to completing all tests and procedures for IPN, per a work plan that does not exceed six months from the date of application.
- Submission of a three-year work plan, including the number of accounts and cards of the target customers made available to IPN.
- A comprehensive risk management plan.
- The number and values of annual transactions to be executed.
- A high-level marketing plan to introduce the service and activate its use, provided that the approved budget is indicated in the plan.

The rules regulating the IPN in Egypt further specify maximum daily and monthly transaction limits, as well as individual transaction limits. IPN rules initially set a daily maximum transaction limit at 50,000 EGP ($1,005). IPN has since increased this limit to 70,000 EGP ($1,407) following customer feedback and driven by rising inflation and currency devaluations.

The management and enforcement of the IPN scheme rules involve several key mechanisms. The IPN has a dispute resolution system (DRS), whereby banks must maintain audit trails for all IPN transactions and ensure that these trails are protected against manipulation or unauthorized changes. This procedure aims to facilitate fraud investigations and resolve any disputes or complaints, as system records serve as conclusive evidence.

Egypt IPN transaction volumes and values (millions)





Volumes and values processed by the payment system

By the end of 2024, IPN had over 12.72 million unique users, amounting to approximately 16% of the adult population in Egypt. IPN has experienced significant growth since its 2022 launch, both in transaction volumes and values. Transaction volumes increased from 39.1 million in 2022 to 1.561 billion in 2024, representing a compound annual growth rate (CAGR) of 532% over three years. Transaction values grew from $3.4 billion to $92 billion, a CAGR of 420%.

Albeit off a low base, the considerable increase in IPN transaction volumes and values can be attributed to several key elements: ease of system access, a broadening range of applications, cost-effectiveness, and interoperability. These factors have also contributed to financial inclusion gains in Egypt over the past few years. From 27% in 2021, 43% of adults in Egypt had a financial account as of 2024 (World Bank 2025b). Further growth in transaction volumes and values is expected as the system enables more use cases, participants continue to join, and end users acquire accounts.



Inclusivity learnings

Egypt IPN has made progress in achieving inclusivity, fulfilling the progressed level criteria. In the previous edition of the SIIPS report, the IPN was unranked because it did not fulfill the basic criteria of inclusivity, primarily due to the absence of the P2B use case. IPN has since evolved to enable the minimum primary use case through InstaPay. In addition, IPN now meets other progressed level criteria such as cross-domain functionality and interoperability between domestic schemes, as well as some matured inclusivity criteria such as low cost through a not-for-loss model.

IPN leveraged the following drivers of inclusivity:

- **Egypt IPN has met the minimum primary channel requirement through InstaPay.** Egypt is estimated to have a smartphone ownership rate of over 90%, which ensures that the use of a mobile app can sustain the minimum channel requirement (NAOS Solutions, 2023). A crucial element driving inclusion is the use of proxy aliases, specifically mobile phone numbers. This can connect the payment network to other digital public infrastructure systems, such as digital ID, as seen in other markets such as Nigeria, enabling interoperability across the entire digital public service delivery ecosystem (Business Day, 2024).
- **Fee transparency and affordability play a vital role** in driving the adoption and inclusivity of IPN and building trust in the central bank. The CBE stands out for offering the service free of charge for three years after launch. Despite the introduction of a transaction fee, the cost recovery model, along with its relatively low rate compared to card payments (2% transaction fees), holds promise for keeping barriers to participation low and driving inclusivity.
- To progress toward mature inclusivity, **IPN may seek to provide consumers with additional recourse mechanisms**, as well as expand its use cases to include P2G and G2P flows. Bringing P2G and G2P payments onto the network would unlock gains in public sector revenue management and service delivery.



4

Trends and emerging opportunities to drive IPS inclusivity

In this chapter, we put the IPS landscape and end-user insights into context with several trends and opportunities that are poised to affect IPS inclusivity, informed by the broader insights key informants shared and by the instant payments literature. These trends fall under three broad categories:

- Market trends relate to the environment in which an IPS and its stakeholders operate.
- System trends refer to those that arise from the IPS itself.
- End-user trends reflect specific behaviors and needs.

Before we highlight this year's trends, it is worth calling out several of the market and system trends highlighted in the SIIPS 2024 report that remain relevant in 2025. The first relates to Digital Public Infrastructure (DPI), which we called out in the SIIPS 2024 trends and opportunities chapter and which continues to be a key driver shaping the IIPS landscape. The growing emphasis on DPI offers IPS operators an opportunity to align their schemes with broader objectives, reinforcing their role as inclusive and sustainable infrastructure. Given the increasing significance of this topic, we explore it as a dedicated spotlight in Chapter 5.

The role of critical infrastructure, including universal electrification and telecommunications, was also discussed in SIIPS 2024 and continues to affect digital payment adoption, as highlighted by the end-user research participants. Since the original discussion appeared, the African Union has continued to advance its *Digital Transformation Strategy for Africa (2020–2030)*, while several countries are implementing national strategies. Notably, Egypt is executing its *Egypt 2030 ICT Strategy* (MCIT, 2024), Kenya is rolling out the *Kenya ICT Authority Strategic Plan (2024–2027)* (ICTA, 2023), and Algeria is preparing to launch 5G services in Q3 2025 as part of broader digital transformation efforts (TechAfrica, 2025). In 2025, South Africa launched its *Digital Transformation Roadmap*, highlighting the centrality of DPI in government modernization (MyMzansi, 2025). However, some of the regional IPS initiatives continue to experience roll-out delays. Progress is evident, however, as highlighted in the IPS landscape chapter.

Beyond these continuing trends, 2025 has brought new developments within the IPS ecosystem, as follows.



4.1 | Market trends and opportunities

The following market trends are affecting the design of IIPS.

Table 4.1 | Market trends and opportunities summary

Trends	Opportunities
IIPS will enable the next cross-border play in Africa.	• Reduce costs associated with remittances. • Create new revenue streams for IPS operators.
Consumer-protection frameworks tighten, led by APP-fraud reimbursement rules.	• Rebuild user trust. • Incentivize preventative control. • Reimbursement rules open a market for third-party risk-tech.
IIPS design gaps stall launches.	• Align pricing with end-user needs. • Promote universal participation. • Explore multi-use functionality. • Offer visible mechanisms to build trust and confidence. • Incorporate agile governance and change management into IPS project planning and implementation.

Market trend 1 | IIPS have the potential to enable the next cross-border play in Africa.

The cross-border use case is so important to enabling efficient and affordable payments for remittances and intra-African trade that we dedicate Chapter 6 to a deep dive on the topic. Since multiple experts also highlighted the momentum that exists within Africa to leverage IIPS for cross-border transactions, we also highlight it here as a key market trend with the potential to enable more efficient and affordable cross-border transactions.

IIPS are becoming more widespread at a time when African cross-border retail payments have flowed either through the traditional Society for Worldwide Interbank Financial Telecommunications (SWIFT) correspondent banking chain or through private 'hub-and-spoke' aggregators such as Onafriq and Thunes. The latter are private fintech aggregators and have been especially important in overcoming payment initiation and clearing barriers caused by fragmented national systems. Onafriq, for

example, connects mobile money networks, banks, and remittance companies across more than 40 African markets, allowing a payer in Ghana to push funds digitally in seconds to a receiver in Kenya or Zambia. This dramatically improves payment initiation and user experience compared to correspondent banking alone.

However, despite the friendly user experience, the settlement process still depends on offshore correspondent banking arrangements, primarily in U.S. dollars (USD).

Today, a typical Onafriq transaction includes the following steps:

- **Onafriq-mediated payment:** A sender in Ghana initiates a transfer via a mobile money wallet. Onafriq debits the sender's partner institution (e.g., MTN Ghana).
- **Onafriq-mediated clearing:** Onafriq credits the equivalent amount to the receiving partner (e.g., MPESA Kenya) within its internal ledger, effectively clearing the transaction at the aggregator level. This allows the recipient to see the funds in their account almost instantly.
- **Onafriq-mediated settlement:** To balance positions between Ghanaian and Kenyan institutions, Onafriq periodically nets and settles transactions. The transfer of actual value between partner banks occurs via pooled USD accounts maintained in correspondent banks abroad (often in New York or London). This step introduces a time lag (T+1 or more), foreign exchange conversion costs, and continued dependency on global correspondent relationships.

An IPS cross-border model would significantly streamline this process as follows:

- **IPA-mediated payment:** The customer experience in Ghana remains the same, whereby the sender initiates via a wallet or bank app.
- **IPS-mediated clearing:** Instead of clearing only on the initiating aggregator's internal ledger, the transaction flows through the interlinked IPS in Ghana and Kenya (or a regional IPS hub). The clearing happens across the domestic or regional systems in real time.
- **IPS-mediated settlement:** Rather than relying on pooled USD accounts abroad, settlement occurs in local currencies (cedi-to-shilling, for example) through central bank settlement accounts linked by the IPS or a regional settlement platform. This eliminates dependency on offshore nostro accounts, reduces settlement delays and fees, and retains value within African financial markets.

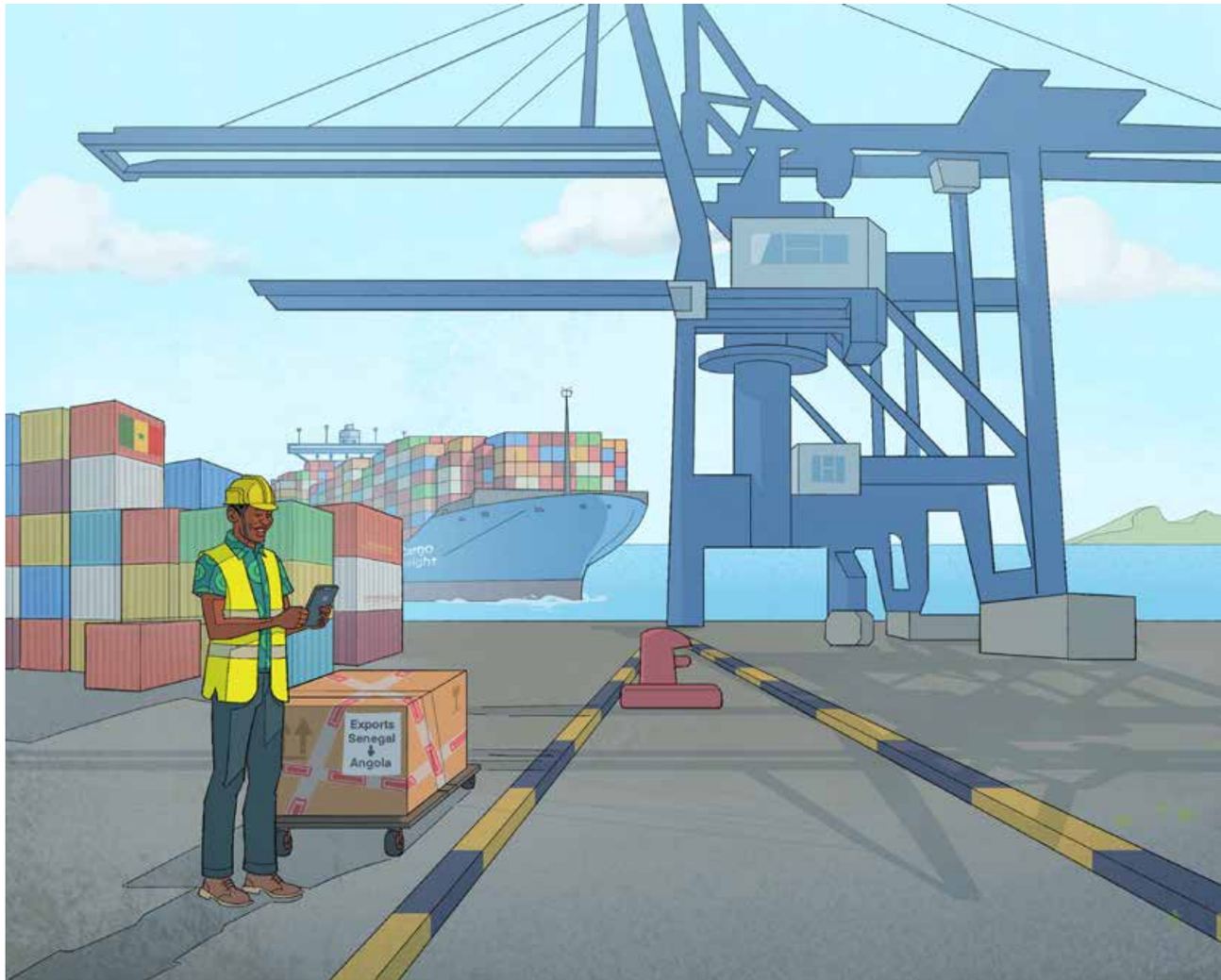
The difference is that aggregators like Onafriq and Thunes solve the connectivity and front-end clearing problem but still rely on USD correspondent settlement offshore. IPS interlinkages, if scaled and properly governed, could alternatively execute clearing and settlement within Africa. This would give cross-border payments the same real-time, low-fee, local-currency settlement characteristics that consumers already enjoy with domestic payments.

According to national and regional IPS operators, merchants selling across borders and emigrants who wish to avoid the high costs and settlement delays inherent in traditional channels are driving demand for the IPS cross-border model. Eleven African IPS, including the three regional systems, are already enabling cross-border payments in 2025, namely eNaira, GIMACPAY, Instant Payment Network (IPN), Kenya mobile money, Madagascar mobile money, Mauritius Central Automated Switch (MauCAS), Meeza Digital, NIBSS Instant Payment (NIP), PAPSS, Tanzania mobile money, Transactions Cleared on an Immediate Basis (TCIB).

Regional pioneers illustrate the model: Groupement Interbancaire et Monétique de l'Afrique Centrale PAY (GIMACPAY), the economic association for the payment and financial markets in the Economic and Monetary Community of Central Africa (CEMAC), routes transfers for all six CEMAC countries entirely in the region's currency, the Central African Franc (XAF), using fintech aggregators only for collection. Settlement remains within the IPS rail.

While IPS interlinking—either from domestic system to domestic system, or domestic to regional—opens opportunities for a new model of cross-border payments, significant hurdles still prevent many domestic systems from supporting cross-border capability. These hurdles relate to infrastructure readiness, foreign exchange settlement design, cost allocation, and regulatory alignment.

- **Timeframe to achieve IPS interlinking:** Short-to-medium term (1–3 years); Additional corridors can go live more quickly by connecting domestic IPS to regional IPS, such as GIMACPAY, PAPSS, or TCIB.
- **Conditions for success:** Harmonized policies, regulations, messaging standards, and proxy-lookup APIs. Region-level foreign exchange-netting/settlement arrangements. Common risk and dispute frameworks that sustain consumer trust.



Market trend 2 | Consumer-protection frameworks tighten, led by APP-fraud reimbursement rules.

Africa's instant payments boom is now colliding with a sharp rise in authorized push payment (APP) fraud. In Nigeria, NIBSS recorded a 112% year-on-year rise in reported fraud attempts during 2023, a surge that stakeholders describe as "unprecedented for the NIP era" (NIBSS, 2025; Stakeholder interviews, 2025). The vulnerability of real-time rails was underscored in Southern Africa in 2024, when the Central Bank of Lesotho suffered an eight-day cyber incident that halted interbank transfers across the country (Techpoint, 2023).

These shocks have accelerated the shift by regulators from "buyer-beware" regimes to frameworks that place explicit, shared liability for APP fraud on the payment service providers (PSPs) that receive the illicit funds (and are therefore best placed to prevent and detect abuse). This approach, pioneered in the United Kingdom, has now reached Africa's instant-payments landscape and is poised to reshape scheme rules across the continent (TechCabal, 2025). Evidence for this change in practice includes the following examples.

From precedent to practice

- **The global benchmark:** The UK Payment Systems Regulator's mandatory reimbursement regime, effective October 7, 2024, requires payment system participants in the country to refund APP scam victims within five business days, with costs split fifty-fifty between sending and receiving PSPs. Caps of £85,000 ($110,109) per claim and a modest customer excess of £100 ($130) balance consumer protection and moral hazard (Payment System Regulator, 2024)[37].

- **Nigeria established the continent's first mandatory reimbursement rule:** In December 2024, the Central Bank of Nigeria directed the Nigerian Inter-Bank Settlement System (NIBSS) to debit the settlement account of any PSP that has received confirmed fraud proceeds. The measure, formalized in January 2025, forces banks and fintechs to upgrade real-time screening and know-your-customer (KYC) controls or bear the financial loss themselves. Although NIBSS is expected to enforce this directive, an industry fraud desk and machine-learning transaction-monitoring layer now run centrally on the NIP rail to prevent fraud. Centralizing detection lets smaller PSPs benefit from network-wide intelligence while aligning incentives to invest in controls.

- **Momentum elsewhere:** Bank of Ghana's 2023 Financial Stability Review acknowledges a "sharp rise in digital-channel fraud" and flags an upcoming review of the consumer-protection guidelines. However, it stops short of prescribing a liability shift (BoG, 2023). Similarly, the Central Bank of Kenya's National Payments System Vision & Strategy 2021-25 commits to "effective complaints mechanisms" and a revised consumer-protection framework that will include stricter fraud-liability rules (CBK, 2020).

Why now? Visible end-user pain.

In a five-country AfricaNenda survey, 19% of men and 11% of women reported losing money to fraud; one in five said they would not use digital payments after the incident. The inability to reverse mistaken or fraudulent payments is viewed as a direct barrier to usage: 75% of women and 63% of men say reversibility would increase their uptake of digital payments. Quotes from end-users, such as "When you lose your money, the bank tells you it's a donation," underline the trust deficit caused by fraud.

37 The Faster Payments System (FPS) is the UK's 24*7 real-time payment system. An exchange rate of $1.29 per £1 was used, as per www.oanda.com (October 7, 2024). All dollar denominations in this chapter refer to United States dollars.

Opportunity

> **"Fraud exists in all payment systems, but the collaborative approach across the entire value chain shows promise."**
>
> — IPS operator

- **Rebuild user trust:** When victims know they will be reimbursed quickly and automatically, anxiety about irreversible loss disappears, especially for higher-value transfers such as salary payments, school fees, and small- and medium-enterprise supplier invoices. A clear, time-bound guarantee unlocks use cases that would otherwise default to cash or slower ACH rails.

- **Incentivize preventative controls:** By splitting liability between sending and receiving PSPs, reimbursement rules turn fraud prevention from a compliance cost into a margin-protection imperative. Both ends of the transaction now have clear economic reasons to deploy confirmation-of-payee, real-time risk scoring, and sanctions screening, driving rapid uptake of advanced analytics and continuous KYC.

- **Catalyze data-sharing utilities:** Centralized liability creates demand for shared fraud-intelligence hubs. Nigeria's NIBSS's industry fraud desk and NIP's machine-learning transaction-monitoring layer, as well as PayShap's (South Africa) fraud-intelligence hubs, are early examples. As more schemes adopt reimbursement, cross-scheme data pooling and machine-learning analytics will become commercially viable, potentially giving smaller PSPs access to enterprise-grade defenses and raising the overall security baseline.

- **Enable new service layers:** A mandated reimbursement environment opens revenue opportunities for third-party providers of behavioral biometrics, synthetic data testing, and transaction monitoring "as a service." Fintechs that can lower a PSP's future reimbursement exposure gain a ready market, while schemes benefit from a growing ecosystem of specialist risk-management tools built on top of the IPS rails.
  By anchoring liability where risk can best be managed, African regulators are laying the groundwork for safer and therefore larger instant payment ecosystems.

Timeframe to achieve:
Short-to-medium term (1–3 years).

Conditions for success:
Clear scheme rules or regulatory directive apportioning liability to or between sending and receiving PSPs. Real-time data-sharing pipelines (transaction, KYC, and confirmed fraud cases).





Market trend 3 | IIPS design gaps stall launches.

A wave of African IPS has gone live, yet many remain far below the adoption curves achieved by the continent's payment pioneers. Analysis of the SIIPS 2025 database shows that the main constraint is *not* demand by end users but design and governance gaps that suppress network effects.

For instance, the bank IPS PayShap in South Africa was processing 1.4 million transactions a month in Q1 2024, and by early 2025, volumes had risen to 30 million. Nevertheless, stakeholders say the rail is capturing only a tiny share of the country's 100 billion in annual cash transactions in South African Rand (ZAR). They point to staggered bank onboarding, a single (mobile-number) proxy, and the absence of QR merchant acceptance as barriers; there is a full-bank roll-out and QR launch slated for late-2025.

Five interlinked design gaps appear repeatedly in IPS struggling to reach scale:

- **Pricing structures that disincentivize usage:** High or unclear transaction fees remain a major deterrent, especially for low-value person-to-person (P2P) and person-to-business (P2B) payments. In several systems, commercial banks continue to set end-user fees that exceed consumers' perceived costs of handling cash. We discuss this further in the system trends section, exploring how tariff caps, zero-rating, or cross-subsidized models can drive early adoption.

- **Partial or delayed participation:** Some IPS go live without all banks, MMOs, or wallets; others delay onboarding certain participants. This piecemeal approach blunts network effects and signals to users that the rail may not reach everyone they need to pay. South Africa's PayShap, for example, launched with only four banks: Absa, Standard Bank, Nedbank, and FNB. Several high-volume retail lenders, such as Capitec and Tyme Bank, were excluded, which in turn excluded many of the customers the scheme was built to serve (TechPoint, 2025). Ethiopia followed a similar trajectory until the National Bank issued a directive in May 2025 mandating every licensed institution to join its IPS (NBE, 2025b), which has the potential to level the competitive playing field (though it is too soon to determine what impact the directive has had).

  A second, subtler exclusion arises when schemes prioritize the dominant provider in the market and overlook less powerful PSPs. The result of this dynamic can be to undermine the very institutions that serve low-income users (e.g., microfinance institutions (MFIs) or smaller fintechs), such that the IPS is "live" and interoperable in theory but fails to be inclusive in practice. IPS may be inclined to satisfy the market's dominant players out of concern that otherwise the PSP will not join the IPS and instead seek to fragment the market.

  Balancing the conflicting goals of various participants with the financial inclusion goals of the country will require constant adjusting and strategy on the part of the IPS to come up with compelling value propositions for all players. Recognizing this, the Rwanda Information Society Authority (RISA) is collaborating with RSwitch to digitalize savings and credit cooperatives (SACCOs) and plug them directly into the IPS in an effort to demonstrate that intentional inclusion of non-bank players is feasible and can lead to a more robust market for all (KTPress, 2024).

- **Limited use-case coverage:** IPS that support only basic P2P transfers struggle to stay relevant in users' daily lives. Out of the 36 IPS identified in the landscape chapter, only one provides the full range of payment use cases, including P2P, P2B, business-to-person (B2P), person-to-government (P2G), government-to-person (G2P), and cross-border payments (see Table 4.2). The absence of the P2B use case in particular implies that the IPS cannot yet match the convenience of cash, card, or closed-loop wallet ecosystems.

Table 4.2 | Use cases and number of IPS deployments

Use case(s)	Number of IPS	IPS
IPS offering P2P only.	8	KWiK (Angola), LeSwitch (Lesotho), EPS Fast Payment Module (Eswatini), Natswitch (Malawi), Virement Instantané (Morocco), Salon Pement Swich (Sierra Leone), PAPSS (continent-wide), and TCIB (SADC).
IPS offering P2P and P2B only.	4	Nigeria Mobile Money, eKash (Rwanda), PayShap (South Africa), and SIPS (Somalia).
IPS offering more than two use cases, but not offering all.	23	Switch Mobile (Algeria), IPN and Meeza Digital (Egypt), EthSwitch (Ethiopia), Gamswitch (The Gambia), GIP and Ghana MII (Ghana), Kenya Mobile Money and PesaLink (Kenya), LYPay (Libya), SWAM (Morocco), Madagascar Mobile Money (Madagascar), MauCAS (Mauritius), SIMO (Mozambique), eNaira (Nigeria), RTC (South Africa), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money, Uganda Mobile Money, National Financial Switch (Zambia), ZIPIT (Zimbabwe), and GIMACPAY (CEMAC).
IPS offering all use cases (P2P, P2B, B2P, P2G, G2P, and cross-border).	1	NIP (Nigeria)

- **Weak security and user protection features:** Not all live IPS are equipped with the features that reassure users that their money is safe and recoverable. Only 23 systems provide real-time payment confirmation messages, 20 perform transaction validation such as recipient lookup before sending funds, and 19 incorporate additional consumer recourse mechanisms like shared fraud desks or dispute escalation pathways. When these security and user protection features are absent, users believe they are at greater risk of losing funds. As a result, they tend to limit themselves to small, infrequent transactions, hindering volume growth, even in markets where pricing and access barriers have already been addressed.

Table 4.3 | IPS deployment of trust-and-confidence capabilities

Capability	Number of IPS offering capability
Real-time payment confirmation message enabled	23
Transaction validation	20
Additional consumer recourse requirements	19

- **Governance inertia:** In some IPS, particularly government-owned schemes, every rule or feature change, down to proxy expansion, must clear full regulatory cycles, which slows product improvement. IPS that combine low consumer pricing, compulsory participation, high-frequency settlement, and a pipeline of overlay services are likely to race ahead; those that delay risk plateauing before reaching critical mass.



Opportunity

Tackling each design gap can convert a live IPS that is struggling to reach scale into a widely used public utility, unlocking the immediate and longer-term benefits summarized in Table 4.4.



Table 4.4 | Opportunities to fill design gaps

Addressed gap	Immediate payoff	Longer-term upside
User-aligned pricing	Rapid digitalization of low-value P2P and P2B payments from cash; higher daily active users.	Economies of scale enable the switch to offer low fees, grow non-interest-bearing float, and attract private investment.
Universal participation	Full network effects: anyone can pay everyone on day one, resulting in a steeper volume curve.	Greater scheme resilience and bargaining power in cross-border interlinking and overlay negotiations.
Multi-use functionality	Sticky, everyday relevance for consumers and small- and medium-sized enterprises.	Platform positioning for super-app integrations, open-API ecosystems, and data-driven credit models.
Visible trust and confidence features	Greater user willingness to move higher-value flows onto the rail; decline in dispute-related churn.	Reputation as the “safe rail,” attracting payroll, government transfers, and regulated cross-border corridors.
Flexible governance and change management	Faster rollout of new use cases and policy tweaks in response to market feedback.	Continuous innovation that keeps the IPS more competitive than informal channels and emerging private schemes.

Timeframe to achieve:
Short-to-medium term (1–3 years) if reforms are prioritized and phased: fee caps and full-participation mandates can be issued within months; new use cases typically require 12-24 months to design, test, and roll out.

Conditions for success:
Collaborative pricing agreements; regulatory support for mandatory onboarding; human-centered design approach; multi-stakeholder governance that can quickly approve feature changes and iterate based on user feedback.

4.2 | System trends and opportunities

The following system trends are affecting the design of IPS.

Table 4.5 | System trends and opportunities summary

Trends	Opportunities
QR code functionality is gaining traction	Widespread QR code functionality has the potential to drive digital merchant payment acceptance and enhance usability for end users.
Limited development of consumer-facing solutions/ applications	IPS operators can play a role not only in back-end infrastructure but also in delivering consumer-facing solutions that catalyze instant payment adoption.
Free/affordable fee structures jumpstart adoption	IPS that are struggling with user uptake can boost adoption by waiving transaction fees, making the service more attractive and accessible to end users.



System trend 1 | QR code channel functionality is gaining traction across Africa.

Smartphone adoption in Africa is projected to grow from 54% in 2024 to 81% by 2030 (GSMA, 2025a). Parallel efforts to expand internet access and reduce data costs across the continent are also gaining traction, driven by public and private sector investments in digital infrastructure. This growing digital readiness sets the stage for IPS to leverage QR codes as a P2B payment channel, particularly in retail and informal sectors.

QR code adoption across African IPS platforms has accelerated recently, marking a shift towards more accessible, low-cost, and micro-merchant-friendly digital payment options. Merchants are embracing QR codes because they help reduce reliance on cash, thereby lowering the administrative burden and risks associated with handling physical currency. These include theft or the need for secure storage and frequent bank deposits. QR payments are processed as credit transfers between accounts and operate on the IPS rails, allowing funds to be settled immediately into the merchant's account. This contrasts with traditional card payments, which typically require at least two days (T+1 or more) for settlement. QR payments also enable real-time transaction tracking for improved cash flow visibility, which is particularly valuable for micro and small enterprises.

As of 2025, **20 IPS across the continent support QR code functionality**, up from 13 in 2024, 11 in 2023, and eight in 2022. Four of the IPS that launched between July 2024 and June 2025 came online with QR code functionality already enabled—Switch Mobile (Algeria), LYPay (Libya), SAPS (Sierra Leone), and SIPS (Somalia). Other systems currently supporting QR code payments include IPN and Meeza Digital (Egypt), EthSwitch (Ethiopia), Gamswitch (The Gambia), GIP and Ghana MMI (Ghana), Kenya Mobile Money, SWAM (Morocco), MauCAS (Mauritius), eNaira and NIP (Nigeria), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money, ZIPIT (Zimbabwe), and GIMACPAY (CEMAC). Several other IPS, including PayShap (South Africa), are working to integrate QR code payment functionality (Techcentral, 2025).

QR codes support various configurations and payment flows, broadly categorized based on who presents the code (merchant-presented vs. consumer-presented) and by the type of data they contain (static vs. dynamic) (World Bank, 2021). In a merchant-presented model, the QR code contains the merchant's payment information, enabling the customer to initiate a credit transfer. In a consumer-presented model, the QR code contains the payer's account information, which the merchant uses to initiate payment. Static QR codes contain fixed payment information and are often used by small vendors. Dynamic QR codes can include transaction-specific details, like the amount and reference, offering greater security and automation. Dynamic QR codes can be displayed on the merchant's smartphone or tablet screen, or POS, printed on a receipt, embedded in an emailed or SMS payment link, or surfaced within an in-app checkout page. This array of options gives customers multiple convenient ways to scan and pay.

Regulators play a vital role in guiding the responsible and secure rollout of QR code payments. For example, they must set transaction limits based on user profiles, including the KYC level, to strike a balance between access and risk management. They must also establish technical standards for QR code encryption, transaction verification, and information protection. Regulators enforce adherence to global standards, such as those outlined by **EMVCo**, which help address concerns related to fraud, data privacy, and interoperability. Finally, they encourage government-mandated national standards that ensure consistency across financial institutions and PSPs.

The following governments and central banks across Africa are leading national standards and interoperability frameworks for QR code payments:

- Ghana became the first African country to introduce a universal QR code payment system, **GhQR**, in 2020. Operated by GhIPSS and launched by the Central Bank of Ghana, the platform enables full interoperability so that customers of any PSP can scan and pay with any merchant code (GhIPSS, 2025).
- In Nigeria, the Central Bank of Nigeria introduced the QR Code Payment System Guidelines in 2021 to guide adoption (CBN, 2021b). In 2025, NIBSS upgraded its (New Quick Response) **NQR** platform with a new pricing model designed to attract businesses of all sizes, including informal merchants and street vendors, while promoting digital payments and reducing cash dependence (Fintechmagazine Africa, 2025).
- Tanzania launched the **TANQR** standard in 2022 through the Bank of Tanzania, with a focus on enhancing transaction security. This has increased customer trust and widened QR code acceptance for mobile payments (Koloseni & Mandari, 2025).
- In 2023, the Central Bank of Kenya released the Kenya Quick Response Code Standard (**KE-QR**), aligning with EMVCo specifications to standardize QR usage and mitigate risks associated with fragmented or insecure QR payment systems (TechCabal, 2023).
- South Africa, through the Payments Association of South Africa (PASA), is currently developing a QR Code interoperability framework, which is expected to harmonize QR-based payments and support broader acceptance across banks and fintechs (PASA, 2023).
- The National Bank of Ethiopia launched **EthSwitch QR** in 2024, replacing the varied QR code systems that were in use with standardized QR codes for digital payments (NBE, 2024).
- In Somalia, SIPS and the Central Bank of Somalia are leading QR standardization in instant payments through **SOMQR**, a national QR code standard aimed at driving interoperability and secure mobile payments (Central Bank of Somalia, 2023).

Opportunity

The growing adoption and standardization of QR code payment functionality across Africa offer a wide range of benefits for end users and merchants, making it a powerful tool for advancing digital payment ecosystems. For end users, QR code payments offer a convenient, intuitive, and secure way to make transactions. By simply scanning a code, users can initiate payments without needing to manually enter account numbers or payment details, thereby reducing the risk of human error. QR payments also enhance transaction security, as each payment is typically authenticated through a PIN, fingerprint, or facial recognition, and sensitive information is encrypted, thereby minimizing the risks associated with card fraud or data breaches. The contactless nature of QR payments also contributes to faster checkouts and improved hygiene, which is relevant for post-COVID payment preferences.

For merchants, QR codes offer a cost-effective and scalable alternative to traditional POS systems. Unlike card POS terminals, small businesses can generate QR codes at little to no cost, do not need to invest in expensive hardware, and have low transaction costs compared to traditional card infrastructure. On average, merchants can save between 1% and 3% per transaction by utilizing QR code payments (Payplex Solutions, 2025). These benefits make QR code acceptance an attractive option for merchants operating in low-value, high-volume environments. There is an opportunity for IPS to design and introduce QR systems in a way that enhances inclusivity (see Table 4.6).

Table 4.6 | QR code design considerations for inclusivity

QR code design element	Design principles for inclusivity
QR code presenter	Merchant-presented QR codes, when used with push payment functionality, can trigger real-time payment confirmations, enabling customers with any type of mobile phone, including basic feature phones, to easily pay a merchant. For example, on the Nairobi airport toll road, this technology allows toll officers to initiate a payment request, which the driver can confirm regardless of the type of phone they use.
Shared QR code	A QR code can either be dedicated to a single payment system or shared across multiple systems. For true inclusivity, the latter option is superior. To maximize reach and impact, the QR code channel should be embedded within the IPS, transforming it into an open, interoperable platform. By adopting a single, scheme-wide QR standard, merchants only need to display one QR code to accept payments from any participating bank or non-bank PSP. This not only simplifies the user experience but also avoids the fragmentation seen in some markets, where merchants were forced to display multiple competing codes. A shared standard also lowers the technological and operational barriers for smaller PSPs.
QR code issuer	The IPS is responsible for defining and issuing the QR code standard and maintaining the supporting infrastructure. However, it is the acquirers—including banks, MMOs, and fintechs—that enable QR code acceptance at the merchant level. From an inclusivity perspective, the IPS-operated QR code channel significantly lowers the barrier to entry, allowing even the smallest or least tech-resourced acquirers to support QR acceptance. This broadens merchant participation in digital payments and extends the reach of instant payment services to a wider base of consumers, particularly in underserved markets.
QR payload	Rather than containing the merchant's payment address, the QR code can point to this information, providing more flexibility and enabling merchants to change providers, but keep payment methods consistent.
Fraud management	QR payments offer inherently stronger security than traditional payment methods, such as card transactions, due to their push-based nature. In a QR payment, the payer initiates the transaction by logging into their bank or wallet app, scanning the merchant's code, and authorizing the payment using a PIN, fingerprint, or facial recognition. No sensitive card data leaves the user's device, significantly reducing the risk of data breaches or credential theft. Dynamic QR codes further enhance security by embedding transaction-specific details—such as the payment amount, merchant ID, and a short expiry time—making it much harder for fraudsters to tamper with or replace codes. On the back end, issuers tokenize and encrypt user credentials, while IPS operators and acquirers perform real-time risk analytics to detect and flag suspicious activity. For merchants, QR payments provide instant, irrevocable confirmation and near-instant settlement, offering a higher level of protection and significantly lower chargeback risk compared to most card-present payment methods.
Fee structure for merchants	Zero, or near-zero, pricing for small merchants.

Source: The Level One Project, 2019.

Timeframe to achieve:
Shorter term (6–18 months).[38]

Conditions for success:
Affordable access to smartphones, which enable a seamless user experience; compatibility with feature phones through request-to-pay functionality; reliable internet connectivity; widespread ownership of digital wallets or bank accounts; and a broad merchant acceptance network to ensure usability across various points of sale (World Bank, 2021h).

System trend 2 | Development of consumer-facing solutions/applications.

In most IPS countries, end users initiate instant payment transactions through their provider's channels, such as mobile banking apps, internet banking platforms, USSD codes, or physical service points, while the IPS operates in the background to enable real-time fund transfers. Yet in a few markets, IPS operators offer dedicated consumer-facing applications that allow users to access instant payments directly from the IPS operator. These consumer-facing applications aim to deliver simple, convenient, and secure user experiences.

To date, three IPS in the African IPS landscape have developed consumer-facing solutions:

InstaPay is Egypt's national instant payments app, offering users 24/7 access to their bank accounts via mobile phone. The app allows users to link multiple accounts, transfer funds using mobile numbers, instant payment addresses, or bank cards, and send payment requests. Users can also check balances, view statements, and consolidate their accounts in one place (InstaPay, 2025). By the end of 2024, InstaPay had reached 12.5 million registered users (CBE, 2024). Managed by the Egyptian Banks Company (EBC) and owned by the Central Bank of Egypt, InstaPay is licensed through Banque Misr under the country's bank-led regulatory model. Although users can make instant payments through their own banking apps, participants in an AfricaNenda end-user focus group shared that they preferred InstaPay for its simplicity. The app was designed to ensure that even smaller banks without mobile or internet banking services could participate in the IPS, thereby enhancing inclusivity.

Looking ahead, EBC plans to open InstaPay to fintechs via APIs and software development kits.

38 Experience across several countries shows that implementing an interoperable, EMV-compliant QR code channel within an IPS can be achieved in a relatively short timeframe—typically within two to 12 months once a high-level design is agreed upon. Even end-to-end projects, including stakeholder consultations, rarely exceed 18 months. In Brazil, for example, the Central Bank formed an industry working group in late 2018, began coding the central QR infrastructure in October 2019, published regulations in August 2020, and launched PIX to the public in November 2020—completing the build-and-test phase in just 13 months. In Indonesia, Bank Indonesia conducted pilot tests for QRIS in late 2018 and early 2019, launched the national standard in August 2019, and mandated adoption by January 2020, allowing roughly 8–12 months from pilot to national rollout. Similarly, in Nigeria, the Central Bank issued its QR Code Payments Framework in January 2021, and the national switch NIBSS publicly launched NQR just two months later, leveraging existing IPS infrastructure to accelerate implementation.

SWAM (Morocco) issues its mobile app **M-Wallet** to payment accounts held by non-bank PSPs or banks. End users can download the M-Wallet app corresponding to their chosen PSP and make P2P, P2B, and P2G payments directly from it (MarocPay, 2025).

In Mozambique, **SIMO** manages its internal wallet, **Conta Móvel**, which is primarily USSD-based and does not yet have a corresponding smartphone app. Conta Móvel is accessible through a shared USSD code (*134#) for all participating institutions that opt into this service. It offers quick access to funds and various financial services for clients who may not have traditional bank cards. It utilizes their mobile number and a personal identification number (PIN), with occasional token verification for transactions. Currently, four participants (banks/MMOs) offer this USSD service to their customers (Stakeholder interviews, 2025).

Apart from the technical considerations of developing a mobile app, IPS may face challenges securing buy-in from shareholders and/or participants. Banks or mobile money providers may view a central consumer-facing solution as a competitive threat to their digital channels. Many PSPs are reluctant to support a centralized app that could divert traffic away from their platforms, where they control the user interface, engage directly with customers, and promote their products and services. Concerns about market cannibalization may prevail and keep this approach to a small number of systems.

Opportunity

Some IPS may seek to complement back-end infrastructure with user-facing applications (see Table 4.7).



Table 4.7 | Advantages of consumer-facing IPS solutions



Benefits for IPS operators

Consistent user experience and brand building: A branded IPS app enables the operator to control the end-user experience, making it consistent and streamlined, thereby building trust and visibility.

Direct feature implementation and updates: The IPS can directly offer and update additional features such as use cases and third-party integrations, without depending on participants.

Unified market entry: A single, unified access point to the IPS enables all PSPs to go live simultaneously, as users only need to link their preferred payment instrument. This approach levels the playing field, allowing PSPs—regardless of size or technological capacity—to begin processing transactions through the IPS.



Benefits for end users

Enhanced accessibility, convenience, and control: Consumer-facing IPS solutions allow users to link multiple bank or wallet accounts in one place, enabling them to transact from any account without switching between different apps. This unified experience not only simplifies payments but also gives users greater control over their finances. By consolidating accounts and transactions, the IPS can serve as a powerful financial management tool—offering better visibility for expense tracking and budgeting than most individual PSP apps.

Expanded financial services: IPS can offer direct-to-customer solutions and thus expand consumer access to essential financial services, like credit, savings, and insurance. Enabled by data sharing via the IPS, this could foster economic inclusivity.



Benefits for the PSPs

Enhanced competition and innovation: Consumer-facing applications, built on open-loop IPS infrastructure, enable a wider range of financial service providers, including smaller banks, fintech startups, and mobile money operators, to actively participate in the digital payment ecosystem. This increased participation invigorates competition, leading to more innovative products and better service quality. This also incentivizes financial institutions to innovate their offerings and update their consumer-facing applications.

Unified market entry: A unified entry point to the IPS is essential in markets where smaller banks or wallet providers face technological constraints, including inconsistent app/quality features or a lack of available mobile apps/interfaces. A consumer-facing solution enables these smaller PSPs to still participate in the IPS.



Timeframe to achieve:
Shorter term (1–3 years).



Conditions for success:
Technological capabilities/resources needed to develop a mobile application; buy-in from participants for jointly owned and participant-owned IPS; and necessary t echnological capabilities.

System trend 3 | Free/affordable fee structures jumpstart adoption

To encourage early adoption, some IPS have chosen to waive transaction fees at launch, making the service more accessible and appealing to new users of instant payments. The cost of transactions is a significant factor in digital payment adoption, especially for low-income households. Free or affordable fee structures can reduce this barrier.

Internationally, incentive schemes and free fee structures have contributed to the success of some of the most widely adopted instant payment systems. Brazil's PIX, for instance, has no fees for individuals to make or receive payments (BCB, 2025). India's Unified Payments Interface (UPI) also gained widespread acceptance by offering a free digital payment method for P2P and P2B transfers between bank accounts. This significantly reduced cash dependency in a previously cash-reliant economy (HDFC Bank, 2024).

In the African IPS landscape, Libya's LYPAY has opted for a free fee structure. At its launch, the Central Bank of Libya announced that the service would be free of charge without commissions until the end of 2024 (LibyaHerald, 2024).

Similarly, the Central Bank of Egypt launched IPN and the InstaPay app with a free fee structure to incentivize use. The IPS introduced fees after three years. This strategic waiver contributed to InstaPay's rapid adoption, achieving a user base of 12.72 million by 2025.[40] In April 2025, the IPS introduced commercial fees (Ahram Online, 2025). For financial transactions, the pricing structure is 0.1% of the transaction value, with a minimum fee of 0.5 EGP ($0.01) and a maximum fee capped at 20 EGP ($0.40).[41] Consumers pay the fees; merchants continue to enjoy free payment acceptance. The new pricing model was designed to encourage digital adoption by keeping fees low for smaller transactions. It considers the local economic context, historical pricing, cash handling costs, and user feedback. Users receive 10 free non-financial interactions (e.g., balance checks, mini statements) per month, after which a fee of 0.5 EGP (approximately $0.01) also applies. This policy helps manage system performance by discouraging excessive use.

The InstaPay case shows that even slight differences in transaction costs can significantly influence consumer choices, particularly in low-income or price-sensitive segments. An AfricaNenda study highlights the significant influence of transaction fees on user behavior, with participants in Egypt explicitly stating that they are switching to InstaPay because the fees are lower (AfricaNenda, 2025).

40 According to the answers in the SIIPS 2025 data questionnaire.

41 The exchange rate calculation between Egyptian pounds and the U.S. dollar is based on the exchange rate on April 1, 2025, used by Oanda: https://www.oanda.com/currency-converter/en/?from=EGP&to=USD&amount=0.5.

Low transaction fees serve as a key enabler of digital payments adoption. To promote inclusive usage, pricing models should reflect transaction size. Small-value payments should incur minimal or no fees, while higher-value transactions may have tiered fees. In this context, implementing a value-based fee structure—where charges scale with the size of the transfer—is often more equitable than flat fees, which can discourage low-value digital transactions. A fee cap or tiered fee structure can help ensure affordability and encourage frequent usage of digital channels for everyday transactions.

Opportunity

By waiving transaction fees, IPS can increase initial uptake, enhance cash displacement, and foster greater financial inclusion. Removing the cost barrier can encourage initial trials and help users develop confidence using digital channels. Assuming the temporary fee waiver is clearly communicated to avoid potential end-user backlash when fees are introduced, it can help accelerate the shift from cash to digital payments, especially for small-value transactions that are crucial for low-income households. This is especially beneficial for cash-based economies, given the administrative expenses involved in managing cash. In South Africa alone, these are estimated to total 0.52% of its GDP (Genesis Analytics, 2017). This considerable economic drain, stemming from cash handling, security, and logistics, can be mitigated by a deliberate fee subsidization effort to ensure low/free instant payment transaction fees.

Timeframe to achieve:
Shorter term (1 year).

Conditions for success:
Willingness of governments and/or participants to subsidize the operating cost of the IPS during the no-fee or low-fee period. As the IPS and user adoption mature, the system can introduce affordable pricing, with awareness of the competitive dynamics in the broader market.

4.3 | End-user trends and opportunities

Table 4.8 | End-user trends and opportunities summary

Trends	Opportunities
Human-assisted channels are even more (not less) essential for narrowing inclusivity gaps.	PSPs and partners can modernize agent operating models.
End users embracing digital payments still live in a hybrid world.	Develop hybrid approaches to enable less digitally and financially advanced customers to take advantage of digital benefits.
Negative experiences spread virally through personal social networks, discouraging digital channel adoption.	Invest in consumer education and counter-messaging to combat fear and misinformation.



End-user trend 1 | Human-assisted channels are even more (not less) essential for narrowing inclusivity gaps.

Even as end users in Africa embrace mobile technology and digital channels for payments and other financial services, human-assisted channels, including agent locations, continue to be relevant—even essential—for growing their customer base and reaching underserved customers, thereby expanding financial inclusion. Agent networks, in particular, help build awareness of digital payments among people without accounts. They also assist end users who may be less digitally and financially confident and, therefore, less comfortable making digital payments without help. This represents a significant share of people, given that one in three mobile money users in Sub-Saharan Africa report needing help to use their account (World Bank, 2021g). As a share of overall payment users, this group needing human assistance is growing, as mobile money and other digitally enabled methods become more accessible and reach more first-time financial services users. As such, PSPs that want to reach untapped market segments must establish and maintain high-quality, human-assisted channels as part of their customer growth strategy.

Agents establish the essential link between end users and service providers.

Research finds that agent proximity is one of the key motivators for mobile money adoption, especially in rural environments (Babatope & Mushungje, 2020). However, a lack of agents can also be a barrier. Data from the Global Findex finds that when asked why they do not have a mobile money account, more than 11% of adults without an account say they do not have mobile money because agents are too far away (World Bank, 2025b).

The SIIPS demand-side research from 2023 and 2024, as well as this report, highlights how important agents are for building awareness of digital payment options. Agent outreach emerged as a primary driver of digital payment adoption in the 2023 research countries (AfricaNenda, 2023b). In 2024, 16% of respondents across Algeria, Ethiopia, Mauritius, and Uganda said they began using digital payments because an agent explained the benefits (AfricaNenda, 2024). Both individual and merchant respondents emphasize how having an agent in a reliable location with convenient open hours drives their payment behavior. Furthermore, another AfricaNenda research survey from 2025 of more than 1,500 end users across five countries (Cameroon, Egypt, Mauritius, Nigeria, and Zimbabwe) finds that 41% of respondents first became aware of digital payment options through agents (AfricaNenda 2025).

Financial providers recognize the need for a robust agent network to compete, and particularly to reach underserved groups. As one IPS stakeholder in Nigeria said to us during an interview, “The agent is king.” Efforts to grow mobile money agent networks are ongoing: the number of mobile money agents grew worldwide by 20 percent between 2023 and 2024, with 77% of that growth happening in Sub-Saharan Africa (GSMA, 2025b). This growth trend is expected to continue as markets such as Angola and Tunisia, which the demand-side research showed have limited agent coverage, grow their mobile money markets.



Challenges and risks with agents raise management costs.

Despite the broad recognition of how a well-distributed agent network adds value, agents also bring risks. For end users, there is the risk of over-dependence. In an ideal scenario, agents serve as a bridging function, connecting end users to their providers until, over time, end users with the necessary infrastructure—mobile phones—gain greater confidence in transacting independently. However, agents do not have an incentive to enable end-user independence, as they typically only receive their commission when they process a transaction. As such, passive exploitation can occur when agents encourage dependence by fully executing transactions for end users without showing them how to do it, even to the point of plugging in the PIN on their behalf.

There is less harm if the agent does not do anything more than process the transaction and receive their commission. Greater harm can arise when agents use the customer’s PIN to send money to themselves or otherwise skim cash from an end-user’s CICO transaction. (As many as one-in-four adults in Sub-Saharan Africa who receive government or wage payments digitally say they have paid an unexpected fee to cash out their money, according to the Global Findex 2025.)

There is also tension in the fact that many licensed agents are also merchants selling products to the same customers who depend on them to cash out or send a payment. When a customer wants to buy something and pay digitally with a card, mobile money app, or QR code, the merchant may pay a processing fee to their PSP. When the customer wants to execute a CICO transaction or P2P transfer via mobile money, in contrast, the agent/merchant can receive a commission. These conflicting costs and commissions create an incentive for an agent/merchant to process purchases as CICO transfers and then use the cash to pay themselves for the customer’s purchase, thus earning both the commission and the sale. Both individuals and merchants participating in the qualitative end-user interviews discussed in Chapter 3 highlighted this dynamic.

Opportunity

Despite the challenges that come with agents, they are in Africa to stay for the long term. As formerly excluded customers increasingly enter the formal financial system, agents become even more relevant as frontline service providers. That creates an opportunity to innovate the agent management operational model and the role agents play in the payments value chain.

Many financial service providers built proprietary agent networks and may rely on third parties for part or all of their management. More recently, shared agent infrastructure models have emerged as an alternative; we expect that approach to gain traction. For example, in Nigeria, the Shared Agent Network Expansion Facilities (SANEF) platform, created in partnership between the Central Bank of Nigeria and the country's banks, has built a network of over 2 million agents across the country to provide a shared infrastructure for promoting financial inclusion.[42]

Private "agents-as-a-service" offerings such as Selcom (Selcom, 2025) in Tanzania and Agent Banking Company (ABC) (ABC, 2025) in Uganda are also emerging to offer agent network management for PSPs and full-service financial institutions. Some of these emerging actors are new start-up firms, while others are established, such as Tyme Bank's partnership in South Africa with Pick n Pay and Boxer retail stores. (Delport, 2021).

Outside of the mobile money space, banks and MFIs have been investing in agent networks as part of their product expansion strategies. For example, Nigeria's Lift Above Poverty Organization, a microfinance bank, initiated its expansion from lending into a broader array of banking services, in part by developing an extensive network of agents trained to offer a range of products, not just payments (IFC, 2019). Building dependable agent networks starts with agent-facing innovations across selection, training, monitoring, incentives, and support—including credit-linked float management support.

For IPS, this opportunity may also stimulate a conversation about their continued support for human-assisted channels, given the reduction trend seen in this year's report. As reported in SIIPS 2024, 21 IPS supported the agent channel and 20 supported bank branches. As of June 2025, those numbers were down to 15 and 11, respectively.

Timeframe to achieve:
Shorter term (1–3 years).

Conditions for success:
PSPs must continue to invest in agents as a key customer engagement channel, the user experience through which is as important as it is through apps or other digital channels. IPS may also reconsider its shift away from support for human-assisted channels in recognition of the share of payment transactions that run through them.

42 According to the SANEF website as of August 2025: https://www.sanefng.com/



End-user trend 2 | End users embracing digital payments still live in a hybrid world

IPS operator enablement of QR code transactions—discussed in the section on system trends and opportunities—has a clear justification given the ongoing growth in digital payment adoption. Between 2017 and 2021, 42% of adults in Sub-Saharan Africa had made or received at least one digital payment, and 13% had made a digital merchant payment (World Bank, 2021h). As of 2024, those shares had increased to 51% and 20%, respectively (World Bank 2025b). In addition, end users are making and receiving more of their payments digitally and moving higher volumes of money through digital channels.

This growth in digital payments does not mean that Africa will become a predominantly digital payments environment within the five-year long-term planning horizon adopted for this report. On the contrary, consumers face multiple constraints, many of which are highlighted in Chapter 3, that will keep even avid digital adopters in a hybrid payments world for the foreseeable future. These include habit, infrastructure limitations, and fractured markets.

Cash habits limit the reach of digital payments.

Multiple consumer research studies document the challenges consumers face in shifting their payment habits from cash to digital channels. As mentioned in Chapter 3, 75% of the merchants participating in this year's SIIPS research say that their customers still prefer to pay with cash. Many of these same merchants also use cash to pay their suppliers at morning markets, in some cases because the supplier does not accept digital payments.

Another AfricaNenda consumer survey conducted in 2025 similarly shows that 89% of women and 86% of men with accounts prefer to pay for goods with cash (AfricaNenda 2025). Finally, the most recent Global Findex finds that among adults with an account in Sub-Saharan Africa who do not make digital merchant payments, more than half say it is because they are used to cash. A far smaller share says it is because their preferred merchants do not accept digital payments (World Bank 2025b).

Smartphone ownership gaps contribute to a fractured market.

As mentioned earlier in this chapter, smartphone adoption is growing across the continent. Nonetheless, as of 2024, half of the mobile phone stock in Sub-Saharan Africa was in basic phones. While this is slowly changing, the transition could lead to increased inequity in access to interoperable digital payments for low-income individuals and women, as both are less likely than wealthier adults and men to own a smartphone. In contrast, the income gap in basic phone ownership in Sub-Saharan Africa is smaller than for smartphones, and there is no meaningful gender gap. As a result, at least for the next five years, more low-income adults and women will have easier access to USSD-enabled mobile money services and digital payments than to app-enabled options. This includes many QR code options, as well as IPS-offered consumer-facing apps like InstaPay (note that smartphone ownership as a share of total mobile phone ownership in the North Africa region is higher than in Sub-Saharan Africa).

This does not mean that basic phone owners will reject digital payments. On the contrary, they will likely continue to embrace USSD-enabled options, as they have for more than a decade. It does mean, however, that basic phone users could come to depend more on the services of a single provider offering P2P and P2B options inside their service and use cash when paying individuals or merchants who do not accept the digital payment method they have.

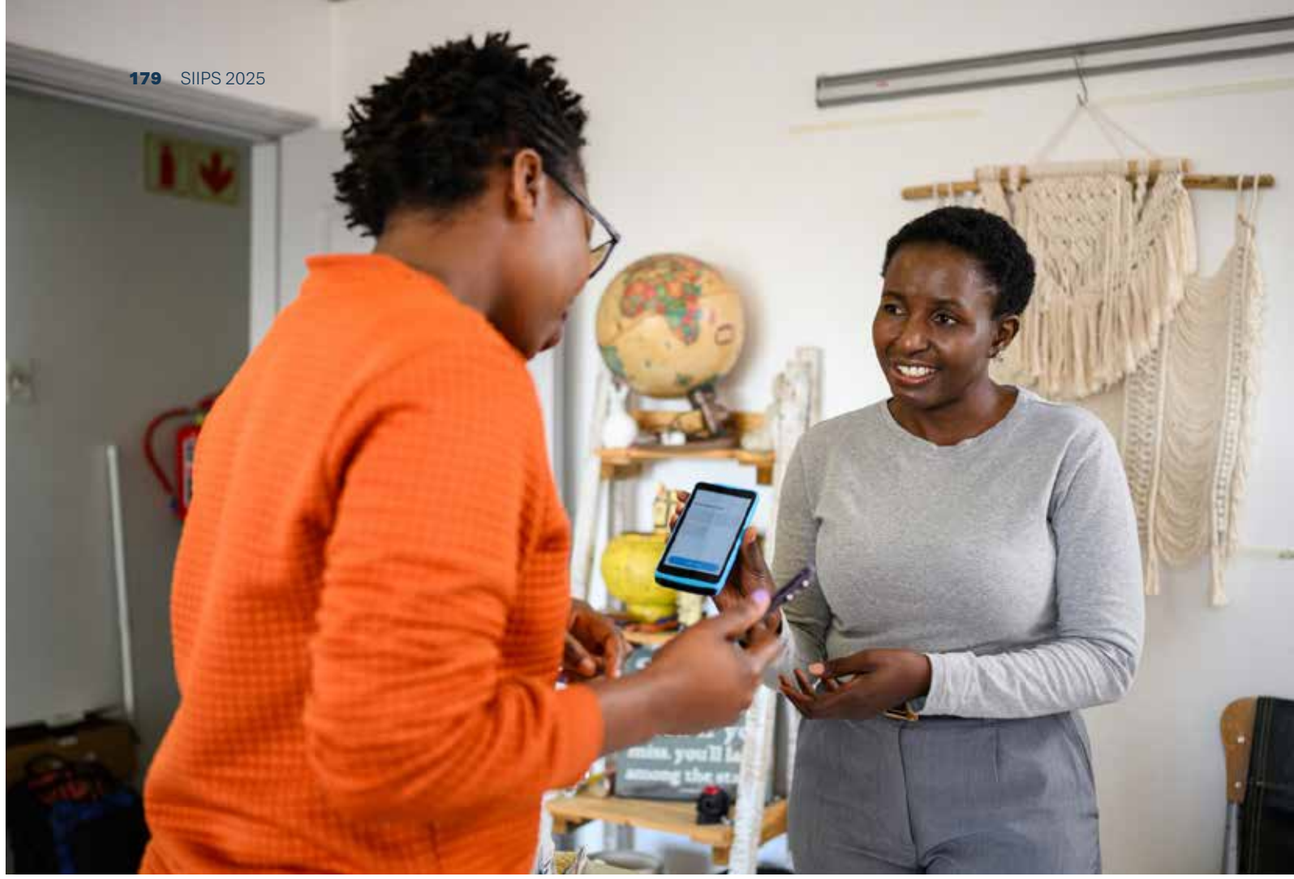
Opportunity

As the benefits of digital payments become more apparent to the broader ecosystem, providers will embrace more sophisticated approaches, including the QR codes and IPS-level consumer apps discussed earlier in this chapter. There are already willing customers among the wealthier, smartphone-enabled subsets of the market ready to embrace these options. Yet the large, basic phone-enabled market will still want convenient, easy, and safe options they can access with the tools they have. Serving them where they are today can help establish new habits and foster brand loyalty that will carry forward as this group acquires smartphones and transitions to app-enabled channels in the future.

Strategies for enabling different digital payment channels for this hybrid customer will vary depending on the market and the provider. We encountered one example of hybrid innovation during our consumer research in Côte d'Ivoire. In that country, QR code payments are contributing to a surge in digital merchant payment adoption. To take advantage of this, one of the country's mobile money providers issues customers with a physical QR code card linked to their account, thereby enabling non-smartphone owners to make secure QR code payments. When a merchant scans the card, it initiates a push-to-pay request to the customer, allowing them to input their PIN and execute the payment using the PSP's USSD service.

Timeframe to achieve:
Short-to-medium term (1–3 years).

Conditions for success:
Providers innovating hybrid digital-analog approaches specifically designed to serve less digital or financially enabled customer groups.



End-user trend 3 | Negative experiences spread virally through social networks, discouraging digital channel adoption.

Even as regulators are strengthening customer protection requirements (as noted above) and IPS are responding to them, negative perceptions of digital payments, spurred by word-of-mouth, are keeping some potential users from adopting them.

Social networks are among the top three sources of information individual end users have about digital payments in the countries included in this year's demand-side consumer research. Women are particularly likely to learn about digital payments from their social networks, according to AfricaNenda consumer research (AfricaNenda, 2025).

When the members of that social network are active digital payment users and derive benefit from them, they can positively influence the perspectives of others. The opposite is also true: non-users or tentative users of digital payments may be dissuaded from using them more if a member of their social network has a negative experience, such as not receiving money back after a mistaken payment or exposure to a scam or another form of digital exploitation. Unfortunately, digital channels increase the frequency of this type of exposure, and the current approaches to managing it have gaps.

Recourse options bring mixed results.

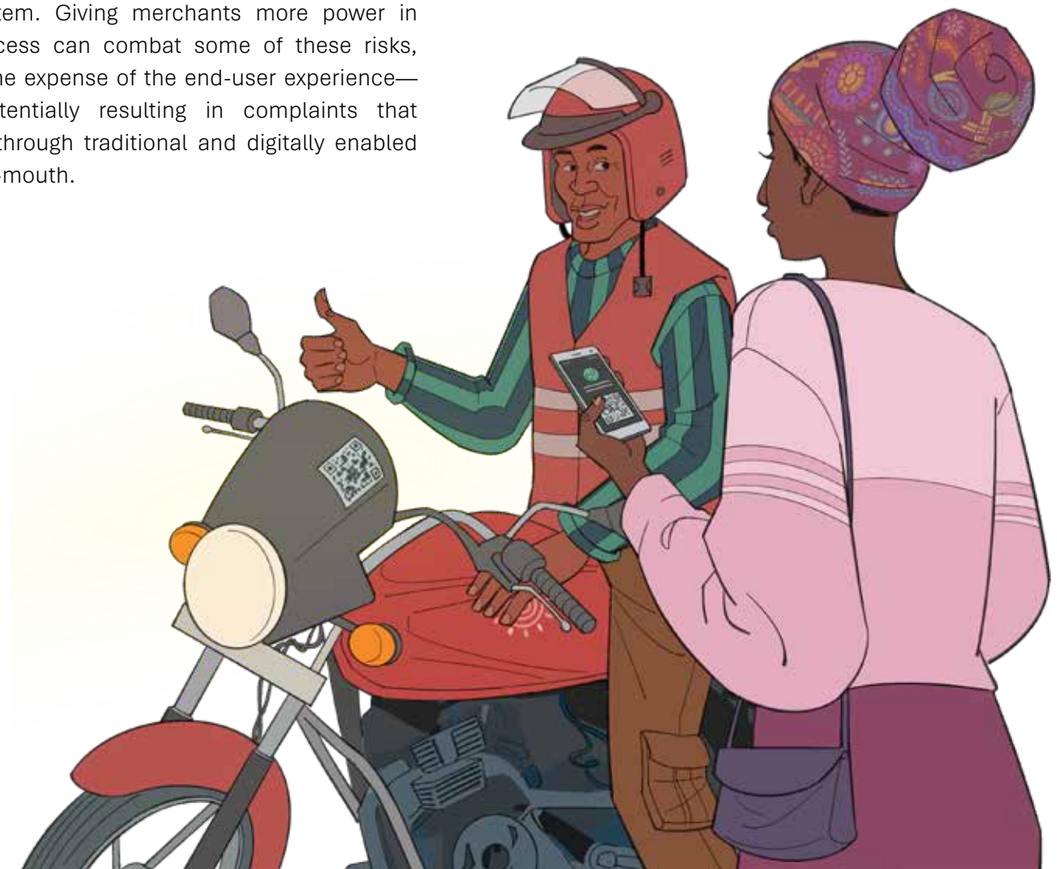
In digital payments, efforts to strengthen consumer protection can sometimes clash with the seamless user experience that motivates people to use digital options. This tension

becomes visible when digital payment systems put too much of the burden for protecting consumers on merchants or the individual end user.

Transaction reversals are one example. For customers, the ability to quickly reverse an erroneous transfer often shapes trust in a platform. In Côte d'Ivoire, some platforms require customer-merchant coordination before a reversal can happen, which can create friction for users while offering merchants more control and protection. The argument in favor of this approach is that it protects merchants, for whom digital payments may increase risk through increased transactions with remote customers they do not know and often cannot verify in person. Customer protection efforts often prioritize the individual end user, further increasing risks for merchants, such as fraudulent reversals and disputes. Likewise, when dispute resolution is delayed or unclear, it can create operational disruptions, especially for small businesses that rely on fast cash flow. These experiences not only erode trust but also exacerbate concerns about fairness in the system. Giving merchants more power in the process can combat some of these risks, but at the expense of the end-user experience—and potentially resulting in complaints that spread through traditional and digitally enabled word-of-mouth.

Fraud, scams, and fear about mistakes are major barriers to sustained usage.

In addition to the friction that many experience in the process of reversing mistaken transactions, fraud is a major driver of digital payment attrition. People hear stories, whether directly from their friends and family members or indirectly through social media, of scams, impersonation, or account takeovers. These incidents spread quickly through social networks, reinforcing the sense that "it could happen to me." Without clear guarantees of resources or protection, even small doubts can lead people to stop using digital payment channels. As one demand-side research participant from Côte d'Ivoire put it, "I stopped using [Provider P] because I was scammed by it. Someone next to me changed my PIN without my knowledge and made withdrawals." Another participant in Côte d'Ivoire said, "I am afraid of scammers; my friend was a victim of fraud."



The power of these personal stories is stronger in part because issue resolution is either slow or unsatisfying for so many. There is a deep-rooted sense among our research participants that formal recourse mechanisms are ineffective—that once cash is lost, whether through fraud or theft, there is no recourse. In Angola, one of the participants said, "Here, when money disappears, it's gone—there's no way to get it back."

End users are also confused or unclear about the fee schedule. Many feel that fees appear when they send or receive money, as well as when they cash it out. These fees often catch many by surprise, especially hybrid users who switch between cash and digital transactions. Nor is it clear where the problem lies. It could be that providers are opaque about their fee schedules. It is also possible that some end users have limited digital literacy, making it difficult for them to understand how payment flows and thus increasing their vulnerability to scams and simple mistakes.

If end users frequently experience or hear about scams, data breaches, and fraud when using digital payments, it can create fear, erode trust, and discourage both ongoing use and new user onboarding.

Opportunity

Research finds that people implicitly trust members of their social circle more than they trust a service provider or their government. Thus, to combat negative messaging circulating through social networks, providers must empower customers to maximize the benefits of their services and share positive experiences.

While it is critical for PSPs and IPSs to take steps to protect end users, they should also equip them with the information and skills to use services safely and avoid scams. User education on fraud prevention should complement investments in service security. PSPs should also strengthen consumer protection measures, fulfill or exceed regulatory mandates, and enhance the user experience to build trust and encourage habitual use. This could include incorporating safe guidelines into the onboarding process and running regular fraud awareness campaigns, while also promoting customer care channels for quick issue resolution and offering clear mechanisms for grievance redressal.

Timeframe to achieve:
Short-to-long term (1–5 years).

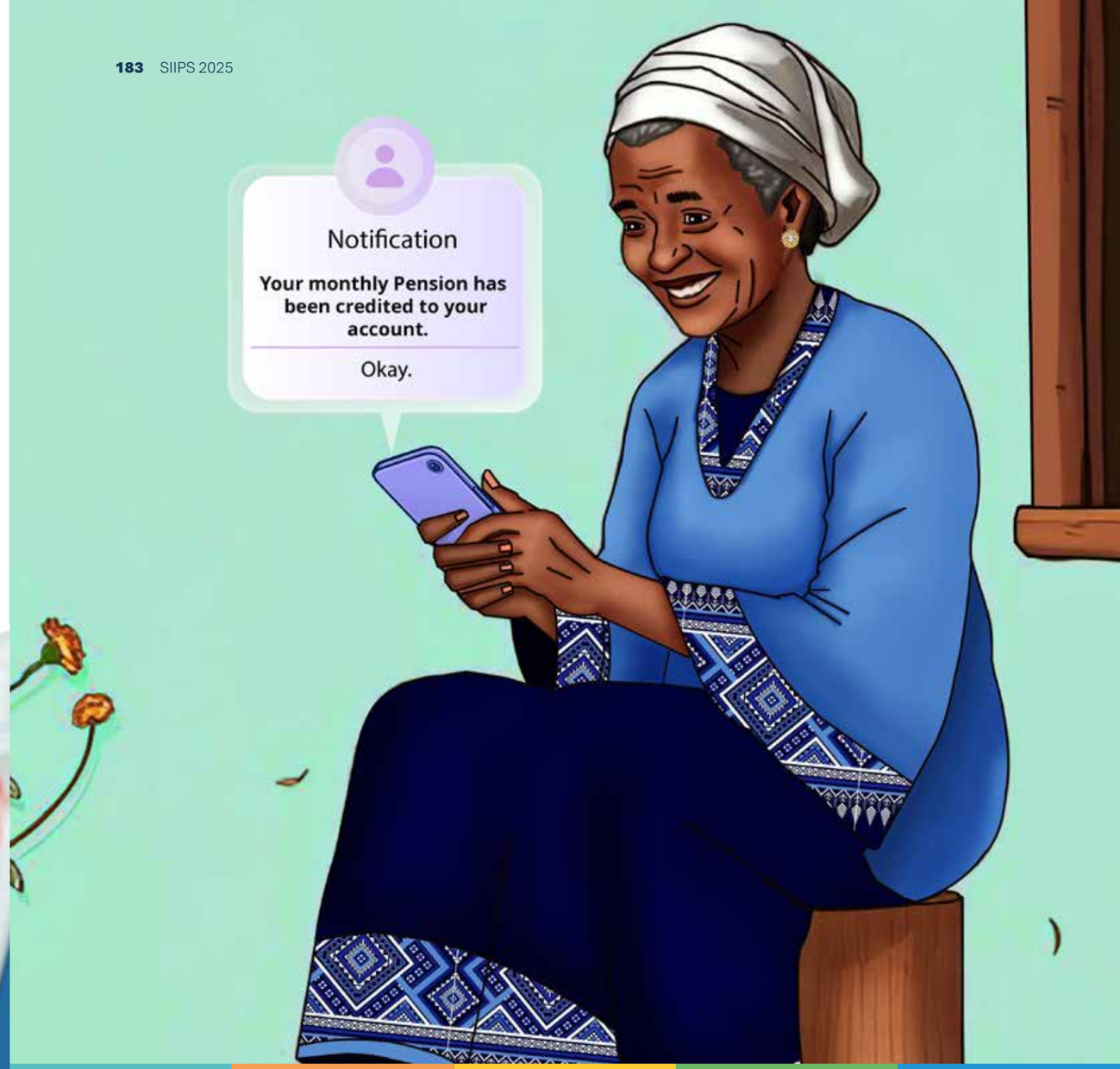
Conditions for success:
Building and maintaining trust is not a one-time action. Especially in the context of increasing scams, the approaches to which change constantly, providers need to establish and adapt their customer support and consumer protection approaches to maintain trust and promote success stories to create a narrative that payment providers are helpful and supportive.

4.4 | Conclusion

The market, system, and end-user trends and opportunities have the potential to influence the design and uptake of IPS over the next few years. Some of these trends may accelerate IPS launch and usage—for example, shared liability for fraudulent transactions or continued investment in the agent channel to promote digital payments and educate new customers. Others can hinder growth, such as design challenges and continued end-user fears about security.

Whether the dominant trend is toward acceleration or hindrance will also hinge on how actively the market's live IPS invest in evolving their systems toward inclusivity to fulfill the criteria needed to qualify as digital public infrastructure (DPI). The next chapter explores the DPI concept in more detail, including the opportunities and challenges IPS faces in delivering on its promise.





Case Study |

EthSwitch Ethiopia

Origin story

Challenge

Ethiopia has taken steps to digitally transform its payment sector, yet limited interoperability across payment channels has kept digital payments inefficient and costly. In 2011, the National Bank of Ethiopia (NBE) launched the Ethiopian Automated Transfer System (EATS), a modern digital clearing and settlement system (World Bank, 2019). In 2011, the National Bank of Ethiopia, in partnership with the country's banks and microfinance institutions (MFIs), established EthSwitch as a jointly owned share company. Additional participants, including mobile money providers and payment system operators, joined later.

EthSwitch began processing transactions in 2016, starting with ATM interoperability, followed in 2020 with support for POS payments. However, mobile banking and wallet services still operated in closed-loop systems. This limited users to transferring funds through expensive over-the-counter branch services. EthSwitch enabled interbank person-to-person (P2P) transfers using the existing card switch infrastructure in 2021. Yet the fragmented payment ecosystem created incentives for Ethiopians to use cash (UNCDF, 2024). As of 2021, 50% of adults across Sub-Saharan Africa had made or received a digital payment, but in Ethiopia, only 24% of men and 15% of women had done so (World Bank, 2021h). In addition, only 3% of adults used a mobile phone or the internet to pay bills, 5% to send money, 2% to make an online purchase, and 2% to make a digital in-store merchant payment.

To encourage digital payment adoption, EthSwitch launched a project to develop instant payment system (IPS) capabilities in 2022. The EthSwitch IPS went live in February 2024, enabling payments, transfers, and settlements between payment service providers (PSPs). Its capabilities address the fragmentation challenges in Ethiopia's payment ecosystem.

Value proposition

EthSwitch is a unified platform for bank and non-bank providers (MFIs, MMOs, and PSOs) to connect directly or through sponsors to process payments. The EthSwitch IPS's value proposition is multifaceted, offering significant benefits to stakeholders within the Ethiopian financial ecosystem, such as:

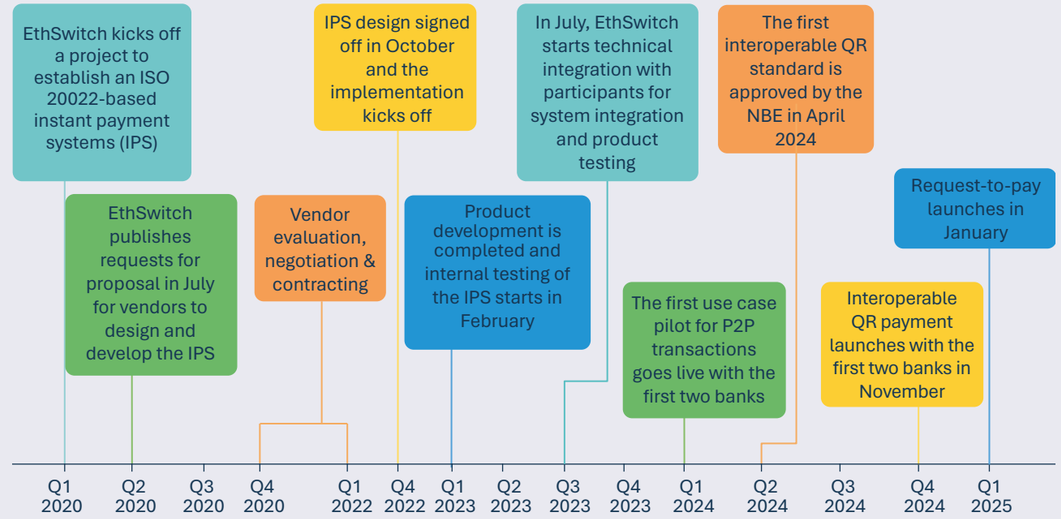
1. **Improved interoperability:** The central interconnection hub enables transactions between bank and non-bank financial institutions, allowing users to make payments digitally.

2. **Expected efficient payment processing from shared services and infrastructure:** The shared unified platform reduces the need for individual institutions to invest in proprietary infrastructure to enable interoperable digital payments. Rolling out new use cases for all participants is expected to be easier and more cost-effective.

3. **Improved affordability:** Transfer costs on the EthSwitch IPS are approximately 47% lower per transaction for end users compared to the cost of digital payments before its introduction. Additionally, QR code functionality offers a more affordable alternative to traditional point-of-sale (POS) terminals for small businesses.

4. **Enhanced financial inclusion:** The system has the potential to extend digital financial services to unbanked populations through the participation of non-banks, including MMOs and MFIs. It could also improve usage through more accessible, affordable, and convenient payment options.

EthSwitch Timeline



Source: EthSwitch stakeholder engagement, 2025.

Efforts to build an interoperable IPS began in February 2020, when EthSwitch developed an implementation roadmap for a technical architecture to support secure, interoperable, and real-time settlement. By mid-2020, EthSwitch had issued a request for proposal (RFP) to select a technical solution provider and establish a dedicated project office led by a program management director.

Phase one of the IPS implementation commenced in November 2022. It focused on establishing key modules (Instant Core Payments Switch, Operator, and Participant Portal) and enabling the first use case: Simple P2P Credit Push Transfer. Internal testing of the first builds provided by the IPS vendor began in February 2023.

Industry participant engagement began in July 2023 following a two-stage go-to-market strategy: onboarding and public launch. After confirming the P2P use case was secure and stable, EthSwitch distributed onboarding packs and engaged multiple banks in integration testing. The system went live in February 2024 with the P2P use cases and two participating banks: Awash Bank and Amhara Bank.

In 2024, EthSwitch expanded functionality to include QR code payments and request-to-pay (R2P) transactions for merchants. In April 2024, the NBE had approved a standardized QR scheme and QR brand, ETHQR, creating a single standard for all participants. In November 2024, the NBE mandated that payment providers adopt the standard to promote public trust and interoperability and minimize consumer confusion.

Bulk transactions, alias payments, direct debit and e-mandate, and payment initiation service provider (PISP) connection functionality are all in the pipeline. EthSwitch plans to enable bulk payments in 2025, beginning with P2B and P2G transactions. Direct debit and e-mandate development was 50% complete as of December 2024 and will enable recurring payments using account or wallet numbers. The functional specification document for PISP/third-party connection functionality has been finalized.

EthSwitch also has projects underway to enable cross-border payment functionality through integration with other IPS. These include a project with Aani, a central bank IPS in the United Arab Emirates, covering Dubai and Abu Dhabi; card integration has already started (Al Ethiad Payments, 2025). Discussions with the Pan-African Payment and Settlement System (PAPSS) and Ghana Interbank Payment and Settlement Systems (GhiPSS) are ongoing to enhance cross-border payment capabilities.



Governance and operations

Payment system overview

Governance and ownership

Governed by
Governed by EthSwitch, NBE provides strategic oversight and approvals

Ownership model
EthSwitch

Decisions made by
NBE and participants (Direct and Indirect)

Scheme rules and governance processes

Working groups and committees
Approved by EthSwitch Board and final approval by NBE

Stakeholder comms and feedback
Collaborative input by NBE and participants

Messaging standard
ISO 20022 standard with robust middleware

Operator

System manager
EthSwitch

System operator
EthSwitch

Technical system and network operator
EthSwitch

Payment system

Settlement agent
National Bank of Ethiopia

Settlement modality
Net settlement model with two settlement windows per day (14 settlement sessions per week)

Foreign exchange hub
None

Correspondent banks
None

Interoperability model
Banks, MFIs, PIIs, and PSOs

Instruments

- Card
- E-money
- Debit transfer (EFT)
- Credit transfer (EFT)
- CBDC

Channels

Branch	ATM/Kiosk	USSD	Apps	POS
Agents	QR code	Branch	Browser	Biometric with National ID

Biographic data and functionality

ID proxy	Biometrics	APIs	Other functionalities
Mobile phone number, bank account number, and QR code	None	APIs for message transfer, name resolution, etc.	Request-to-pay, P2M, Alias Payments, Bulk Disbursements, E-mandates, and PISP.

Participants

Direct (33)
33 direct participants

Indirect (9)
3 MFIs, 6 PSOs, and 4 PIIs

The EthSwitch IPS has 33 direct participants (30 commercial banks, 1 e-money issuer, and 2 MFIs) and 9 indirect participants (4 MFIs, 2 DFS, and 3 wallets). As the market evolves, EthSwitch will continue onboarding new participants in line with the NBE's mandatory participation directive. The IPS uses standardized application programming interfaces (APIs) to enable integration between PSPs and technical service providers using ISO 20022 standards, as well as robust middleware for messaging formats, transaction types, and data validation rules, and to connect with participants that have not yet adopted ISO 20022. Also, EthSwitch integrates with the NBE's Real-Time Gross Settlement (RTGS) system, which does not fully support ISO 20022 messaging formats. Consequently, the IPS operates on a net settlement model with two daily settlement windows. Once the NBE migrates its system messaging to the ISO 20022 standard, the IPS intends to have up to seven daily settlement windows.

Governance structure

The EthSwitch Share Company (EthSwitch S.C.) is a public-private entity jointly owned by the NBE and 33 payment providers, including 32 banks and 13 non-bank financial providers. New owners can join by buying shares. This shared ownership model aims to secure the input of every participant and align their interests. The IPS is a service provided by the company.

The IPS supports direct and indirect participation models through sponsorship arrangements. PSPs can participate by purchasing a share in EthSwitch or through an alternative participation model that requires an annual subscription fee. Banks operate as direct participants with settlement accounts at the NBE. Non-banks participate indirectly through sponsoring banks that can maintain settlement accounts at the NBE.

The National Payment System (NPS) Proclamation No. 718/2011, which provides the legal framework for Ethiopia's payment systems and grants the NBE regulatory authority, defines governance for all EthSwitch solutions, including the IPS (more on the regulatory framework below).

EthSwitch is licensed as a payment system operator under the NBE Payment and Settlement Systems Directorate and is governed by a 12-member board of directors comprising CEOs from banks with ownership stakes (NBE, 2025a). The board makes IPS-related decisions under the NBE's regulatory guidance, with the NBE vice governor serving as the board chairman. This structure ensures input into key decisions from diverse stakeholders, including the NBE, IPS participants (both direct and indirect), and payment industry associations.

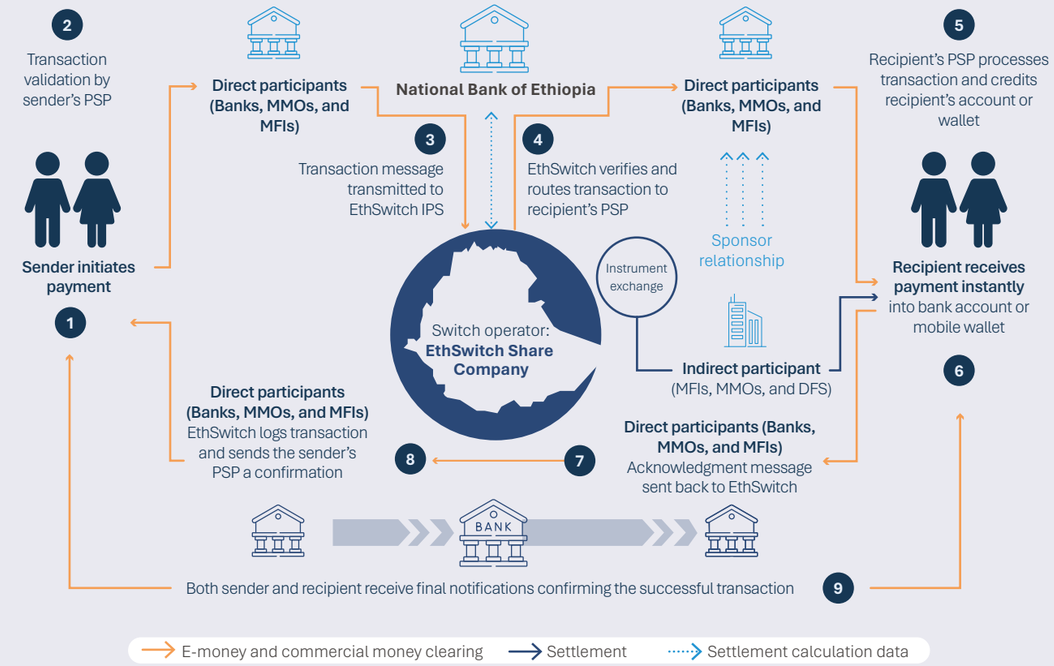
Functionality

The EthSwitch IPS employs a channel-agnostic approach that supports diverse channels across bank and non-bank PSPs. The system accommodates feature phones and smartphones and enables transactions through web-based platforms, mobile applications (including USSD), QR codes, point-of-sale (POS) terminals, and automated teller machines (ATMs). The participants select the channels they offer based on customer needs.

EthSwitch supports multiple payment instruments to facilitate digital transactions. These include transfers between bank accounts through P2P credit push transfers, as well as all-to-all interoperability between bank accounts and mobile wallets (e.g., P2P wallet-to-wallet, wallet-to-account, and account-to-wallet transfers). The system enables Request-to-Pay (RtP) payment for P2B transactions through merchant-presented QR codes (both static and dynamic) as well as payee-presented QR codes for P2P transfers. The QR payment system maintains full interoperability, and the IPS has fully implemented RtP functionality.

The NBE is the Ethswitch settlement agent. The system leverages central bank liquidity by directly connecting to the NBE-managed RTGS system for final settlement.

EthSwitch IPS transaction flow



The instant payment process begins with the sender initiating a payment through one of their PSP's supported channels. The sender's PSP validates the transaction details, including identity verification and funds availability. It then transmits the payment instructions, formatted in the ISO 20022 message standard, to the EthSwitch IPS via the PSP API. The IPS routes the message from the sender's PSP to the recipient's PSP using Bank Identification Numbers (BIN). After the recipient's PSP authenticates, authorizes, and verifies the account, the IPS forwards payment status to the sender's PSP, which notifies the consumer through mobile app and SMS channels. An acknowledgment message returns to the IPS for transaction logging and confirmation. The sender and the recipient receive final transaction confirmation from their PSPs.

EthSwitch is developing payment alias functionality for the IPS to enhance the user experience. By June 2025, the system enabled payments using aliases such as phone numbers, national IDs, or custom short codes linked to accounts. These aliases will facilitate efficient and secure payment routing, ensuring that transactions connect to the correct accounts and wallets across the diverse ecosystem of banks and non-bank PSPs.

Technical standards and use cases

The EthSwitch IPS uses ISO 20022 with a robust middleware message format for transmitting payment instructions between PSPs (see Box). Furthermore, all messages from PSPs to the IPS employ private key encryption with signature and digest protocols before transmission. The IPS decrypts these messages using public keys before forwarding them securely to other participants.

ISO 20022 standard with robust middleware

EthSwitch has created a robust middleware layer that:

- Handles multiple message types, including ISO 8583 (for cards), ISO 20022 (for instant payments), EFT messages, QR specifications, and proprietary bank file formats.
- Converts messages from legacy formats (e.g., ISO 8583, local EFT standards, XML, JSON) into ISO 20022-compliant structures to ensure uniform processing.
- Supports bidirectional translation so that participants using older systems can still interact with IPS seamlessly.

The middleware exposes standardized, unified API endpoints that abstract the underlying complexity. As a result, participants can integrate once with EthSwitch and automatically gain access to:

- Payment initiation and acceptance
- Name resolution and alias lookup
- Settlement and reconciliation
- Request-to-pay flows
- Dispute and mandate management

By providing one API specification, EthSwitch reduces integration costs and accelerates onboarding for new participants.

Additionally, EthSwitch offers an API gateway with a unified API for PSP integration. Participants interact with a single endpoint while the IPS manages underlying routing and processing. This enables connectivity and access to system functionality, including name resolution, transfers, transfer reversal, settlement, service requests, messaging, and administrative functions.

EthSwitch implemented a phased deployment strategy for use cases, starting with P2P payments. It followed with P2B functionality through static and dynamic merchant-presented QR payment capabilities. The next development phase will introduce government-to-person (G2P) and person-to-government (P2G) use cases; in early 2025, the IPS began integrating with tax authorities and customs agencies for those purposes. The system will thereafter enable bulk credit disbursements for government worker salaries, G2P, and large-scale transfers, and e-mandate management to allow recurring payments and third-party-initiated payments (PISP) to support innovation by fintechs and third-party providers.

Future development plans also include, as mentioned, cross-border functionality through integration with other payment systems.



Business model

EthSwitch provided the initial capital investment to implement the IPS in Ethiopia, supplemented by the African Development Bank's Africa Digital Financial Inclusion Facility and the Gates Foundation. The IPS reports that it operates on a not-for-loss revenue model.



Scheme rules

EthSwitch, in collaboration with the NBE, has developed specific rulebooks to govern IPS operations, including the IPS Rulebook, the Real-Time Payments (RTP) Rulebook, and the QR Card Scheme Book. These rulebooks define mandatory rules and standards for ecosystem participants. While the IPS scheme rules are restricted to ecosystem participants, the overarching System Rules of the National e-Payment Switch of Ethiopia outline the primary governance framework for all participating PSPs and remain publicly accessible.

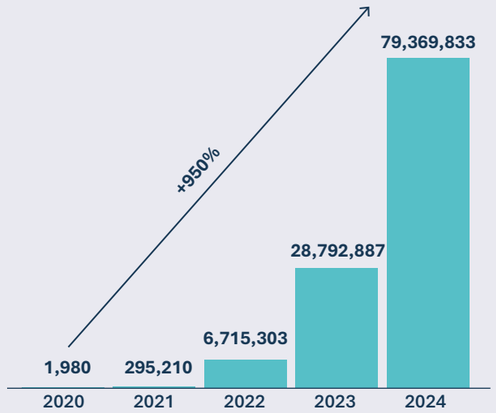
EthSwitch maintains fraud management services for all transactions, which are governed by scheme rules. In addition, the IPS has consumer recourse monitoring mechanisms and redress channels to ensure effective issue resolution for end-users. It features a dispute management platform for handling inter-institutional disputes. However, participants are required to address disputes raised by their clients.

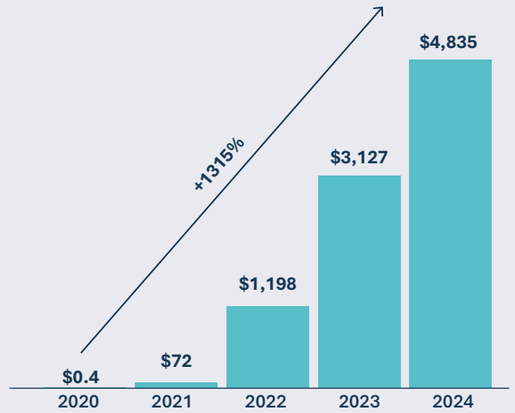


Volumes and values processed by the payment system

EthSwitch launched the cross- domain and interoperable IPS in February 2024, although its precursor scheme had been in operation for three years prior, supporting ATM and POS card payments. The figure below includes all those years, though note the change in capabilities resulting in the 2024 inflection, with the IPS processing approximately 79 million transactions, valuing a total of $5 billion.

EthSwitch transaction volumes and values (millions)





Regulatory framework

As the foundation for regulating payment systems in Ethiopia, the EthSwitch IPS and its participants operate under the purview of the National Payment System (NPS) Proclamation No. 718/2011. Subsequent amendments opened digital payment systems to foreign investment. Participating PSPs must comply with AML/CFT rules and regulations issued by the Financial Intelligence Agency to prevent illicit financial activities according to the Prevention and Suppression of Money Laundering and the Financing of Terrorism PROCLAMATION NO. 780/2013.

As Ethiopia's primary payment system regulator, the NBE establishes directives, guidelines, and principles related to payment settlement systems. This includes, but is not limited to, the Payment Instrument Issuers (PII) Directive No. ONPS/01/2020, Payment Systems Operators (PSO) Directive No. ONPS/02/2020, Use of Agents Directive (FIS/02/2020), Personal Data Protection Proclamation No. 1321/2024, and Financial Consumer Protection Directive No. FCP-01-2020.



Inclusivity learnings

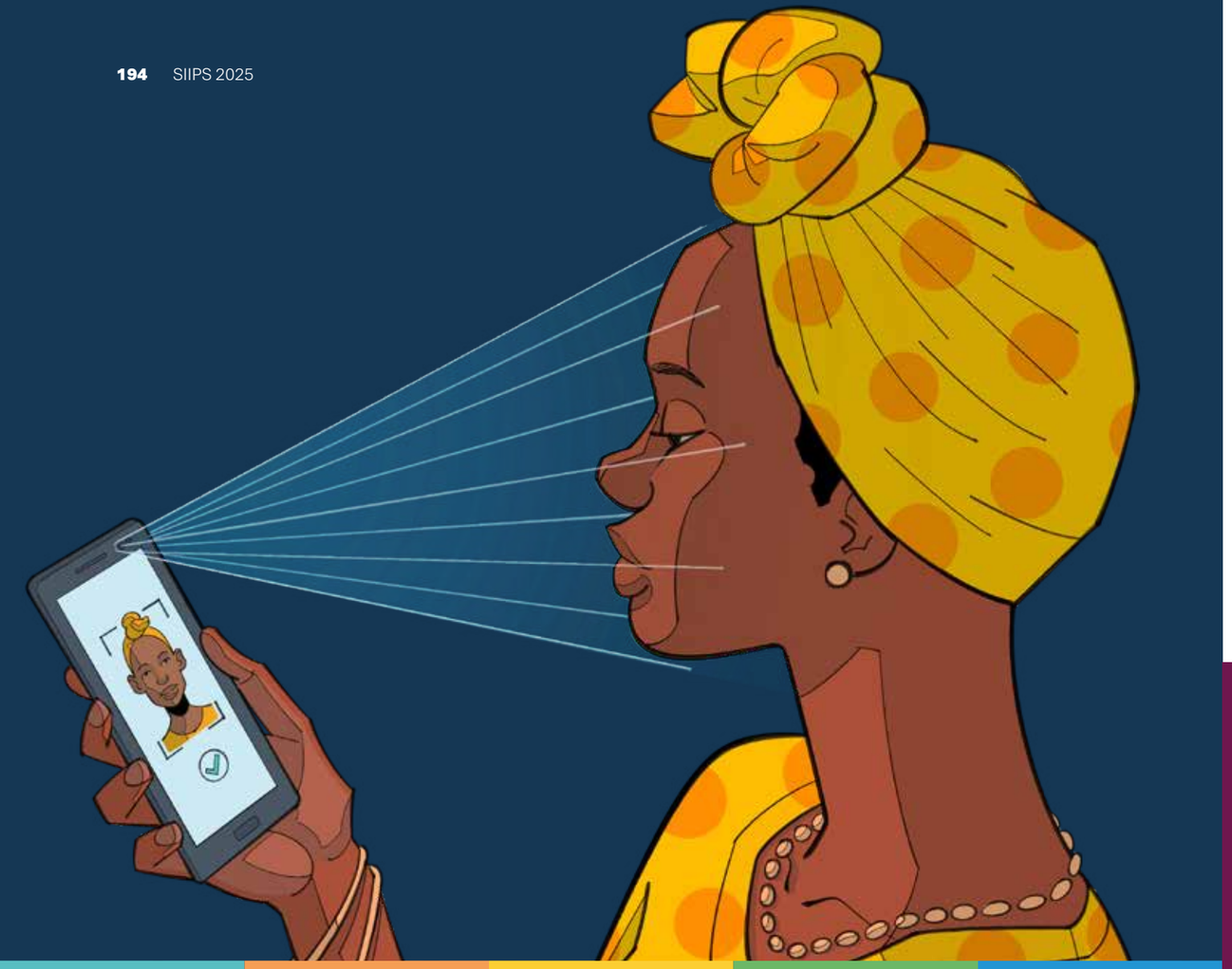
Ethiopia's EthSwitch IPS is ranked at a progressed level on the AfricaNenda Inclusivity Spectrum, advancing from a basic level in the SIIPS 2024 report. The system now supports pro-poor governance mechanisms through joint decision-making. Board members are CEOs from bank participants with an ownership stake, and it incorporates input from all IPS participants, including indirect participants in decision-making. With this development, EthSwitch meets the criteria for progressed inclusivity.

The following drivers of inclusivity have been identified for the EthSwitch IPS:

- **EthSwitch supports banking apps** as a payment channel for end-users, meeting the minimum primary channel requirement based on Ethiopia's bank-dominant market. EthSwitch enables P2P, P2B, and B2B use cases, which means the IPS meets the minimum use case functionality on the AfricaNenda Inclusivity Spectrum.

- **EthSwitch allows both bank and non-bank participants** and therefore meets the cross-domain model criteria. Additionally, the IPS actively collaborates with the central bank, serving as the regulator and supervisory entity. NBE, specifically the vice governor, serves as the board chairman of the IPS. The central bank is also responsible for approving the IPS fee structure and scheme rules. With EthSwitch adopting a pro-poor governance model, the IPS meets the three requirements to gain status on the 2025 AfricaNenda Inclusivity Spectrum.

- **EthSwitch meets two of the three requirements for mature inclusivity by enabling additional recourse and achieving low costs for end users**. The IPS has a dispute management platform for handling interinstitutional disputes, which is managed by a dedicated team that monitors how participants address disputes raised by their clients. EthSwitch operates within a not-for-loss business model, charging low fees sufficient to generate revenue for cost recovery and ensure the sustainability of the IPS. To obtain a mature status on the inclusivity spectrum, EthSwitch needs to expand its use cases to enable B2P, B2G, and cross-border use cases.



5

Spotlight IIPS for what: The digital public infrastructure (DPI) opportunity in Africa

5.1 Introduction

The State of Inclusive Instant Payment Systems in Africa (SIIPS) 2024 report opened with the simple premise that digital public infrastructure (DPI) is the next frontier of inclusivity in payments. That statement remains just as true in 2025. AfricaNenda uses the Group of 20 (G20) definition of DPI, which defines it as "a set of secure, interoperable digital systems available at societal scale." DPI possesses four attributes: interoperability, open standards, societal scale, and robust enabling rules. Three pillars make up its core foundations: digital payments, digital ID, and data exchange systems (see Table 5.1). In countries where all three layers operate as an integrated whole, they catalyze lower-cost identification and privacy-protected ID verification, cheaper payments, and safe, empowering data exchange to enable an end-to-end digital economy.

Yet the current state of DPI in Africa is one of numerous payment and digital ID rails and too few comprehensive, full-stack solutions.

Twelve months since the last SIIPS report, Africa has doubled down on these *individual* layers:

Digital payments
36 live IPS now crisscross 31 African countries.

Digital identity
36 African countries issue digital or electronic national IDs.

Data exchange system
17 African countries now have a digital public service delivery that has data exchange capabilities. In addition, 36 countries have enacted data protection and privacy legislation that supports data exchange (Data Protection Africa, 2023).

Only a handful of African countries have begun to integrate the three layers, enabling online ID verification, instant execution of payments, and data sharing with revocable consent. Across the continent, this presents a significant yet untapped opportunity to establish comprehensive DPI.

Governments require practical guidance to spearhead both siloed and integrated DPI initiatives. To provide that guidance, AfricaNenda Foundation, the Better Than Cash Alliance, the Centre for Digital Public Infrastructure (CDPI), the Digital Impact Alliance (DIAL), and Integral developed the DPI Roadmap Playbook, a step-by-step guide to help countries create a customized DPI roadmap tailored to their unique needs—it is available for download on the AfricaNenda website.

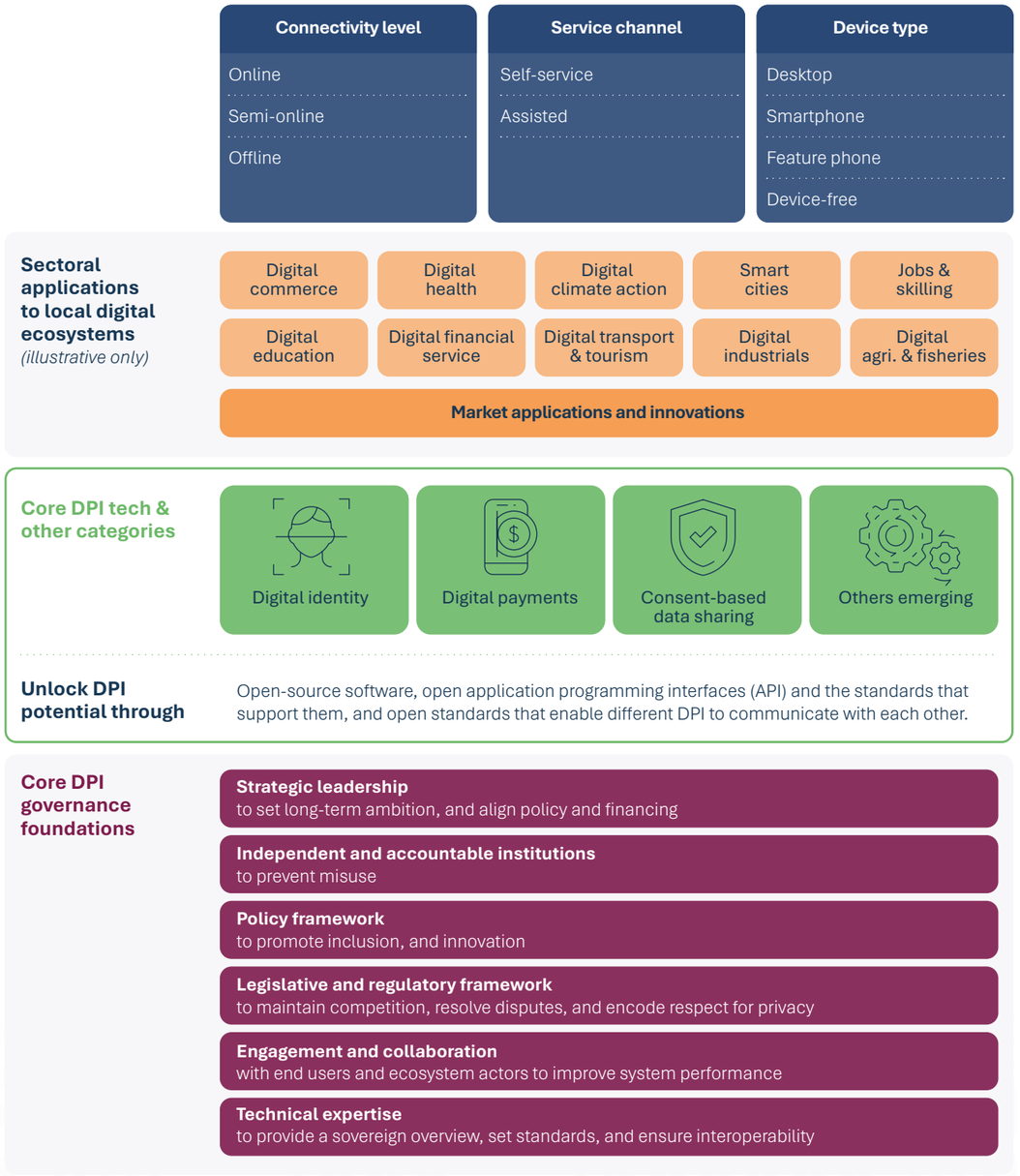
For this chapter, we explore the benefits that a fully interoperable DPI stack could unlock, uncover why most countries still operate their DPI foundations in silos, and offer practical steps governments, industry, and development partners can take to translate Africa's digital infrastructure into shared prosperity.

Table 5.1 | Core foundations of DPI

Layer	Core function	Typical building blocks
Digital payments	Move value in real-time at low cost.	Inclusive instant payment systems (IIPS), proxy/alias and overlay services, open-loop payment systems, and all-to-all interoperability.
Digital ID	Prove *who* a person or firm is.	Unique national identification (ID) numbers, biometric registries, and electronic know-your-customer (eKYC) services.
Data exchange system	Move data securely, with the owner's consent.	Open APIs, data-sharing/consent frameworks, data-protection and privacy laws, and regulated entities known as 'consent managers,' which facilitate the easy sharing and consumption of data from various entities with user consent.



Figure 5.1 | A framework to understand the DPI approach



Source: Adapted from UNDP, 2023a.

5.2 | India's DPI—a global example

India has been a central force in transforming DPI from a niche idea into a prominent strategy in global tech policy. The country's development of ID, payment, and data exchange infrastructure began in 2009 with Aadhaar, a nationwide digital identity program that assigns every resident a unique 12-digit number, laying the foundation for the first pillar of DPI (UIDAI, 2025). Aadhaar's eKYC and electronic authentication (e-auth) functions enable banks, mobile network operators, and other service providers to verify identities instantly and at low cost (Aadhaar is estimated to have driven verification costs from around $11 or more per transaction to $0.35-$0.45) (The Hindu, 2018).

Aadhaar provided the foundation for India to build the second pillar: digital payments (India Stack, 2025; Chandler Institute of Governance, 2025). In 2016, the Unified Payments Interface (UPI) introduced a simple, secure, and fully interoperable payment system (NPCI, 2025a). Together with policies enabling simplified eKYC processes and efforts to register people for basic financial accounts, these innovations helped drive a rapid rise in financial inclusion. Between 2014 and 2018, formal bank account ownership in the country increased from roughly 53% of adults to 89% (World Bank 2025b). Aadhaar also functioned during the COVID-19 crisis as an authentication system to track vaccine recipients and to support rapid, contact-free, government cash transfers (Chandler Institute of Governance, 2025).

In 2020, India added a third layer, data exchange, through the Data Empowerment and Protection Architecture (DEPA), which lets individuals share personal data on a conditional basis and with consent (NITI, 2020). The following pillars make up the DEPA framework:

1. **The Digital Personal Data Protection Act of 2023,** which established rules related to individual data rights, responsibilities of fiduciaries, and enforcement authority.
2. **An electronic consent artifact**, which defines the scope of data that can be shared.
3. **A new category of regulated entities known as 'consent managers'** (also referred to as account aggregators). DEPA replaced existing mechanisms for data access and sharing, such as document notarization and physical submission, screen scraping, and username/password sharing, which are standard across Africa (Journals of India, 2023).

India's DPI model has since attracted wide international attention and sparked new forms of collaboration. One such example is the Modular Open Source Identity Platform (MOSIP), incubated at the International Institute of Information Technology, Bangalore, with support from the Gates Foundation and other donors (MOSIP, 2025). Launched in 2018, MOSIP is a configurable digital ID stack that enables governments to capture biometrics, deduplicate identities, and issue verifiable digital credentials on-premises or in the cloud. Using MOSIP, a country could deploy a secure, low-cost national ID system in months rather than years. MOSIP was developed based on insights from Aadhaar and is now being adopted in Africa in Burkina Faso, Ethiopia, Guinea, Madagascar, Morocco, Niger, Sierra Leone, and Togo (MOSIP, 2025). India's UPI is also making inroads in Africa through NPCI International, the overseas arm of the National Payments Corporation of India. NCPI International was set up in 2020 to license the UPI/RuPay technology and help partner countries set up UPI-like real-time payment systems. This form of technology transfer is increasingly referred to as DPI-as-a-Service (DaaS).

DaaS enables the prepackaged delivery of DPI solutions as cloud-based or on-premises services. In theory, this could facilitate faster and more affordable DPI development, particularly in countries with limited technical capacity. Leveraging a service version of India's technology could make it easier for nations to leverage India's expertise with DPI. Similarly, other open-source platforms, such as Singapore's Government Tech Stack (SGTS), Estonia's X-Road, and Mojaloop, are also being adopted in Africa. At the multilateral level, the GovStack open-source community is working to establish common standards that can accelerate DPI roll-outs worldwide (GovStack, 2025).



5.3 Where Africa stands today in DPI deployment

As noted in the introduction, dozens of African countries have implemented one or more of the layers of DPI, and a handful have begun to integrate the three layers, enabling online verification of an ID, instant execution of payments, and data sharing with revocable consent. The current state of DPI on the continent is as follows:

Digital payments

A growing number of IPS anchors Africa's digital transformation. As of July 2025, the continent hosted more IPS than any other developing region and was second only to Asia in transaction growth (ACI Worldwide, 2024). This proliferation is in part driven by proactive central bank efforts to establish IPS. In short, the payment layer of DPI is on its way to ubiquity.

Digital identity

The identity layer is nearing ubiquity as well, but coverage gaps remain. According to the African Union, the majority (85%) of African countries have national ID systems. However, many still rely on paper-based civil registers and processes, and many systems offer limited utility for service delivery (African Union, 2022). Furthermore, data from the University College London's DPI map indicate that 67% of African countries now operate a digital or electronic ID system (UCL IIPP, 2025). Yet people, not systems, tell the real story: an estimated 470 million Africans lacked any official ID in 2021, the most significant exclusion gap on the planet (World Bank, 2021d). The implication is stark: even the fastest payment rails cannot reach everyone or satisfy eKYC rules if people do not have verifiable forms of ID.

Data exchange system

The data exchange layer is the essential glue that lets verified information flow securely among government agencies, regulators, and private-sector providers. Still, it remains the weakest link in Africa's emerging DPI stack. Though 36 of 54 African states (65%) have enacted data-protection laws (Data Protection Africa, 2023), fully interoperable data platforms are still rare. Consent frameworks are even scarcer. Nigeria alone has issued a formal open-banking rule set, scheduled to take effect in August 2025 after a four-year waiting period. The open banking rules will require banks to share data with licensed third-party providers under explicit, user-controlled consent, paving the way for open banking to enable open finance and, eventually, an open economy (Techcabal, 2025; CBN, 2021).

Meanwhile, digital public-service portals that broker person-to-government interactions (tax filing, license applications, benefit disbursements) now operate in 17 African countries. Four of them run on Estonia's X-Road architecture ("X-Road" is the open-source, white-label digital public-service portal that Estonia and Finland released through the Nordic Institute for Interoperability Solutions so that adopters can brand and tailor it to their context). Another four are in pilot running on the same X-Road architecture (UCL IIPP, 2025). Rwanda's Irembo portal already offers 100-plus public-service APIs, while Uganda's UGhub fuses dozens of government registries on an open-source backbone, reducing new e-service onboarding from months to days (Digital Impact Alliance, 2024b). Scaling such platforms and embedding robust consent managers will be crucial if Africa is to unlock the full potential of its instant payment rails and digital ID registries and move toward a truly integrated, open digital economy.

Only a handful of African countries have partially integrated the three DPI layers. Nigeria and Rwanda have the most advanced integration efforts, though Kenya, South Africa, and Uganda have also made strides. Still others have DPI initiatives in all three areas of digital ID, payments, and data exchange, though they are not integrated.

Box 5.1 | African countries connecting the three DPI layers



Nigeria is knitting all three layers of DPI into a single, interoperable system. At the foundation sits the National Identity Management Commission's National Identification Number (NIN) and its API-first NIN Authentication Service, which lets any authorized provider verify an individual only after that person grants explicit approval (NIMC, 2025a). On top of this identity bedrock, the central bank–backed Nigeria Inter-Bank Settlement System (NIBSS) upgraded its decade-old instant-payments rail (NIP) to the National Payment Stack (NPS) in 2025 and has prepared an open-banking framework for enforcement beginning in August 2025 (CBN, 2021a). Together, these rails will allow banks, fintechs, and government agencies to move money in real-time and pull verified data, Bank Verification Number (BVN), tax, company, or account information once a user has been correctly identified (NIBSS, 2025a)

A uniform consent layer ties the stack together. NIBSS's iGree gateway intercepts every BVN and displays a one-time password screen to the account holder, allowing them to either consent or refuse to share their information. NINAuth applies the same opt-in prompt for identity look-ups. Because every data flow must pass through one (or both) of these consent checkpoints, Nigerians retain full control over how their personal information is used. At the same time, regulators gain a clear audit trail. The result is a mutually reinforcing trio: a trusted identity, IPS, and a consent-based data-sharing system, which lowers onboarding costs, curbs fraud, and creates fertile ground for new services ranging from government cash transfers to private-sector budgeting apps.



Rwanda is integrating its DPI components into a coherent stack: the national IPS, eKash, is active with two use cases already enabled (P2P and P2M). Rwanda is also developing a nationwide digital ID program, backed by an automated, multimodal biometric authentication system (now at the procurement stage); it will provide every citizen with a verifiable identity (Biometric Update, 2025). These rails build on Irembo, the one-stop e-government portal that already delivers dozens of public services (IremboGov, 2025). To ensure data flows safely across these platforms, the country's cabinet approved a National Data Sharing Policy in May 2025 that establishes a Data Governance Unit, sets common data standards, requires compliance with the 2021 Data Protection and Privacy Law, and calls for an API-based national data sharing platform. Implementation is phased through 2029, starting by establishing oversight bodies, followed by standards, platform deployment, and government-wide training.



Kenya and South Africa have also made strides in consent-based data sharing, primarily driven by private-sector initiatives focused on the financial sector. Formal national data-sharing frameworks in South Africa are still in development and are not expected until 2026 (FSCA, 2024). South African account-aggregation fintechs Stitch and Ozow are spearheading the move to open banking, partnering directly with Nedbank, Absa, and Capitec to build and refine ecosystem-wide open APIs (Absa, 2025).

Table 5.2 | DPI status in Africa

#	Country	Digital payments - IPS	Digital ID or electronic ID	Digital public service platform with a data exchange capability
1	Algeria	Yes	Yes	
2	Angola	Yes		Yes
3	Benin		Yes	Yes
4	Botswana			Yes
5	Burkina Faso		Yes	Yes
6	Burundi			
7	Cabo Verde		Yes	
8	Cameroon	Yes	Yes	
9	Central African Republic	Yes		
10	Chad	Yes	Yes	
11	Comoros			
12	Democratic Republic of Congo		Yes	
13	Republic of the Congo	Yes	Yes	
14	Côte d'Ivoire			
15	Djibouti		Yes	
16	Egypt	Yes	Yes	Yes
17	Equatorial Guinea	Yes		

#	Country	Digital payments - IPS	Digital ID or electronic ID	Digital public service platform with a data exchange capability
18	Eritrea			
19	Eswatini (formerly Swaziland)	Yes		
20	Ethiopia	Yes	Yes	
21	Gabon	Yes	Yes	
22	Gambia	Yes	Yes	
23	Ghana	Yes	Yes	
24	Guinea		Yes	
25	Guinea-Bissau			
26	Kenya	Yes	Yes	
27	Lesotho	Yes	Yes	Yes
28	Liberia			Yes
29	Libya	Yes	Yes	
30	Madagascar	Yes	Yes	Yes
31	Malawi	Yes	Yes	
32	Mali		Yes	
33	Mauritania		Yes	
34	Mauritius	Yes	Yes	Yes
35	Morocco	Yes	Yes	Yes
36	Mozambique	Yes		
37	Namibia			Yes
38	Niger			
39	Nigeria	Yes	Yes	Yes
40	Rwanda	Yes	Yes	Yes
41	São Tomé and Príncipe			
42	Senegal		Yes	
43	Seychelles		Yes	Yes

#	Country	Digital payments - IPS	Digital ID or electronic ID	Digital public service platform with a data exchange capability
44	Sierra Leone	Yes	Yes	
45	Somalia	Yes	Yes	
46	South Africa	Yes	Yes	Yes
47	South Sudan			
48	Sudan			
49	Tanzania	Yes	Yes	Yes
50	Togo		Yes	
51	Tunisia	Yes	Yes	
52	Uganda	Yes	Yes	Yes
53	Zambia	Yes	Yes	
54	Zimbabwe	Yes		
Total		**31**	**36**	**17**

Source: IPS Digital Payments data derived from the findings in Chapter 2 of this report, and data on digital/electronic IDs and digital public service platforms were obtained from The Digital Public Infrastructure Map (2025).



5.4 Why integration matters and the potential for Africa

The full value of each pillar of DPI is arguably realized only when they are integrated. In technical terms, each layer is a network; when they are woven together, they create a *network of networks* whose utility grows exponentially with every additional node, whether that node represents a citizen, a business, or a government agency. In the absence of deliberate, standards-based integration, countries risk "isolated digital environments," as described in the European Interoperability Framework, which undermines the single market (European Commission, 2017).

Integrated DPI shows potential to accelerate transformation and inclusion in Africa by lowering the cost of digital services, making public service delivery more efficient, improving cohesion in digital economic development, improving credit access for SMEs and individuals—along with data capture for credit scoring—and enabling more tax income collection, which leads to more public investment and increased public trust in government and private sector systems. Below, we look at each of those prospective benefits in turn.

> **"Where Aadhaar first helped seed India's economy with hundreds of millions of new economic participants with bank accounts, UPI then gave those account holders an easy and cheap way to transact digitally. Similarly, the third layer of India Stack helps those same account holders to leverage the data trail they leave behind as they go about transacting and operating in the digital economy."**
>
> — India Stack (2025a)

Lower cost, faster onboarding

Integrated digital ID, digital payments, and consent sharing have the potential to make identity validation and verification more accurate and streamlined while also protecting end-user privacy. This can result in greater speed at a lower cost.

For example, when India fused its Aadhaar ID with real-time payments and an open-API consent layer, the cost of executing eKYC processes fell, as noted above. This cost reduction enabled India to bring hundreds of millions of low-income customers into the formal system through a dedicated financial inclusion program known as Pradhan Mantri Jan-Dhan Yojana. Launched in 2014, it resulted in millions of Indians becoming financially included within just a few years (Vaneck, 2024).

More efficient government service delivery

DPI establishes one system that multiple beneficiaries can take advantage of. Just for government service provision, DPI has the potential to enable multiple ministries to benefit from shared infrastructure.

Consider Ghana's Digital Services and Payments Platform as an example of what is possible when a digital payment system (GhIPSS Instant Payment—GIP—and Ghana Mobile Money Interoperability—MMI), a digital ID (the GhanaCard), and a digital public service delivery gateway converge (Ghana Gov, 2025). On the platform, users log in by entering their Ghana Card Personal Identification Number (PIN), which Ghana.gov immediately verifies through the National Identification Authority (NIA). The portal then auto-populates the user's details for the agency from which the end user requests a service. For paid services, the portal also generates an e-invoice with a unique payment reference and allows the user to pay via mobile money, bank app, USSD, or GhQR over GIP. The government of Ghana now plans to scale the platform to offer 16,000 government services (CitiNewsroom, 2025).

Similarly, Rwandan residents and citizens can access 240 services online through the Irembo platform. Irembo estimates the integration has saved Rwanda over 120 million hours of queuing and paperwork, cutting average service times from five days to 24 hours (Digital Impact Alliance, 2025). Users log in with their ID and can pay using any PSP or agent enabled by the national payment switch, Rswitch. Without the data exchange layer, those gains would be impossible because each ministry would need to re-verify the same person for every service.

Integrated public service delivery

DPI breaks down the silos that have long plagued Africa's standalone digital initiatives, allowing information to flow seamlessly across ministries and between the public and private sectors. Services can be combined, scaled, and repurposed in ways no isolated system could achieve.

Also in Ghana, the tax authority recently scrapped its separate taxpayer identification numbers and adopted the Ghana Card PIN as the sole tax ID, eliminating duplicate registries and enabling automatic data sharing between the tax system, payment rails, and other public-service platforms (GRA, 2021).

Open, competitive digital markets

With a common layer for identity, payments, and data exchange, any licensed provider can plug in, reach customers, and build new services. Brazil's Pix illustrates the effect: launched by the Central Bank of Brazil (BCB) in 2020, the instant payment system now serves 153 million people and is supported by 900-plus banks, cooperatives, and fintechs. Enabled by the country's open-finance rules, Pix has reduced reliance on cash and fee-charging intermediaries, providing even the smallest lenders and start-ups with a level playing field to innovate, compete, and grow.



Expanded credit access for SMEs and individuals

When inclusive instant payment systems (IIPS), digital IDs, and data exchange platforms work in concert, lenders can pull a borrower's verified transaction history, tax filings, and business registry data in seconds without requiring paper statements or site visits. This richer, real-time dataset supports alternative credit-scoring models that recognize cash-flow consistency rather than just collateral, lowering underwriting costs and risk premiums. The result is faster approvals, smaller-ticket loans, and a broader pool of first-time borrowers, particularly micro and small enterprises that have long been overlooked by formal finance.

For example, when a Ghanaian small-shop owner applies for a microloan today, the lender can access three high-trust data streams in seconds: the borrower's Ghana Card PIN, the person's mobile money cash flow history, and alternative data, such as telecom usage and digital payment trails. Letshego's QwikLoan uses this data to enable algorithmic scoring of MTN Mobile Money users to grant instant loans up to GHS 2,000 ($190) (BFT Online, 2025; Jumo, 2018).

Figure 5.2 | Traditional small-business loan processes with and without DPI



Higher tax revenue and, thus, greater public investment

Using the same DPI stack, every business or consumer payment can be tagged to a unique digital ID and automatically reported to the tax system, shrinking the informal economy and curbing leakage. Seamless e-filing portals, pre-populated with data from payments and registries, nudge compliance while reducing administrative overhead. As the tax net widens and collections become near real-time, governments unlock a steadier, larger revenue stream that can be channeled into roads, schools, clinics, and the next generation of digital infrastructure.

Reduced government spending and duplication

When each ministry builds its stand-alone platform (e.g., health IDs here, farm-subsidy wallets there), governments pay repeatedly for the same functionality. The DPI approach flips that logic, with a single identity, payments, and data-exchange backbone that serves every agency and is equally open to vetted private-sector players. The savings can be substantial. India spent about $1.5 billion to roll out Aadhaar, yet the unified ID has already prevented more than $42 billion in fraud, error, and leakage across social-benefit programs (Gates Foundation, 2025).

Trust by design

Integration is not only about speed; it is also about assurance. When consent dashboards, audit trails, and privacy rules are embedded in the data layer, users gain visibility and control, while regulators gain real-time oversight.

For example, in India, every Aadhaar authentication or UPI payment is tokenized, time-stamped, and presented in a single consent dashboard. The consent manager framework enables citizens to grant and later revoke access to precisely scoped banking, tax, or pension data, all under the regulator's oversight.

Rwanda's "zero-trip, zero-paper" e-government model applies the same principles: the IremboGov portal logs each service request against the national ID, issues instantaneous SMS or e-mail receipts, and streams transaction metadata to the Auditor-General's dashboard, enabling proactive fraud detection while providing citizens with a clear audit trail (OAG, 2025).

Through these approaches, DPI codes transparency, consent, and accountability directly into the system. A fully integrated DPI has the potential to turn core government rails for identity, payments, and data exchange into an open, neutral utility that lets any licensed provider reach citizens instantly, spurs private-sector innovation, slashes costs and leakage for the state, and ultimately delivers more inclusive growth, fairer markets, and higher-quality public services for everyone.

The following section examines the barriers that still prevent that integration and how they can be addressed.



5.5 Barriers to a holistic DPI and recommendations

Africa's fast-growing digital ID programs and path-breaking payment rails will not yield their promised social and economic dividends until key bottlenecks are removed. These include political fragmentation that prevents existing systems from aligning, while aging networks and erratic electricity keep entire districts offline. Limited technical talent and low digital literacy depress uptake. Ministries struggle to coordinate and finance their platforms, and trust in the state's handling of personal data remains fragile. Together, these weaknesses keep the three DPI layers in silos, raising transaction costs, slowing innovation, and excluding millions of prospective users. We look at each in turn.

Challenge 1 | Weak institutional and political coordination

Weak institutional coordination can create a barrier to developing full-stack DPI. Shared rails need clear custodianship and sustainable funding. Yet agencies have both conflicting mandates and overlapping needs, which can lead to conflict over what should be built with what design parameters and in what order. In the absence of clear communication and consensus, multiple agencies may end up building rival systems instead of plugging into a common backbone. The challenges, in short, include legal, bureaucratic, and hierarchical, not only technical.

A Digital Impact Alliance (DIAL) case study on the implementation of Uganda's UGhub platform highlights non-technical factors. Despite UGhub having onboarded over 100 government ministries, departments, and agencies, as well as private entities, including banks, insurance providers, and fintech firms, further onboarding has been stalled due to the limited convening authority of the implementing agency, the National Information Technology Authority - Uganda (NITA-U) (Digital Impact Alliance, 2024a). The National Identification & Registration Authority (NIRA) manages the National Identification Register, but NITA-U has not yet convinced NIRA to join UGhub. Other crucial agencies similarly have yet to join UGhub, delaying plans to integrate essential citizen identification data (Digital Impact Alliance, 2024b).

In a separate case in Nigeria of multiple agencies building rival systems, a World Bank diagnostic conducted before the country established the NIN found 13 separate biometric ID programs run by different federal bodies. None of these were interoperable, which exhausted budgets intended for a single registry and forced citizens to enroll multiple times (World Bank, 2016).

Kenya, for its part, demonstrates how legal challenges can halt a flagship initiative in its tracks. Specifically, in 2021, the High Court suspended the Huduma Namba digital ID rollout because officials had not conducted a mandatory data-protection impact assessment (Future of Privacy Forum, 2022). The suspension was subsequently lifted.

Opportunities to address political, institutional & governance hurdles: taking a whole-of-government approach

Countries can address institutional and coordination challenges by taking a "whole-of-government" approach for DPI, which centralizes the oversight and coordination of DPI initiatives within a high-level government body, often the presidency.

Appointing or assigning a high-level official-in-charge can establish the necessary political will to enable collaboration across various government departments. This can counteract the traditional siloed nature of government structures. Additionally, convening power and alignment around a central body brings all ministries together and ensures they agree on initiatives that span their respective domains. This alignment is crucial for advancing projects. Placing DPI within a central, powerful office also helps to keep the motivation for the digital system as a high priority.

One example of a government pursuing a whole-of-government approach to align ministries, state-owned enterprises, and the private sector behind a single digital reform timetable is South Africa's My Mzansi initiative. Integrated into Operation Vulindlela, it is driven directly from the presidency (The Presidency of the Republic of South Africa, 2025).



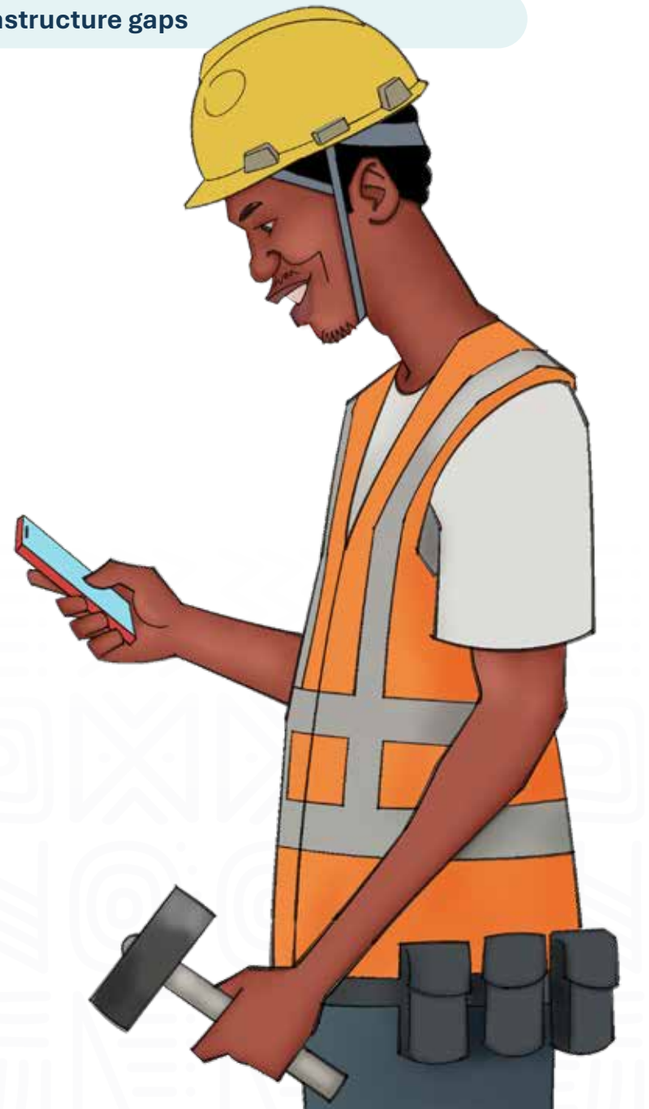
Challenge 2 | Physical infrastructure gaps

APIs and consent dashboards are ineffective if citizens lack connectivity or access to electricity. The World Bank's *Economic Monitor* finds that the challenges of building the last mile of digital connectivity delay the adoption of e-government applications by officers in district and regional offices (World Bank, 2021d). Furthermore, electric power supply and internet connectivity are intermittent and unreliable outside large cities. Until fiber, mobile broadband, and a stable electricity grid are addressed, the sustainability of DPI initiatives will remain in question.

As a case in point, Burundi's internet penetration was just around 11% in 2023, leaving nearly nine out of ten residents beyond the reach of any e-government portal (Internet Society Pulse, 2024). Even in upper-middle-income South Africa, scheduled load-shedding hit 329 days in a single year, repeatedly knocking public websites offline, including ID authentication servers (Reuters, 2024).

Opportunities to address physical infrastructure gaps

Reliable and ubiquitous infrastructure enables digital IDs, payment rails, and data exchanges to reach the entire population, including rural areas. There is an opportunity to ensure rural inclusion through rural connectivity drives, which are targeted programs usually led or underwritten by the government that extend affordable, reliable internet and mobile network coverage to underserved areas and peri-urban settlements that commercial operators would otherwise ignore.



As an example, Ghana's $155 million Rural Telephony & Digital Inclusion Project aims to construct 2016 cell sites, half of which are solar-powered, in unserved and underserved rural communities across the country (MoC Ghana, 2024). Similarly, Nigeria's Rural Electrification Agency, under the World Bank-backed Nigeria Electrification Project, has already brought power to almost 6 million previously off-grid citizens via 180 solar-hybrid mini grids and more than one million home-solar kits. A new $200 million deal (March 2025) will fund a further 400 mini grids to reach up to two million rural residents (World Bank, 2024a).

Challenge 3 | Human capacity shortfalls

National switches and secure data hubs require specialized engineers, regulators, and cybersecurity staff that many governments struggle to hire and retain. Tanzania's Digital Skills Framework identifies acute shortages in areas such as cybersecurity and cloud computing—precisely the technical skills DPI operations require (Tanzania ICT Commission, 2021). Similarly, in Malawi, agencies struggle to secure the required technical expertise, financial resources, and institutional authority to launch and effectively maintain digital public platforms (World Bank, 2021e).

Opportunities to address human capacity shortfalls

Tackling the human-capacity gap requires a dual approach: enhancing digital literacy for the broader population while accelerating the development of specialist talent, including cloud engineers, cybersecurity analysts, and data-governance experts, across both the public and private sectors.

Rwanda's Digital Ambassadors Program is training 5 million citizens via 2,000 roving trainers who help residents open e-ID wallets, use mobile money, and access e-government portals (RISA, 2025a). Kenya's *Ajira Digital* blends online content, university clubs, and industry placements, aiming to equip one million young people annually with the soft and technical skills needed for digital development careers, including skills relevant to DPI development (eMobilis, 2025).

Challenge 4 | Sustainable finance shortfalls

DPI is capital-intensive to set up, covering hardware, software development or licensing, and large-scale change management. Grant or government seed money typically covers build-out. Yet, the platform must still fund security patching, monitoring, upgrades, and a growing operations team for several years before system volumes are high enough to cover costs. Nor can it count on usage fees to cover those maintenance costs. On the contrary, to accelerate uptake, DPI operators may keep fees at zero or token levels during this "adoption runway." As noted in the case study on Egypt's Instant Payment Network (IPN), it operated fee-free for almost three years before introducing charges in April 2025. Libya's IPS, LYPAY, is following the same path. The low- or no-fee model aims to prove value to users and the broader economy and drive adoption, yet it also creates a short-term financing gap. Bridging this gap through dedicated operating-expense grants, multi-year public budget lines, or concessional working-capital facilities may be necessary to keep DPI solvent until the platform breaks even.

Opportunities to address finance shortfalls

Opportunity 4.1 | Consider open-source platforms. Governments can potentially reduce upfront costs and shorten development timelines by building on proven open-source components, especially if the country can leverage existing technical skills, local customization, and institutional coordination.

Opportunity 4.2 | Adopt self-financing models. Introduce cost-recovery fees that fund operations and upgrades as soon as the initial seed fund tapers off. Seventeen African IPS operators already use cost-recovery fee structures (not-for-loss) to achieve financial sustainability.

Challenge 5 | Lingering trust & privacy gaps

Unless the use of digital IDs is mandatory or necessary to gain access to certain services, citizens may balk at adopting them, especially if they do not trust that their data is secure and that any misuse is punishable. That confidence faltered in Zambia after the Flocker ransomware gang breached the ZamServices/ZamPortal platform in mid-February 2025, compromising production servers, backups, and the internal network (Ransomware Live, 2025).

Opportunities to address lingering trust & privacy gaps:

Opportunity 5.1 | Independent regulators and complaints portals. Establish recourse mechanisms that allow end users to report issues and achieve timely resolution. For example, Kenya's 2019 Data Protection Act created the Office of the Data Protection Commissioner (ODPC), which runs an online breach-reporting tool that has issued enforcement notices to both public and private offenders, signaling that rules apply to the state as well (ODPC Kenya, 2025).

Opportunity 5.2 | Consent-first regimes. Nigeria's Operational Guidelines for Open Banking (2023) will take effect starting August 2025, requiring granular, revocable customer consent. Each permission must be captured as a time-stamped record, bound to an encrypted token, logged for audit, and discoverable in the central bank's public Open Banking Registry. Customers can withdraw their consent at any moment, providing both users and regulators with an unbroken chain of custody and a clear path to enforcement.

These hurdles help explain why many national DPI efforts still resemble impressive but isolated "islands of success." Tackling them together is a prerequisite for turning Africa's emerging digital rails into an integrated platform that can scale. In practice, the countries making the fastest DPI progress are those that pair high-level political coordination with deliberate investments in infrastructure, human capital, sustainable funding models, and robust privacy guarantees.

5.6 | Conclusion

DPI has the potential to unlock the benefits of the digital economy for government services, private sector businesses, and citizens. African countries with DPI initiatives underway still face challenges with siloed initiatives that offer limited value; African countries with DPI initiatives underway still face challenges with siloed initiatives that offer limited value due to a lack of institutional alignment, sustainable investment, technical capacity, and concerns about privacy and security. Due to a lack of institutional alignment, sustainable investment, technical capacity, and concerns about privacy and security. In fact, estimates find that technology contributes just 20% of the benefits; the remaining 80% comes through policy design, institutional alignment, and trust-building (Stakeholder Interviews, 2025). Success requires clear intent and strong executive sponsorship.

The benefits for government service provision could be significant, including for government entities that make government-to-person payments in the form of salaries, social disbursements, pensions, and other payments. In the next chapter, we explore the subject of government-to-person payments and how IPS can help governments deliver them efficiently and inexpensively and with greater transparency than current methods allow.



Case Study |

SIMO Mozambique

Origin Story

Challenge

Mozambique's journey to establish a single payment clearance network for all payment service providers began in 2011, when it established the Sociedade Interbancária de Moçambique S.A. (SIMO) to create a single platform for interbank systems (Renpayments, 2025). SIMO launched its instant payment system (IPS) in 2012, enabling bank-to-bank transactions (i.e., as a bank IPS). Following upgrades to its payment systems in line with the strategic objectives of Mozambique's Financial Sector Development Strategy (FSDS) 2013-2022 and the National Financial Inclusion Strategy (NFIS) 2016-2022, SIMO launched a new IPS in 2022, enabling cross-domain functionality.

Before the launch of the cross-domain IPS, Mozambique's financial system had different payment processors and switches that were not interconnected and lacked transparent pricing and processes, making the overall financial ecosystem less convenient for end users. Although bilateral agreements existed between some payment service providers (PSPs), these were often based on the commercial power of the institutions involved. This resulted in limited interoperability between bank accounts and mobile money accounts, and made digital financial services (DFS) more costly and difficult for end users to access (World Bank, 2020a). Cash was often simpler and more universally accepted.

Given the financial landscape, Mozambique's financial inclusion was low: the Global Findex 2021 reported that only 39% of the adult population (15+ years) had a bank account, and 29% had an active mobile money account, resulting in an account ownership rate of 49% in 2021 (World Bank 2022g).

Under the FSDS 2013-2022 and NFIS 2016-2022, SIMO was tasked with implementing services to promote a single national and integrated network to increase financial access in rural areas and promote financial inclusion in the country. Against this backdrop, SIMO evolved from a bank IPS into a cross-domain IPS. It began this shift by migrating to a single payment system, Ren by Euronet, in 2021. The migration first focused on commercial banks, followed by e-money issuers, specifically mobile money operators (MMOs). By November 2023, SIMO had all commercial banks and e-money issuers fully integrated onto the upgraded SIMOrede, the cross-domain IPS platform operated and managed by SIMO, the parent company (Bank of Mozambique, 2023b).

Value proposition

Interoperability through SIMOrede has enabled PSPs to facilitate cross-domain transactions and expand access to financial services. The percentage of the adult population with access to digital financial services through mobile money accounts grew to 46% by 2024, and the overall account ownership rate also increased to 54% (World Bank 2025b).

The value proposition of SIMO's cross-domain IPS is multifaceted, offering the following benefits to end users:

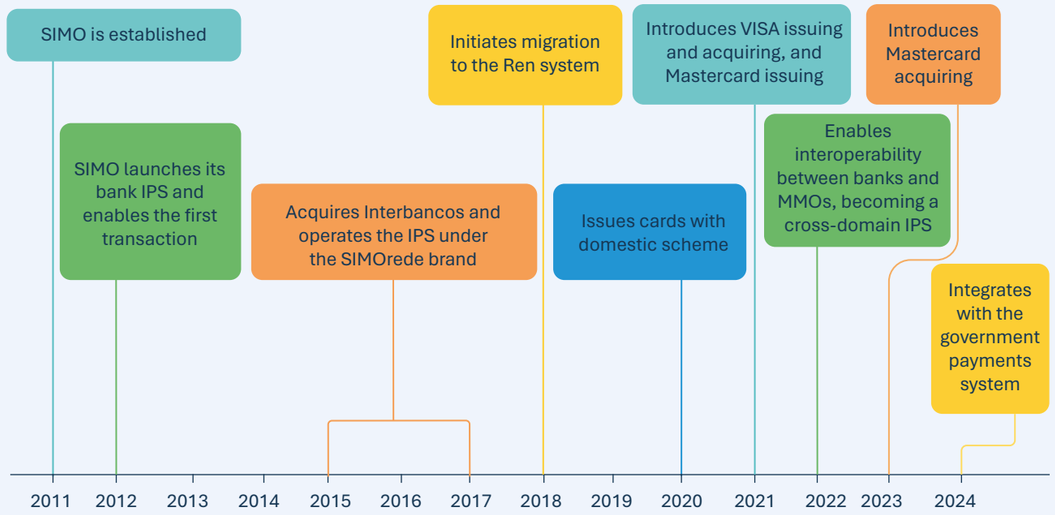
1. **Enhanced interoperability:** Prior to the launch of the upgraded SIMOrede platform, users had to rely on over-the-counter services at physical bank branches or mobile money agents for transfers. Now they can make cross-network digital transactions.

2. **Increased financial inclusion:** The integration of e-money issuers onto the upgraded SIMOrede platform has facilitated inclusion for low-income citizens. In 2024, 46% of adults in Mozambique had an active mobile money account, compared to 25% of adults with a bank account (World Bank 2025b). Given the dominance of mobile money in Mozambique, the integration of e-money issuers onto SIMOrede is expected to drive account usage.

3. **Shift from cash to digital payments:** The market has seen an upward trend in the use of digital government payments (especially for person-to-government (P2G) payments) and merchant payments (person-to-business (P2B), including in informal markets.

4. **Increased convenience:** Participants on SIMOrede can facilitate payments via unstructured supplementary service data (USSD), automated teller machines (ATMs), and point-of-sale (POS) machines anytime, anywhere, to any person or merchant.

SIMO development timeline



Source: SIMO 2025

SIMO's bank IPS was launched in 2012; five participant commercial banks conducted the first transactions. SIMO followed with a number of upgrades to enable interoperability between banks and e-money issuers, leading to the 2022 launch of the new cross-domain IPS. The groundwork for the cross-domain IPS began in 2018 following a nationwide 'blackout' of Mozambique's financial system, which left most ATMs, debit, and credit cards unusable. This marked the beginning of a new phase in SIMO's technological evolution to a sole national payment system.

Before the introduction of SIMOrede, SIMO utilized different internal systems for processing payments (Electronic Payment Management System (EPMS) and Ponto) in a landscape where commercial banks also employed multiple networks, including Multicash. The introduction of the Ren system replaced EPMS and Ponto and integrated the Multicash network, thereby establishing SIMOrede as the sole IPS in the country. Euronet served as the solution provider for this migration.

SIMO executed its consolidation across multiple phases. SIMO began with banks and then began to integrate e-money issuers on the new IPS on July 1, 2022 (Bank of Mozambique, 2022b). This phased work culminated in November 2023, when all commercial banks and e-money issuers in Mozambique were unified under the SIMOrede IPS.

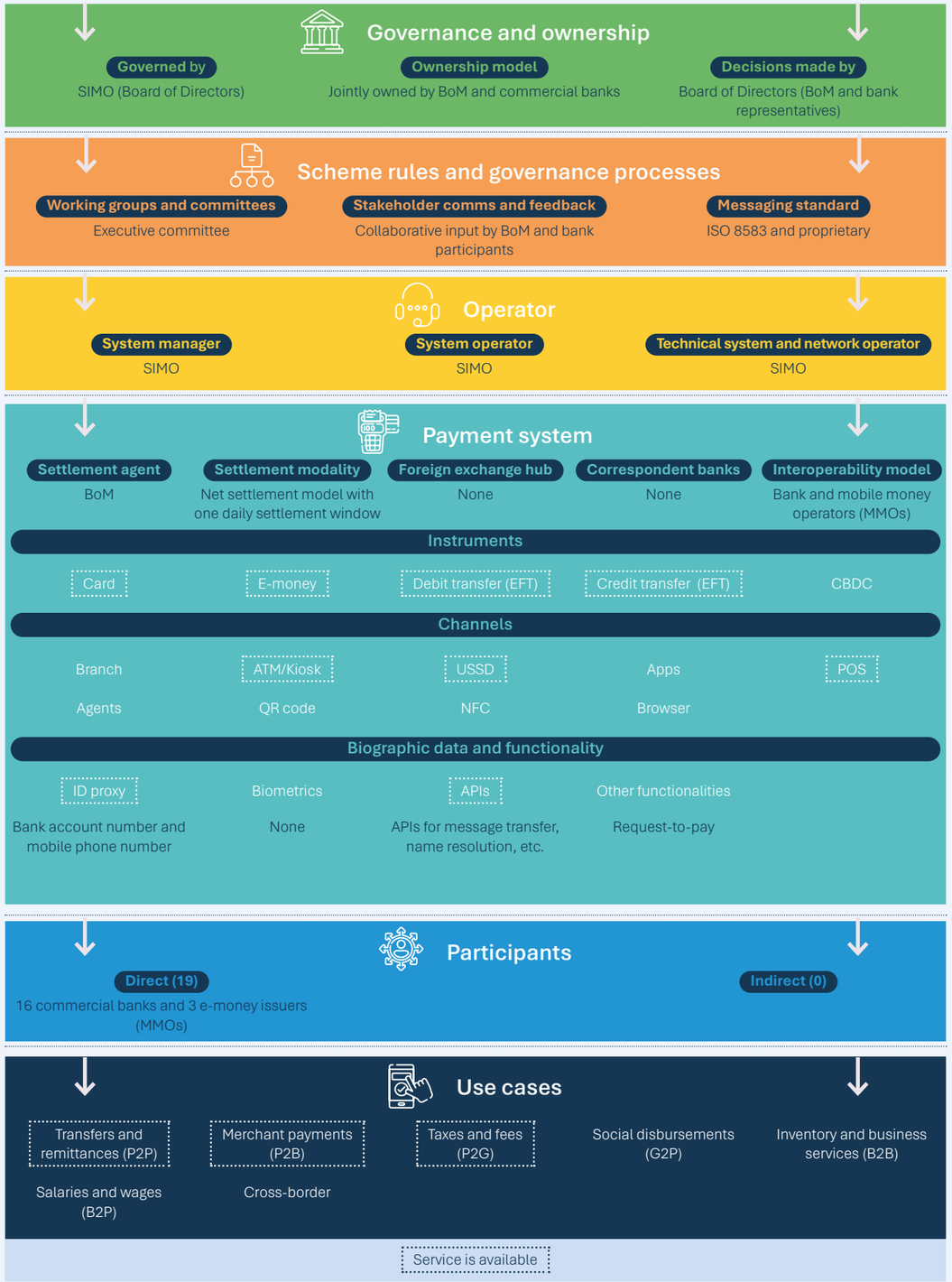
SIMOrede supports debit, credit, and prepaid cards; contactless payments with additional authentication [such as a personal identification number (PIN)]; and online payments. The migration to the cross-domain SIMOrede IPS introduced expanded functionality to support wallets through USSD. SIMOrede also introduced bill payments (P2B and P2G) and enabled mobile wallet top-ups at ATMs.

SIMO plans to expand interoperability to include other PSPs, such as fintechs operating as either e-money institutions, funds transfer institutions, or payment aggregators, under the PSP license issued by BoM. SIMO also plans to introduce a standardized quick-response (QR) code solution for all participants. In 2025, SIMO also tested and certified "Visa Transfer Money," a service for international wallet transfers to local accounts. This indicates SIMO's intention to facilitate cross-border flows in the short-to-medium term.



Governance and operations

Payment system overview



Currently, 19 direct participants (16 commercial banks and three e-money issuers) are onboarded on the SIMO IPS. The IPS leverages standardized application programming interfaces (APIs) that enable integration between PSPs and technical service providers using ISO 8583 standards for messaging. SIMOrede operates on a net settlement model, with settlements occurring once a day at 3:00 p.m. Greenwich Mean Time (GMT) +2.

Governance structure

SIMO is owned by Mozambique-based commercial banks and the BoM, with the central bank holding the majority of shares. The SIMOrede IPS is a service operated by SIMO with technical support from Euronet, a technology vendor. PSPs can become part-owners by buying a share in SIMO. The IPS is therefore jointly owned and operates under a public-private partnership governance model.

E-money issuers are direct participants on the network but are not shareholders of SIMO. All direct participants maintain settlement accounts at the BoM.

SIMOrede is operated under a national switch license issued by the central bank. A board of directors governs the IPS and includes bank CEOs led by a chairperson appointed by the BoM. Large commercial banks have direct representation on the board, while medium and smaller banks have representation by rotation. The board meets monthly to make IPS-related decisions under the BoM's regulatory guidance. SIMO's executive commission communicates board decisions to stakeholders who are not board members, such as e-money issuers.

Functionality

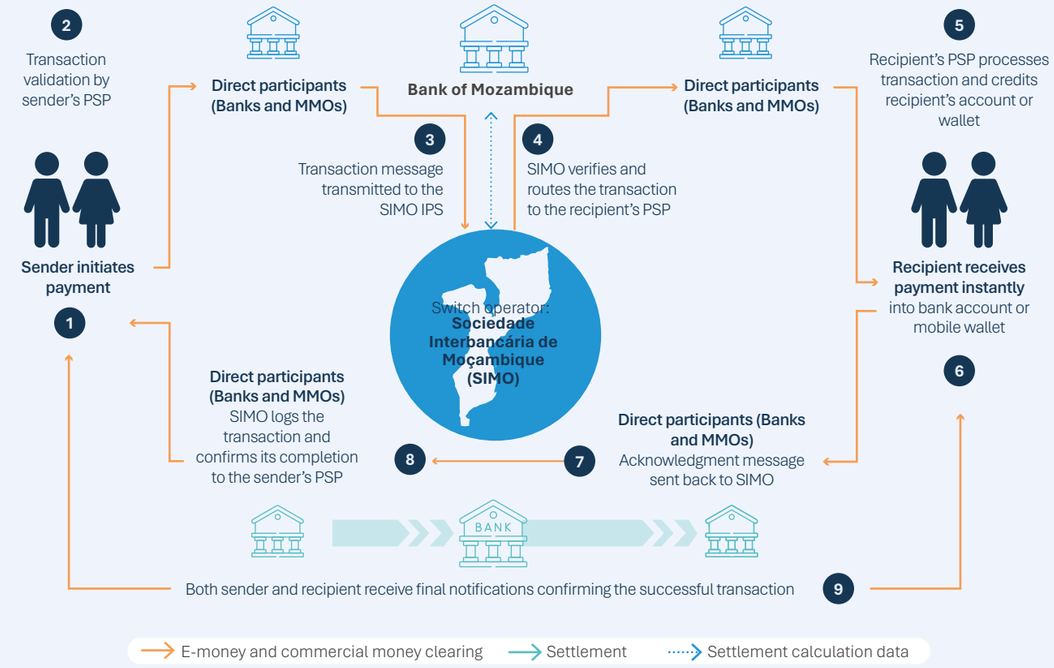
SIMOrede supports multiple interoperable channels across banks and e-money issuers. The system accommodates payments through feature phones, enabling transactions through USSD, as well as through POS terminals and ATMs. In addition, SIMOrede provides infrastructure to support mobile wallets provided by banks and e-money issuers. While SIMO does not manage these wallets, mobile wallets owned and operated by participants must route transactions through SIMOrede to comply with regulations. Channel selection is determined by individual PSPs based on their customer needs. SIMOrede includes an API gateway that enables the IPS to extend and streamline relationships with PSPs.

The BoM is SIMO's settlement agent. The system leverages central bank liquidity through direct connection to the BoM-managed RTGS (Real-Time Gross Settlement) system for final settlement. The BoM's RTGS system is integrated with Automated Payment Systems (SPAs) to comply with ISO 20022 standards.

The instant payment process begins with the sender initiating a payment through their preferred channel, such as POS, ATMs, and USSD. The PSP validates transaction details, including identity verification and fund availability. The payment instruction is transmitted to SIMOrede via the PSP API. The IPS routes the message from the sender's PSP to the receiver's PSP. After the receiver's PSP authenticates, authorizes, and verifies the account, the IPS forwards payment status to the sender's PSP, which notifies the consumer through short message service (SMS) channels. An acknowledgment message returns to the IPS for transaction logging and completion confirmation. Both the sender and the recipient receive final transaction confirmations from their respective PSPs.

Settlement and clearing of accounts begin at 3:00 PM GMT+2, with SIMO gathering all the transaction information from the business day for all participating institutions. SIMO shares a daily transactions report with each of the 19 participants to assist them with reconciling their transactions. A single file containing all the transactions routed through SIMOrede is sent to the BoM to determine the credits and debits for each participating institution and facilitate the final settlement process.

SIMO IPS transaction flow



Technical standards and use cases

The IPS system utilizes ISO 8583 as well as proprietary messaging standards for payment instruction transmission between PSPs. SIMO provides an API gateway that enables participants to interact with a single endpoint while the SIMOrede IPS manages underlying routing and processing.

SIMO implemented a phased use case deployment strategy, beginning with P2P payments in 2012, when the IPS had only enabled bank-to-bank functionality. Today, P2P support includes transfers between bank accounts and all-to-all interoperability between bank accounts and e-money issuers (P2P wallet-to-wallet, wallet-to-account, and account-to-wallet transfers). SIMO implemented P2B functionality in 2022, when the IPS enabled cross-domain transactions. More recently, it added P2G in 2024. The next development phase will introduce the G2P payment use case.

Business model

The initial capital for the development of SIMO's first IPS was provided in 2012 by participants (BoM and banks) through the purchase of company shares. The upgrades to evolve the initial bank IPS into the cross-domain IPS were financed using SIMO's internal funds, approved by shareholders.

SIMO operates on a not-for-loss revenue model that charges fees sufficient for cost-recovery while also generating funds for the sustainability of the IPS. SIMOrede's fees are structured into three main categories: communication fees, processing fees, and fixed transaction fees, regardless of transaction value. While SIMO charges a fee per transaction, the final fee paid by end users includes an added fee on top of SIMO's fee to PSPs. The BoM approves SIMO's fees and pricing structure for participants before the market adopts them.

Scheme rules

The SIMO scheme rules that govern SIMOrede and its participants outline the procedures and operational guidelines of the IPS, as well as the procedures for addressing customer concerns and disputes. The scheme rules are not disseminated publicly and are only available to participants.

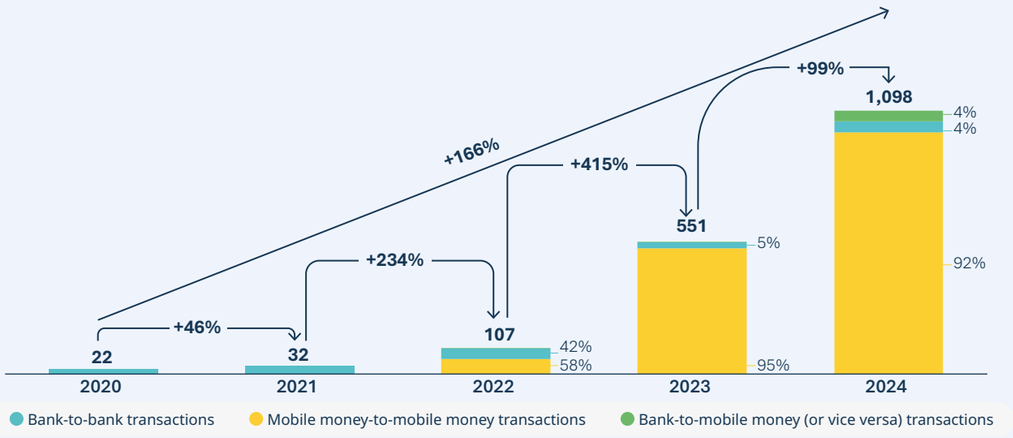
As the arbitrator on the IPS, SIMO has a dedicated team that handles disputes and addresses complaints that participants receive from their clients (i.e., end users). Dispute resolution services are also governed by the IPS scheme rules.

Participants are responsible for compliance requirements, such as know your customer (KYC) and anti-money laundering (AML) limits, as mandated by the BoM. SIMO also has AML and security policies embedded in its scheme rules, which are reviewed annually by the board of directors.

Volumes processed by the payment system

The volume data shows an increase in the number of IPS transactions, especially with the introduction of e-money issuers on the network. SIMOrede experienced a 166% compound annual growth rate (CAGR) between 2020 and 2024, from approximately 22 million transactions to 1.1 billion transactions. Growth was higher between 2021 and 2022 as a result of the scheme beginning to approve and onboard e-money issuers; that year saw a 234% annual increase from 32 million to 107 million. All commercial banks and e-money issuers were fully integrated into SIMOrede by November 2023.

SIMOrede volume (millions) transactions



In 2024, the volume of transactions processed by SIMOrede reached the billion landmark, driven by wallet-to-wallet transactions (i.e., mobile money-to-mobile money transactions). Mobile money transactions constitute 92% of the total volume of transactions processed by the IPS in 2024, commensurate with the growing strength of mobile money in Mozambique. Bank-to-bank and bank-to-mobile money or mobile money-to-bank transactions are less common.

Another trend is the growth in transactions between bank accounts and mobile money wallets. In 2022, SIMOrede reported that only 244 transactions were between banks and mobile money. This number has since increased, reaching 43 million transactions in 2024.

Regulatory framework

SIMO's operations and its participants are subject to various laws and decrees related to the national payment system and electronic transactions. This includes Law No. 2/2008, of February 27, which established the National Payment System (NPS) and created the coordination committee of the NPS. The BoM is currently revising this law to adjust the framework to the current context of the payment system, particularly with the launch of the Real Time Gross Settlement (RTGS) system in 2023 and the modernization of SIMO.

In 2015, the BoM mandated financial institutions to integrate their internal banking operations management systems into SIMO via a Notice published on 22 April 2015. The directive outlined the terms and conditions to which banks should adhere to achieve interoperability through a unified, common, and shared infrastructure.

Additionally, the activities of SIMO align with the strategic objectives of the BoM, as outlined in the country's national payment system strategy and financial inclusion strategy.



Inclusivity learnings

Similar to 2024, SIMO is ranked at basic inclusivity on the 2025 AfricaNenda Inclusivity Spectrum. The only development since July 2024 is that P2G payments have been enabled following SIMO's integration with government payment systems (Electronic State Financial Administration System (e-SISTAFE)).

While SIMO is ranked as basic, it meets some criteria for progressed inclusivity, such as cross-domain functionality and the involvement of the central bank in IPS governance. It also meets the mature inclusivity criterion of operating on a not-for-profit model.

The following drivers of inclusivity have been identified:

- **SIMO has met the minimum primary channel requirement** by enabling USSD for end-users to engage with the payment system, which is consistent with Mozambique's status as a mobile money-dominated country. SIMOrede has enabled minimum use-case functionality, including P2P payments through USSD, POS, and ATM.
- **SIMO fulfills the cross-domain criteria for progressed inclusivity.** By November 2023, all commercial banks and e-money issuers were fully integrated. In addition, SIMO meets the central bank governance involvement requirement of progressed inclusivity. As the majority shareholder of the IPS, BoM appoints the chairperson of the board of directors and approves the fees and pricing structure of the IPS to deliver inclusive and affordable digital payment services.
- **SIMO has yet to implement a pro-poor governance structure** in which all participants have input into decision-making. Currently, only banks are represented on the board of directors and are involved in the decision-making process. For this reason, SIMO has not yet achieved the progressed inclusivity ranking.
- **From a mature level of inclusivity, SIMO offers low cost for end users.** SIMO operates within a not-for-loss business model. SIMO's fees are aimed at generating revenue for cost recovery and ensuring the sustainability of the IPS (i.e., raising funds for future upgrades).



6

Spotlight IIPS for what: Government-to-person payments

The World Bank estimates that more than one-quarter of all adults receive a G2P payment each year (World Bank, 2025e). Every country in Africa has at least one social safety net program, and African countries spend 1.2 percent of their gross domestic product (GDP), on average, on social safety net payments. Roughly 70% of these funds are cash transfers (AFD World Bank, 2018), totaling around $31 billion[12] per year (World Bank, 2025e). Overall, G2P payments can be recurring payments, such as salaries or pensions, or one-time or occasional payments, such as supplier payments or emergency relief (see Box 6.1 on the various types of G2P payments).

Governments and their partners have traditionally distributed G2P payments as physical cash, redeemable vouchers, or direct deposits to bank accounts or electronic wallets. The latter are enabled by one-to-one partnerships with payment service providers (PSPs), which disburse G2P transactions as on-us transactions through their core banking systems.

The limitations of cash approaches have long been apparent. They include high administrative costs, security risks, leakage through corruption or misdirection, lengthy distribution times, and limited financial inclusion benefits (UNDP 2023). These issues motivated many governments across Africa to transition from cash-based disbursement methods to direct deposits even before the COVID-19 pandemic highlighted the critical importance of having systems in place to quickly and securely deliver financial support to citizens (IPA, 2021). Since then, G2P payment digitalization has accelerated, with governments increasingly channeling these payments to mobile money accounts, e-wallets, and other digital financial services (DFS). Yet the one-to-one relationships that define first-generation digital G2P payments also have their disadvantages, including a lack of choice and convenience for recipients and duplication across every distributing agency, to name just two.

Leveraging IPS provides another option. IPS provide the technical foundation for immediate, around-the-clock transfers from any government agency to recipients' accounts of choice. Integrating G2P payments with IPS presents a strategic opportunity for African governments to simultaneously enhance public service delivery, reduce fiscal leakage, promote financial inclusion, foster economic resilience, and accelerate the broader digital transformation agenda. Given that 18% of adults in Sub-Saharan African economies opened their first account to receive a G2P payment (World Bank, 2025b), IPS-powered G2P payments can help bring previously excluded populations into the formal financial system.

This spotlight chapter examines the potential for IPS-enabled G2P payments to overcome the challenges with traditional models, their current adoption status and implementation, and the hurdles and opportunities that lie ahead for scaling the use case across Africa.

Box 6.1 | G2P payment types

G2P payments encompass several categories:

- **Social cash transfers:** A range of programs, including conditional and unconditional cash transfers, disability benefits, and other social safety net initiatives. This is the most common G2P payment type in Africa.
- **Wage payments:** Salaries for civil servants and other government employees.
- **Pension distributions:** Payments to retired government workers and citizens enrolled in public pension schemes.
- **Subsidies:** Payments that reduce the cost of essential goods and services.
- **Emergency relief:** One-time or temporary payments during crises, such as natural disasters, pandemics, or economic shocks.
- **Tax refunds:** Reimbursements for overpaid taxes.
- **Student stipends and scholarships:** Financial support for education.
- **Agricultural support:** Payments to farmers and rural producers, including input subsidies, crop insurance payouts, and price support mechanisms.

Note: Some agricultural support payments and tax refunds may be G2B payments if the recipient is a formal business.

6.1 How IPS can transform G2P payment disbursement

Many IPS have grown their transaction volumes and values by supporting P2P and P2B payments. The continent's government-to-person (G2P) payments, in contrast, remain fragmented across legacy switch files, bank account bulk payments, mobile money bulk payments, and, in some cases, manual pay points (cash). As of 2025, only 11 of the continent's 36 live IPS support the G2P use case. They are Meeza Digital (Egypt), EthSwitch (Ethiopia), GIP and Ghana MMI (Ghana), SWAM (Morocco), NIP (Nigeria), PesaLink (Kenya), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money, and Uganda Mobile Money.

Absent IPS integration, digital G2P disbursements in Africa currently rely on two primary architectures. The first is a direct bulk payment model, in which a government agency transacts with a narrow roster of preselected financial service providers (FSPs). This model frequently requires beneficiaries to open an account with one of the preselected PSPs.

The second model is a G2P payment gateway model that centralizes beneficiary enrollment and payment instructions for the participating government agency on a central hub, to which multiple PSPs link using application programming

interfaces (APIs). The G2P payment gateway model still relies on multiple bilateral agreements between the government agency and the participating PSPs.

Both approaches have helped governments move away from cash. Yet they also remain hampered by the fact that each government agency that disburses payments often establishes its own approach, leading to duplication. This duplication is not just inconvenient and expensive for governments. It can also make spending more difficult for the Ministry of Finance to track, leading to greater potential for fraud, misuse, and misallocation of limited social welfare budgets. Furthermore, both models have onerous onboarding requirements, offer recipients a limited set of provider options, and limit agility during emergencies.

Leveraging IPS infrastructure can eliminate these frictions, broaden reach, and accelerate the delivery of public funds (see Figure 6.1). They have the potential to fundamentally reshape how governments deliver financial support to citizens and address the limitations plaguing traditional disbursement methods.

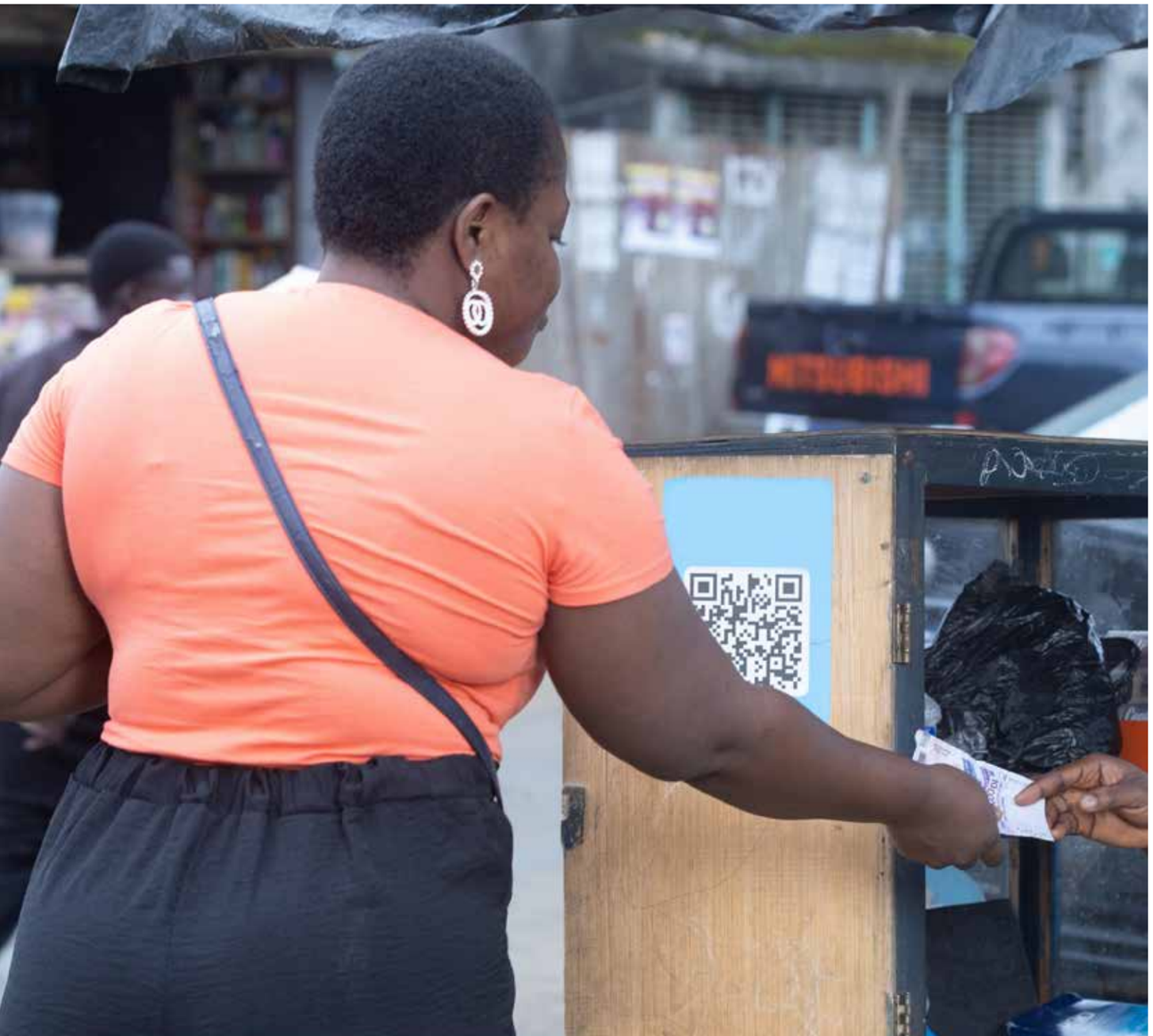
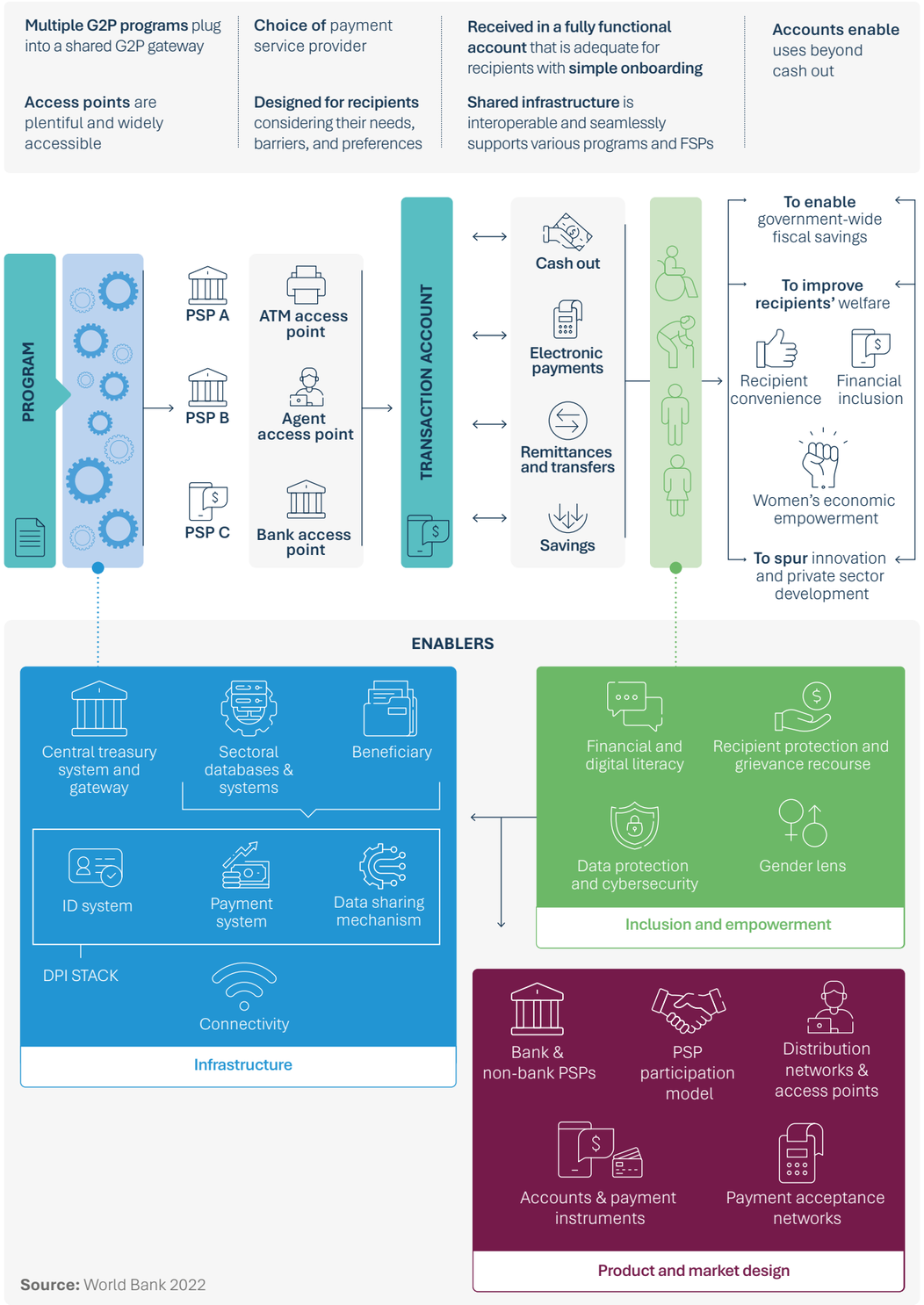


Figure 6.1 | A model for IPS-enabled G2P payments



Source: World Bank 2022

Beyond operational improvements, integrating G2P programs with IPS could also bring economic and social value. For end users/payment recipients, IPS accelerates G2P disbursements by transferring funds from treasuries within seconds, thereby eliminating the lengthy delays and wait times associated with cash delivery (Stakeholder Interviews, 2025). This immediacy can ensure that recipients living in precarious economic circumstances can address their urgent needs and avoid falling deeper into financial hardship. The interoperability of IPS enables recipients to receive payments in the accounts they already have and use, avoiding the hassle of opening program-specific wallets. And once funds are in an account, data shows that recipients are more likely to use other financial services; specifically, they are more likely to also make digital payments, save, and borrow (World Bank 2021h).

These potential benefits are not just limited to welfare beneficiaries. They have the potential to extend to other government payment recipients, including those who benefit from agricultural subsidies, education vouchers, emergency relief payments (see Box 6.2), and community health worker payments (see Box 6.3). There is also potential to support qualifying refugees and migrants directly with cash transfers made directly into accounts—something the United Nations Refugee Agency has done as part of its cash-transfer program (UNHCR, 2020).

For government agencies, IPS that have adopted an open API-friendly architecture can plug directly into existing benefit-management systems, allowing the agency to add real-time payments without accruing technical debt from prior investments. IPS-enabled G2P payments also reduce cash handling, security, and reconciliation costs by as much as 75%, creating a continuous, auditable trail that curbs leakage and corruption (World Bank, 2025e).

IPS-enabled G2P payments can also catalyze broader policy goals. Digital, traceable transactions strengthen program oversight and nudge recipients into the formal financial system. From there, many go on to save, pay bills, and transact through digital channels (World Bank 2025e).

The same rails could also provide governments with the agility to disperse emergency cash during shocks, an advantage demonstrated during COVID-19 in countries like Thailand and elsewhere (CGAP, 2020) (see Box 6.2). In addition, IPS supports alternative access methods for the unbanked, such as cardless withdrawals (Business Day, 2025). With this method, recipients receive a code on their phone, allowing cash out at any IPS-supported access point, including bank branches, ATMs, agents, and participating merchants. This flexibility ensures that those who are financially excluded but digitally connected can still benefit from digital G2P disbursements.



Box 6.2 | The impact of IPS on G2P emergency payment disbursal during the COVID-19 pandemic

Emergency social disbursements provided a critical financial lifeline to low-income households during the COVID-19 pandemic, when businesses shut down in response to social distancing policies. At least 58 governments in developing economies sent these payments, many using digital methods to do so (GPFI 2021). In a few cases, IPS—sometimes in combination with a broader digital public infrastructure (DPI) stack—were available to facilitate the rapid onboarding of unbanked adults with basic accounts and then deliver payments to them.

Examples include Colombia, where the Ingreso Solidario government relief program leveraged data sharing across the public and private sectors to identify citizens in need. Once onboarded, the Ingreso Solidario program was able to deliver payments to them through an interoperable fast payment clearinghouse (GPFI 2021).

Thailand was also able to get COVID-19 relief payments to citizens quickly using its IPS, PromptPay, which sent payments directly into a recipient's ID-linked bank account (CGAP 2020).

Perhaps most famously, Brazil launched its Pix IPS in November 2020, at the height of the COVID-19 pandemic, and saw dramatic uptake in part because it was integrated into the systems used for government relief payments. In April, months prior to the Pix launch, Brazil began delivering COVID-19 relief payments to existing beneficiaries of its Bolsa Familia cash benefit program, as well as to individuals in the country's "Single Registry" social assistance database (World Bank Core Knowledge Exchange, 2021). Unregistered individuals, such as informal and self-employed workers, who had not received benefits in the past but would qualify for them due to the economic impacts of the pandemic were encouraged to register through a special process. They could then claim benefits through an online platform at the state-owned bank, Caixa Econômica Federal. The benefits were intended to be a short-term measure but were extended in September 2020 and then again as the COVID-19 pandemic continued.

With the Pix launch in November, interoperable payment functionality was integrated into the Caixa app. This brought several benefits, most notably the ability for beneficiaries to keep their social benefit payments in the accounts and use them to pay others, since Pix was interoperable, and the Central Bank of Brazil mandated participation by all the country's banks. This feature, among others, was widely credited for Pix's rapid uptake and volume growth in its first two years—estimated to be the fastest for a new IPS in the world (WEF, 2022b). Although it took at least two years before Pix began processing G2P payments itself, it is broadly viewed as having played a significant role in advancing financial inclusion, leading to Brazil's current account ownership rate of 86% and digital payments adoption rate of 77% (World Bank, 2025b).

While research on the role IPS played in facilitating pandemic relief payments is still ongoing, there is broad agreement that IPS helped ensure more people who needed payments received them quickly. In addition, IPS played a role in driving longer-term financial inclusion through the opening of bank accounts for previously unbanked recipients.

Design features that optimize the benefits of using an IPS for G2P payments

Evidence from countries that have modernized their G2P payment strategies using IPS offers insights into the design features that help governments and recipients get the most out of the transition. Based on its work with governments, the World Bank Group has identified 13 design principles of a modern G2P payments architecture. These principles align with the definition of an inclusive instant payment system (IIPS) established for this report and the criteria for mature inclusivity on the AfricaNenda Inclusivity Spectrum.

These principles are:

- **Principle 1:** Multiple programs and payment streams share infrastructure. Different government programs and payment streams can leverage the same infrastructure, which connects to a national IPS and other forms of DPI, such as national ID systems and data sharing platforms. Critically, these payments, via the IPS, leverage a treasury single account (TSA) and an integrated financial management information system (IFMIS), which helps governments ensure budget compliance, tracking, and reporting and gives the Ministry of Finance a holistic view of G2P outflows.
- **Principle 2:** Infrastructure is built to last. It should be designed to support current use cases and be flexible enough to be adapted for future use cases.
- **Principle 3:** Manual intervention is minimized. The infrastructure is interoperable with different systems and is designed to automate processes from end to end, including authentication, recipient eligibility assessments, account mapping, payment flow, and reconciliation.
- **Principle 4:** Systems are scalable and secure. This includes robust data privacy, data protection, and cybersecurity measures.
- **Principle 5:** Payments go into an account. Wherever recipients have access to financial access points and connectivity, payments should be sent directly into an account.
- **Principle 6:** Recipients have a choice. Recipients can choose the payment service provider and payment instrument through which they receive their payments and change it whenever they want.
- **Principle 7:** Onboarding is simple. The user experience is straightforward and low or no cost.
- **Principle 8:** Recipients are not subjected to clawback clauses. Policies do not limit recipients' use of funds and do not put a time limit on cashing them out.
- **Principle 9:** Recipients have easy access to and use of funds. Recipients have many accessible and affordable options for cashing out or using funds. Withdrawal is either low- or no-cost, and there are no undisclosed fees. Recipients have many options to spend their money digitally.
- **Principle 10:** PSPs operate on a level playing field. Delivering G2P payments is sustainable for PSPs. Contracts with PSPs for G2P payment delivery do not negatively affect market competition.
- **Principle 11:** Data collection and registries disaggregate the data by sex. Government payment information and processing systems include sex-disaggregated data.
- **Principle 12:** Designed for individuals and prioritizes women. The G2P architecture is designed for the needs, preferences, and barriers of all recipients, including women, rural residents, and low-income adults. Recipients receive digital and financial education to be able to confidently and safely access and use their accounts.
- **Principle 13:** Recipients are well-informed, protected, and have access to redressal. Payment service providers treat recipients fairly, safeguard their data, and make recourse clear, quick, and responsive.

These principles and the aligned inclusivity criteria established in this report are worth keeping top-of-mind throughout the remaining discussion in this chapter.

6.2 Current adoption of the IPS G2P use case

While many African countries have launched G2P payment digitalization initiatives, their integration with IPS varies significantly across the continent. Some nations have made substantial progress with digital disbursement systems linked to their domestic IPS, while others are in the early planning or pilot stages. In total, only 11 IPS out of the 36 live systems supported the G2P use case in 2025. These IPS are Meeza Digital (Egypt), EthSwitch (Ethiopia), GIP and Ghana MMI (Ghana), PesaLink (Kenya), SWAM (Morocco), NIP (Nigeria), TIPS and Tanzania Mobile Money, Tunisia Mobile Money, and Uganda Mobile Money. This is an increase from the six IPS that offered this functionality in 2024, according to the SIIPS 2024 report. The changes include six new IPS offering G2P functionality and one previously included IPS being removed. The latter is Madagascar Mobile Money, which was reported to have G2P enabled in 2024 but did not indicate this capability in 2025. The six new IPS enabling G2P payments are Meeza Digital, EthSwitch, PesaLink, Tanzania Mobile Money, TIPS, and Tunisia Mobile Money.



Country examples of digital disbursement systems linked to IPS infrastructure



NIBSS Instant Payment (NIP)—Nigeria

NIP has enabled G2P payments, driven by the current administration's emphasis on using technology to improve public service delivery and transitioning away from traditional methods like cash distribution (Stakeholder Interviews, 2025). Although there is no overt policy specifically mandating digital G2P payments, the Central Bank of Nigeria has a cashless policy that makes digital payments a "culture before the law."

To help facilitate that de facto policy, NIBSS partners with government ministries, departments, and agencies (MDAs), including the Ministry of Humanitarian Affairs, Disaster Management, and Social Development, whose accounts are domiciled at the CBN. The CBN connects to NIP as a participant within its ecosystem, acting in a similar capacity to a commercial bank (Stakeholder Interviews, 2025). State governments can also leverage the platform through the banks that hold their accounts and provide bulk payment portals. Alternatively, government entities can link to NIP using front-end solutions (payment portals) provided by licensed payment solution service providers (PSSPs), such as Soft Alliance and Interswitch. Through this method, government entities upload payment files to the NIP system, where name inquiries and other validations occur, to prevent funds from going to the wrong person. Transactions execute instantly and reach beneficiary accounts in seconds (Stakeholder Interviews, 2025).

NIP has also handled the federal government's Social Intervention Program (SIP) payments, including the N-Power youth skills development and employment program and the National Homegrown School Feeding Program. Additionally, NIP managed payments to beneficiaries during COVID-19 and provided other ad hoc emergency payments. For example, NIP has provided services to facilitate payments for the Nigeria Deposit Insurance Corporation (NDIC) on behalf of failed banks, such as Heritage Bank. NIBSS's access to national databases such as the Bank Verification Number (BVN) database and the Industry Customer Account Database (ICAD), which PSPs cannot access, offered a significant advantage by providing NDIC with data on where the defunct banks' depositors had alternative accounts so that they could be credited without direct interaction with the NDIC (Stakeholder Interviews, 2025).

For beneficiaries without traditional bank accounts, NIBSS is leveraging its Africard scheme (prepaid option) (Afrigopay, 2023b) and an ongoing collaboration with the National Identity Management Commission (NIMC), enabling instant wallet account opening using a National Identity Number (NIN) (NIMC, 2025b). NIBSS also has contactless withdrawal options for beneficiaries who do not have an account but own a mobile phone. Government funds are accessible through all channels enabled on the IPS, including agent networks, ATMs, and POS terminals (Business Day, 2025).

The driving factors for MDAs to adopt digital G2P payments include the government's desire for responsiveness, accountability, and transparency, as well as security concerns associated with the use of physical cash for disbursements (Stakeholder Interviews, 2025). NIP did not require core upgrades to support G2P payments, as its platforms were already sufficiently robust for them. NIBSS's access to critical national databases provides a significant comparative advantage over individual FSPs.

G2P transaction volume through NIP is expected to grow in the coming years. This is in part due to increasing trust in the IPS, the growing digital savviness of the population, and the government's growing confidence in NIBSS's services. Another driver is the launch of NIMC's NIN authentication service; following its launch, Nigeria mandates that all government payments have NIN validation (The Guardian, 2025).



PesaLink—Kenya

Historically, G2P had not been a prominent use case for PesaLink, which has more recently enabled G2P payments. It is doing so by functioning as a central switch that facilitates instant transactions from government institutions to beneficiaries. PesaLink aims to significantly reduce costs to the government for social benefit payments and provide an alternative to banks, which require beneficiaries to have an account and whose tiered pricing models are potentially expensive.

Government institutions, including state-owned enterprises and ministries, hold their funds in accounts at the Central Bank of Kenya (CBK), which connects directly to PesaLink as a participant within its ecosystem. In this way, the CBK acts in a similar capacity to a commercial bank, providing channels and a portal for various ministries and state-owned enterprises to disburse funds. MDAs enter beneficiary details, which are validated using a PesaLink API before the funds are debited and the payment instructions are sent.

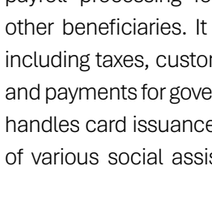
Counties already use PesaLink to disburse social welfare payments. There are also plans to expand the service to include government pension and salary payments. Upon initiation, transactions are typically executed instantly, reaching beneficiary accounts in seconds. Although funds are credited immediately, movement and settlement of funds between participating financial institutions occur later, via a net settlement file prepared by PesaLink and handled by a central settlement system. The Kenya Bankers Association manages the latter within the Central Bank (Stakeholder Interviews, 2025).

PesaLink is involved in a pilot project with the CBK for government supplier payments. The pilot for supplier payments has completed all user acceptance tests and has been signed off, with the go-live on the horizon.

The government G2P payments program provides recipients with some choice about their accounts or wallets. If a beneficiary does not receive their funds, the participating bank or mobile money provider (Telkom's T-Kash) is responsible for contacting PesaLink to investigate the transaction status.







Meeza Digital—Egypt

Meeza Digital sits at the center of Egypt's push to digitalize G2P transfers, a strategy anchored in the National Council of Payments Resolution 2/2018 (Egy Africa, 2022b). That resolution, adopted in September 2018, formally declared a "national trademark payment system" for all government salaries, pensions, and cash or in-kind subsidies. By designating Meeza Digital as the primary rail and linking every disbursement program to it, the government set a clear mandate for transitioning from its previous hybrid system of disbursements via the Egypt National Post Organization (ENPO), EasyPay Visa prepaid card, and Meeza Card to the Meeza Card only (World Bank, 2021f).

The engine behind this shift is the technical linkage between Meeza Digital and e-Finance, the state-owned payments processor established in 2005 as a G2P and person-to-government (P2G) payment gateway. E-Finance facilitates government payments, including payroll processing for government employees and other beneficiaries. It also facilitates P2G payments, including taxes, customs, social insurance payments, and payments for government services. E-Finance also handles card issuance, processing, and management of various social assistance programs, including the Takaful & Karama Program (TKP), an anti-poverty cash transfer program, as well as pensions and social subsidies (e-Finance, 2025).

E-Finance connects directly to Meeza Digital. Consequently, when a ministry issues a payroll or social assistance instruction, e-Finance validates each beneficiary, routes the payment through Meeza Digital, and settles it instantly so that recipients have real-time access to their funds. Guided by the Central Bank of Egypt (CBE) and ministries such as Finance and Social Solidarity, the country has migrated major G2P programs to Meeza Digital (Daily News Egypt, 2023). State-employee salaries, National Organization for Social Insurance (NOSI) pensions, the Takaful & Karama Program, and even emergency payouts now land directly on a Meeza Card or in a Meeza wallet. The latest available data indicates that the CBE has migrated and replaced 10.8 million payroll cards for public workers and pensioners from Visa-backed EasyPay prepaid cards to Meeza cards (Daily News Egypt, 2023).

Egypt's shift to Meeza Digital for G2P payments delivers a suite of advantages that ripple from individual beneficiaries to the broader economy. Beneficiaries can use their Meeza Card at Egypt Post POS terminals and ATMs, as well as at any bank ATM—unlike the previous card, which only worked through Egypt Post channels. Meeza Card also supports cash-in and cash-out functions and has a merchant acceptance capability that the Egypt Post EasyPay prepaid cards lacked. Public employees can also use their Meeza Card payroll card to access a no-fee advance of up to 30 percent of their salary. They can use this advance both online and at physical points of sale, further boosting convenience and liquidity (World Bank, 2023; EGYAFRICA, 2022a).

Tanzania Mobile Money, Tunisia Mobile Money, and Uganda Mobile Money

Tanzania Mobile Money, Tunisia Mobile Money, and Uganda Mobile Money do not yet support multilateral IPS linkage for government-to-person (G2P) transfers. Instead, each G2P payments program is executed through a bilateral agreement between the mobile-money provider and the disbursing agency, with settlement still occurring via the IPS. MMOs offer a bulk-payment service capable of sending funds to as many as 10,000 recipients in one batch. Governments and development partners rely on this functionality to deliver social protection payments and other grants to vulnerable beneficiaries.

In Tanzania, furthermore, efforts are underway to evolve TIPS to enable the G2P use case, starting with an initiative for contracted community health workers (CHWs) (see Box 6.3).

Leveraging Tanzania's digital public infrastructure to enable G2P payments for community health workers

In January 2024, the Tanzanian Ministry of Health (MoH) launched its Integrated and Coordinated Community Health Workers (ICCHW) Program to standardize and coordinate the recruitment, training, deployment, and monthly stipend payments for an estimated 140,000 new community health workers (CHWs). These CHWs are the frontline health providers in many communities and support advancing universal health coverage.

Previously, Tanzania relied on multiple public health partners to support CHWs' stipend payments. Each partner hired its own workers, paid different amounts for similar work, and used its own internal processes and methods to do so. This fragmentation and lack of coordination made it difficult for the Government of Tanzania to track who the CHWs were, where they worked, how much they worked, how much they were owed, and whether they had been paid commensurate with that work. It also made it challenging to track how public health funds from various public health partners were used, ensure the workers were getting paid in a timely and equitable way, and scale health service delivery effectively.

To address these challenges, the government developed a strategic vision for a digitalized government payment platform enabled by complementary elements of the country's growing digital public infrastructure (DPI). Tanzania already had:

- **Facility Financial Accounting and Reporting System (FFARs),** a digital financial system that enables primary health care facilities to directly manage, track, and report their funds with transparency and accountability.
- **Mfumo wa Uhasibu Serikalini (MUSE),** a centralized government accounting system.
- **Tanzania Instant Payment System (TIPS)** IPS.
- **A data exchange platform and systems integration** to connect the elements.
- **Human Resource for Health Information System (HRHIS),** a registry of all health practitioners that excluded CHWs.

The government aimed to enhance these existing systems, using digital payments to CHWs as the first government-to-person (G2P) use case, with future plans to add other contracted workers, such as casual laborers and other related workers.

The Tanzanian government collaborated on a platform blueprint with IntraHealth International, a non-governmental organization with expertise in digital health and CHW systems; IntraHealth has recently combined with the non-governmental organization Global Communities. With leadership from Tanzania's Ministry of Finance (MoF) and catalytic funding from the Gates Foundation, the blueprint development process included multiple government ministries aligning on their needs and priorities, including the MoF, MoH, the President's Office-Regional Administration and Local Government, and the e-Government Authority. A dedicated task force of government software architects, developers, systems analysts, and business application officers from across the participating ministries implemented the blueprint along with the University of Dar es Salaam (UDSM). Building on existing platforms, the task force strengthened Tanzania's existing DPI by advancing interoperability and secure data exchange. This included developing a secure digital registry of CHWs inside HRHIS to track information aligned with the Digital Public Goods (DPG) guidance developed by the United Nations International Children's Emergency Fund (UNICEF).

To maximize transparency, efficiency, and coordination, a dedicated bank account was established specifically to hold funds allocated for paying CHW stipends. This account is required to be pre-funded by the central government, district council sources, and/or external donors. The use of a dedicated account ensures that CHWs receive their stipends in a timely manner and facilitates the effective coordination of contributions from various donors.

From the outset, the platform design incorporated the needs of women and rural CHWs, some of whom did not have a bank or mobile money accounts before enrolling in the CHWs' digital payment platform. To enhance accountability and mitigate the risk of fraud, the program leveraged KYC processes using Tanzania's National Identification Number and the new CHW registry. By August 2025, the government of Tanzania was rolling out the CHW digital G2P payment platform to 23 councils in 11 regions.

There is much to learn about the impact of the CHW digitalized payment system on government efficiency and accountability, public health delivery, and financial inclusion for remote government workers. Tanzania's CHWs' digital G2P payment platform is setting a precedent in digital public finance as a promising innovative approach for others to follow, and serves as a test case to watch.



6.3 Challenges and opportunities in implementing the G2P use case in IPS

For more live IPS to offer G2P payments, IPS operators and regulators need to tackle a set of hurdles related to technology, infrastructure, policy, and regulations. Modernizing G2P payments through IPS requires synchronized progress across two high-level domains: the technical and infrastructural, as well as the policy and regulatory. The technical and infrastructural side includes identity systems, connectivity, and distribution networks; the policy and regulatory side includes regulatory frameworks and government administrative capacity. We look at each in turn:

Technical and infrastructure limitations of disbursing G2P payments through IPS

Technical and infrastructure limitations hinder the effective use and scaling of IPS for G2P payments. Key technical and infrastructure barriers include:

Challenge 1 | Digital identity system limitations

A fragmented or underdeveloped digital ID infrastructure renders G2P payment transfers over IPS unreliable. National ID registries often cover only a portion of eligible recipients, particularly in urban areas, resulting in gaps in the beneficiary pool. IPS must verify each beneficiary by cross-matching G2P payment recipient data with national ID records and the beneficiary's linked financial account or wallet details. Any mismatch will halt the digital payment and force the government to reinitiate the customer due diligence process, which will cause delays in issuing payment. Notably, a social protection study in Cameroon found that one in five beneficiaries lacked valid identification documents to open a financial account or register a SIM card in their name (World Bank Blogs, 2024). Data integrity issues, including name misspellings, number misallocations, and duplication, create downstream barriers to account or wallet opening and customer due diligence processes, effectively excluding vulnerable populations from digital financial ecosystems despite their priority status in social protection frameworks.

Opportunities to address digital identity system limitations

India's experience in addressing digital identity limitations is notable. Rolling out near-universal Aadhaar IDs and layering them onto a DPI "stack" that includes the UPI IPS has created seamless, real-time payments, even in remote villages. Meanwhile, a lightweight, phone-based electronic Know Your Customer (eKYC) process has brought the remaining hard-to-reach residents into the system. Following that blueprint, governments in Africa can pursue universal ID coverage and

adopt a DPI framework that enables the identity system to interoperate seamlessly with the IPS. In the meantime, deploy a tiered eKYC that utilizes alternative identifiers, such as verified phone numbers, to onboard individuals who are still outside the formal ID network.

Challenge 2 | Limited digital readiness in government

Many government agencies still lack modern digital platforms or depend on aging, siloed systems, which makes it difficult for them to plug into today's IPS rails. Converting these legacy management information systems to generate real-time payment instructions requires extensive re-engineering, data migration, and cross-agency coordination. These efforts often stretch institutional capacity far beyond its current limits.

Opportunities to address the limited digital readiness of the government

Governments have an opportunity to set up a purpose-built unit with a long-term mandate to digitalize all public-service workflows, not just G2P transfers. The unit develops a shared payment-gateway platform that sits between the government's core financial/ERP systems and the IPS, converting each agency's batch files into real-time payment instructions. Examples of this model include:

- **Egypt**, where the state-owned e-Finance gateway funnels payment instructions for government payroll, pensions, and subsidy programs straight to the IPS, Meeza Digital.
- **Rwanda's** Irembo e-government portal has already digitalized several government agencies. As a result, only minor modifications and integration with Rswitch are needed for government agencies to process G2P payments through Rswitch, using Irembo as the middleware (IremboGov, 2025).
- **Nigeria's** NIP IPS integrates with licensed PSSPs that develop plug-and-play front ends, directly linking government agencies to the IPS for G2P payment disbursement (Stakeholder Interviews, 2025).

By anchoring public service delivery in a single gateway and a dedicated digital services unit, governments can modernize once and let every agency ride the same rails.

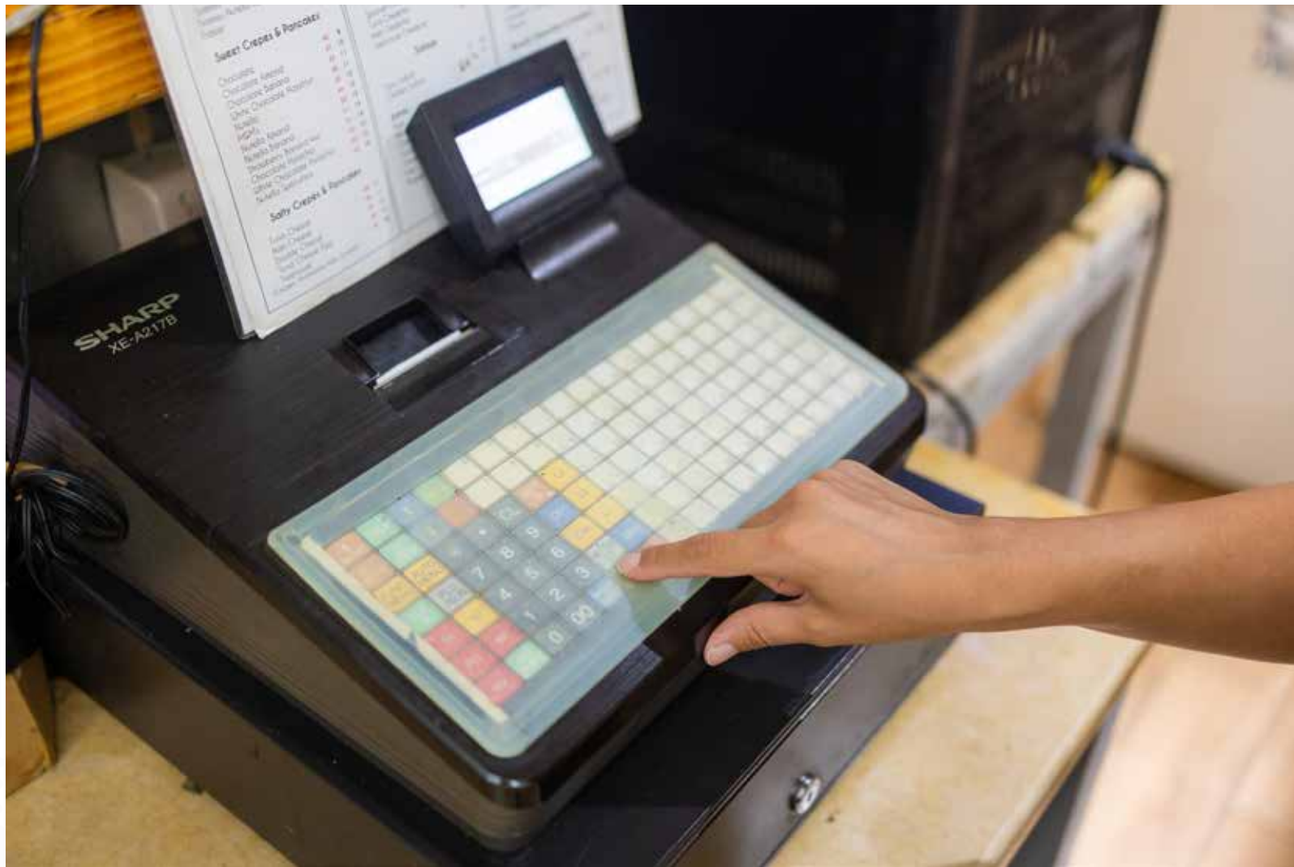
Challenge 3 | API standardization deficiencies

Inconsistent API standards and protocols between government beneficiary registries, national identity systems, the Treasury Single Account (TSA), G2P payment gateways, and IPS create interoperability challenges that significantly complicate system integration efforts. These technical misalignments increase implementation timelines, elevate project costs, and result in suboptimal workarounds that compromise the benefits of leveraging IPS for nationwide G2P payment programs.

Opportunity to address API standardization deficiencies

Governments and/or central banks can issue a single, government-owned set of open API specifications for use by beneficiary registries, the TSA platform, and the IPS. Governments or central banks can host those specifications behind a centralized API-gateway sandbox seeded with sample data and automated tests and make pre-production conformance certification mandatory to go live.

Brazil offers a precedent for this approach. When the Central Bank of Brazil launched Pix in late 2020, it published the entire Pix interface as an open-source OpenAPI file on GitHub. It opened a sandbox where prospective participants could build and test against real rulebook scenarios. The Central Bank of Brazil required each institution to pass stringent certification tests and meet API-quality service-level agreements (SLAs) before going live (Github, 2025).



Challenge 4 | Last-mile infrastructure gaps

Physical access infrastructure for digital financial services remains critically underdeveloped across peri-urban and rural areas in Africa. The GSMA *State of the Industry on Mobile Money 2025* report finds that agent distribution networks remain inadequate in many rural areas of low- and middle-income countries. In Africa, this is true despite the continent now having 28 million registered mobile money agents. POS penetration rates also remain at fewer than 150 terminals per 100,000 adults in most markets, significantly below the benchmark of 600+ terminals observed in digitally mature economies (GSMA, 2025b). Inadequate access points force governments to revert to cash disbursements or partnerships with FSPs that can execute hybrid disbursements (combining digital and cash).

Opportunity to address last-mile infrastructure gaps

Shared payment channel infrastructure represents one opportunity to fill infrastructure gaps. Governments can mandate full interoperability across every last-mile touchpoint, such as agents, ATMs, contactless withdrawal, POS terminals, and QR codes, among others. Through this approach, any transfer sent over an IPS can be withdrawn or spent at the nearest channel, regardless of who owns the terminal or which FSP acquires the transaction. Ghana already operates on this model: its national switch integrates agents, ATMs, and the GhQR scheme into a shared infrastructure, providing beneficiaries with friction-free access (AfricaNenda, 2022).

Governments should also ensure there are payment acceptance options for beneficiaries without bank accounts. For example, NIP offers the NIBSS's Africard (prepaid option), contactless withdrawal, and the ability to automatically open wallet accounts using a National Identity Number (NIN) card. This allows people without bank accounts to receive funds preloaded onto cards or accessed via agent networks or ATMs.



Policy and regulatory limitations

Limitations and gaps in the policy and regulatory frameworks hinder the effective use and scaling of IPS for G2P payments. Key policy and regulatory barriers include:

Challenge 5 | Deficits in political will and institutional commitment

Interviews with stakeholders in multiple African markets about their G2P payment implementation experiences reveal that insufficient political commitment and institutional will create primary barriers to leveraging IPS for G2P programs. In the Kenyan context, stakeholders described a "lack of a consistent long-term vision" and the "... short-term focus in Africa" among decision-makers as reasons for the delayed adoption of IPS for G2P payments. Despite high-level policy declarations supporting digitalization, implementing agencies frequently resist process modifications. As one stakeholder noted, "The technical challenges are often secondary to the matter of institutional will from implementing agencies, who may not fully comprehend the operational and efficiency benefits associated with adapting their disbursement workflows." This implementation gap between policy aspiration and agency execution creates significant friction in scaling the IPS G2P payments use case.

Opportunity to address deficits in political will and institutional commitment

The IPS G2P transition needs to be driven by a clear government mandate with a designated implementation entity and timeline. Egypt's National Council of Payments' Resolution 2/2018 exemplifies this mandate approach. The resolution approved the adoption of a "national trademark payment system" (e.g., Meeza Digital) for G2P payments, which was implemented by the CBE.

Challenge 6 | Restrictive participation frameworks for non-bank providers

To ensure the success of IPS support for G2P payments, central banks may also need to reconsider restrictions on non-bank FSPs that limit their direct and indirect integration with IPS. These exclusionary policies create substantial ecosystem gaps by preventing mobile money operators (MMOs), microfinance institutions (MFIs), and other PSPs that serve vulnerable populations from participating directly in the IPS. Recent beneficiary surveys indicate that 78% of G2P payment recipients prefer non-bank channels, particularly mobile money, highlighting the misalignment between policy frameworks and beneficiary needs (World Bank Blogs, 2024).

Opportunity to address restrictive participation frameworks for non-bank providers

Central banks and IPS operators should amend the IPS rulebooks to allow tiered, risk-based access for licensed MMOs, MFIs, and fintechs. An alternative is to allow them to participate indirectly through sponsor banks as an interim measure. For example, PesaLink has leveraged the indirect membership approach to include 39 non-bank institutions, including MFIs, MMOs, SACCOs, and fintechs (AfricaNenda SIIPS 2024).

Challenge 7 | Potential reliance on sponsor banks

Leveraging an IPS might require agencies to partner with a sponsor bank unless direct participation is possible. As one stakeholder mentioned, “In some cases, they would still need to hire a sponsor bank to leverage the IPS, unless there’s a possibility to participate directly in the system. Therefore, it would require a certain level of capacity at the agency level to manage that participation and manage the payments directly.”

Opportunity to address potential reliance on sponsor banks

One primary solution involves enabling the central bank to act as a direct participant within the IPS. This approach could facilitate the use of a treasury single account and an integrated financial management information system for disbursing and recording G2P payments. Together, these systems enable real-time reconciliation, audit trails, and just-in-time disbursements for the central bank and the Ministry of Finance. According to one of the experts interviewed for this report, “This can improve budget execution and compliance, which is a strong selling point for governments deciding whether to invest (Stakeholder Interviews).”

As mentioned above, PesaLink facilitates direct central bank participation by allowing the CBK to connect directly (Stakeholder Interviews). This setup eliminates the need for individual government agencies to each engage a separate commercial bank as a sponsor to access the IPS.

Other IPS operators offer plug-and-play integration paths that let government agencies bypass the traditional sponsor-bank bottleneck. NIBSS’s reliance on licensed PSSPs to connect government agencies to the IPS is one example. Egypt presents a comparable approach with its state-owned e-Finance payment gateway, which sits between the government agency and the IPS, translating batch files into real-time payment instructions to Meeza Digital. Both models provide a secure, direct conduit for agencies to initiate and manage payments without relying on a commercial bank intermediary.

By focusing on these opportunities, IPS could provide a more effective and reliable backbone for G2P payments in Africa, contributing to greater financial inclusion and the efficient delivery of public sector wages, pensions, and social benefits.



6.5 | Conclusion

Leveraging IPS for G2P payments could bring significant benefits for both recipients and governments that are unavailable with cash disbursal methods. For beneficiaries, digital G2P payments through IPS can provide them with real-time access to funds through a diverse set of digital channels, many of which allow them to keep their funds in an account and use them digitally. Furthermore, through IPS, beneficiaries can choose their PSP, creating the potential for them to use the receiving accounts for a broader range of financial services, such as savings. For governments, digitalizing G2P payments through IPS may also be less expensive, more efficient, and more transparent due to a combination of reduced leakage and greater auditability.



7

Spotlight IIPS for what: Exploring cross-border use cases that support IPS inclusivity

International transaction volumes have surged in Africa, outpacing gross domestic product (GDP) growth. This growth has two components: remittance flows into and across the continent and intra-African trade.

Over the last decade, remittances have become the single most significant non-debt source of financial inflows to Africa. In 2023, Africa received $100 billion in remittances, equaling nearly 6% of the continent's GDP (United Nations, 2024). However, the high cost of sending remittances to and within Africa erodes the value of these funds (BankservAfrica, 2023). Sub-Saharan Africa is the most expensive region globally to send money to, with an average transaction cost of 8.45% for $200 in 2024 (World Bank, 2024b). This highlights the need for cheaper options for sending remittances.

As for trade between African countries, a substantial portion of intra-African trade is conducted through informal, cash-based channels, which are inefficient and lack security (LRS, 2025). The African Continental Free Trade Area (AfCFTA) is expected to boost intra-African trade from 18% to an estimated 50% by 2030 (World Economic Forum, 2022). Afreximbank has already highlighted signs of an increase in regional trade in its *African Trade Report 2025*.

The financial sector must keep pace with these positive trends to ensure continued growth and sustainability. Fast, affordable cross-border payments are essential. This chapter examines the current landscape of cross-border payments leveraging inclusive instant payment systems (IIPS) in Africa, unpacks the multifaceted challenges faced by IPS in enabling the cross-border use case, and identifies opportunities for overcoming them.

7.1 Defining cross-border payments and the typical method for settling them

Cross-border payments involve moving money across country borders. These transactions are classified as either inbound or outbound payments, depending on the directional flow of funds. In the case of inbound cross-border payments, money is received from a foreign country into the recipient's local country; with outbound payments, money is sent from the sender's local country to a foreign country. Inbound and outbound cross-border payments can further be categorized by their specific use case (see Box 7.1), which depends on the purpose of the transaction.



Box 7.1 | The types of cross-border payments

Person-to-person (P2P): These are transfers between individuals. The most common use case is remittances, which are typically low-value payments sent by migrants to family and friends in their home country.

Person-to-business (P2B): These are payments from a consumer to a business in another country. Key examples include payments for e-commerce purchases.

Business-to-business (B2B): These are payments between two businesses in different countries. This category is critical for regional trade and typically involves payments for inventory, supplies, services, and other business purchases.

Business-to-person (B2P): Payments from a business in one country to an individual in another. Common use cases include payroll for international employees and the payment of dividends.

Government-to-person (G2P): These are disbursements from a government to an individual in another country, such as cross-border pension payments.

Person-to-government (P2G): This involves individuals making payments to foreign government entities, such as for taxes or fees.

Cross-border payments often require one or more intermediaries operating in multiple jurisdictions to complete the process from sender to recipient. Historically, cross-border payments have been enabled by the correspondent banking model. In this system, a bank in one country maintains relationships and holds accounts with banks in other jurisdictions to execute and process payments on their behalf. Varied business hours/time zones and payment infrastructures across different banks can lead to delays of days or even weeks, a lack of transparency for the end user, and higher costs (Reserve Bank of Australia, 2024; BIS, 2023; Mastercard, 2023). With advancements in technology and a rising demand for cheaper and faster cross-border services, IPS have emerged as a compelling alternative.

7.2 The case for IPS for cross-border payments

The correspondent banking model brings multiple challenges that create higher costs and delayed clearing and settlement for cross-border payments, making them prohibitively expensive and inefficient (FSB 2024; ECB, 2025). Fragmentation and inconsistent messaging standards across borders are two of those challenges (Payment Components, 2024).

The African payment landscape is highly fragmented due to the presence of different national payment systems, disparate messaging standards (e.g., proprietary vs. ISO 20022 vs. ISO 8583), and a lack of central switches in many countries. Enabling cross-border payments in this context requires individual integrations between institutions or systems or reliance on multiple private aggregators.

IPS offer an alternative that can reduce costs and enable real-time confirmation and availability of funds. One way of leveraging IPS to facilitate cross-border payments is by interlinking domestic and regional IPS (discussed in section 7.3) (Reserve Bank of Australia, 2024). Leveraging ISO 20022 messaging and application programming interfaces (APIs) also improves technical interoperability and streamlines compliance screening in line with multiple national payment systems regulations (BIS, 2023, and BIS, 2024). IPS interlinked in this way—as has been done through Project Nexus, an IPS linking hub developed by BIS for banks in South Asia and East Asia—could connect PSPs in Africa across borders more cost-effectively compared to the correspondent banking model.

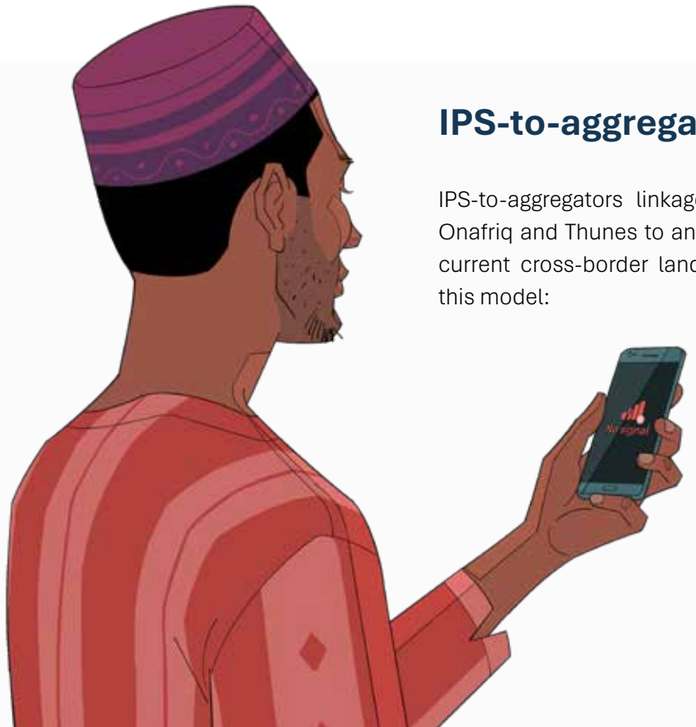


7.3 The current state of cross-border payments leveraging IPS in Africa

As of June 2025, only 11 IPS support cross-border transactions. These include eight of the domestic IPS and the three regional IPS, namely Instant Payment Network (IPN) and Meeza Digital (Egypt), Kenya Mobile Money, Madagascar Mobile Money, Central Automated Switch (MauCAS, Mauritius), eNaira and Nigeria Inter-Bank Settlement System (NIBSS) Instant Payment (NIP), Tanzania Mobile Money, GIMACPAY (Central African Economic and Monetary Community (CEMAC)), Pan-African Payment and Settlement System (PAPSS, Africa-continent wide), and Transactions Cleared on an Immediate Basis (TCIB, Southern African Development Community (SADC)). This is an increase from the six that did so in 2024.

The IPS cross-border landscape utilizes varying implementation approaches to facilitate cross-border payments, including:

1. **IPS-to-aggregators linkages:** This approach involves integrating aggregators like Onafriq or Thunes (whose methods were described in Chapter 4) on the IPS to facilitate cross-border payments across the aggregator's network of countries (see Figures 7.1 and 7.2 and Tables 7.1 and 7.2).
2. **IPS-to-PSPs linkages:** Connecting PSPs across Africa to regional IPS to facilitate cross-border payments (see Figure 7.3 and Table 7.3).
3. **IPS-to-IPS linkages:** This approach includes linking two domestic IPS domiciled in two different countries to facilitate cross-border payments between them. Alternatively, this approach could involve linking a domestic IPS and a regional IPS to facilitate cross-border payments between the country and the relevant region (see Figure 7.4 and Table 7.4).



IPS-to-aggregators linkages

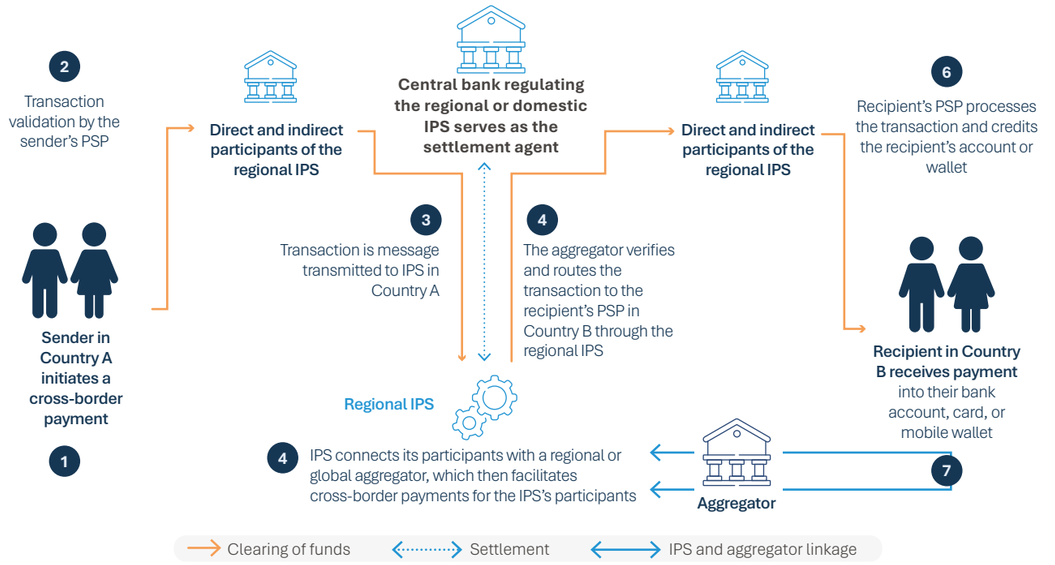
IPS-to-aggregators linkages involve connecting aggregators such as Onafriq and Thunes to an IPS to enable cross-border use cases. In the current cross-border landscape in Africa, there are two examples of this model:

1. **Regional IPS** linked to an aggregator (see Figure 7.1 and Table 7.1).
2. **Domestic mobile money IPS** linked to aggregators (see Figure 7.2 and Table 7.2).

Regional IPS linked to an aggregator

This model involves a regional IPS connecting its participants with aggregators to process cross-border payments to and from the countries in which the aggregator has enabled cross-border functionality. GIMACPAY (CEMAC) uses this implementation approach.

Figure 7.1 | Integrating aggregators on a regional IPS to facilitate cross-border payments



Note: In this model, all cross-border payment transactions initiated by the end-users of IPS participants pass through the IPS. The aggregator has operating licenses in different jurisdictions; therefore, the IPS connects its participants from different countries within its region (e.g., CEMAC countries) to the aggregator to facilitate their cross-border payments across Africa.

Table 7.1 | Integrating aggregators on a regional IPS to facilitate cross-border payments

Regional IPS			
IPS implementation example		**Cross-border use cases**	**Country coverage**
Region: CEMCAX	**IPS name:** GIMACPAY		
Integrates aggregators (Onafriq) onto GIMACPAY and connects the IPS participants (banks and mobile money operators (MMOs)) in the CEMAC region to enable outbound and inbound remittances within the aggregator's network across the African continent. The supervision and settlement of cross-border payments are carried out through the Bank of Central African States (BEAC). Transactions are settled in Central African franc (XAF).		P2P, P2B, P2G, and B2B	Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, and Gabon

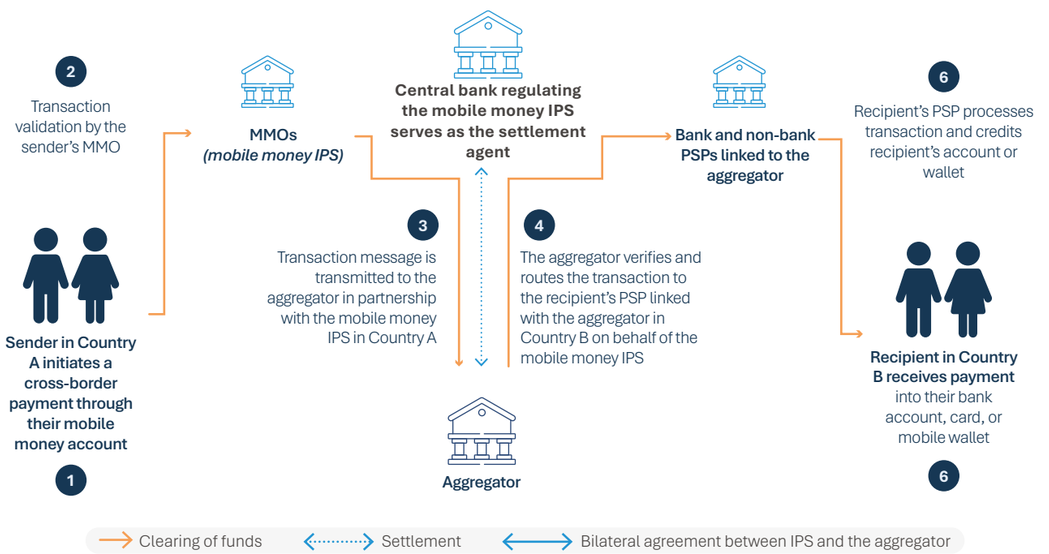


Interlinking regional IPS and aggregators enables the IPS to send or receive money from the countries where the aggregators have an operating license. This model requires a single agreement between a regional IPS and an aggregator to facilitate cross-border payments for multiple PSPs in the relevant countries. However, this approach relies on one-to-one connections with multiple aggregators to ensure coverage across the entire continent, which can be burdensome on the IPS.

Domestic mobile money (MM) IPS linked to aggregators.

Domestic mobile money IPS are also partnering with aggregators to facilitate real-time cross-border payments. Several MMOs have bilateral agreements with aggregators to facilitate their payments (see Figure 7.2). This is the case with Kenya Mobile Money, Madagascar Mobile Money, and Tanzania Mobile Money, as shown in Table 7.2.

Figure 7.2 | Integrating aggregators on a mobile money IPS to facilitate cross-border payments



Note: *In this model, all cross-border payment transactions initiated by the clients of MMOs pass directly through the aggregator to PSPs (bank and non-bank) that are part of the aggregator's network.*

Table 7.2 | Integrating aggregators on a mobile money IPS to facilitate cross-border payments

Domestic IPS		
IPS implementation example		**Cross-border use cases**
Region: Nigeria	**IPS name:** eNaira	
The eNaira is a digital currency initiative by the Central Bank of Nigeria (CBN), which facilitates cross-border payments by providing a digital currency that senders can use to transfer money to recipients in Nigeria, potentially reducing the reliance on foreign currencies. The process begins, according to guidelines from the CBN, with International Money Transfer Operators (IMTOs) opening a merchant wallet with the CBN. When an overseas sender initiates a transfer with the IMTO of their choice, the IMTO logs into the eNaira web wallet portal, debits its eNaira Merchant Wallet, and credits the recipient either with the eNaira or the equivalent in foreign currency. Alternatively, the IMTO integrates with the eNaira portal from its platform via APIs provided by CBN and initiates the transfer.[43]		P2P, P2B, and B2B
Region: Kenya	**IPS name:** Kenya Mobile Money	
Kenya's mobile money network, e.g., M-PESA, enables inbound and outbound remittances through bilateral partnerships with aggregators such as TerraPay and Onafriq. The Central Bank of Kenya (CBK) supervises these transactions, as the MMOs hold a direct license to offer inbound and outbound money transfers with the CBK.		P2P, P2B, and B2B
Region: Madagascar	**IPS name:** Madagascar Mobile Money	
Madagascar's mobile money network facilitates cross-border payments through bilateral agreements with aggregators. An example is the partnership between MVola and Onafriq, which enables inbound and outbound remittances across the aggregator's network. The Central Bank of Madagascar (CBM) supervises these transactions, as MMOs hold a direct license to offer inbound and outbound money transfers with the CBM.		P2P, P2B, and B2B
Region: Tanzania	**IPS name:** Tanzania Mobile Money	
MMOs in Tanzania, like M-PESA, have bilateral partnerships with aggregators such as Thunes, which facilitates inbound and outbound cross-border payments to bank accounts and wallets. The Bank of Tanzania (BoT) supervises these transactions, as the MMOs hold a direct license to offer inbound and outbound money transfers with the BoT.		P2P, P2B, and B2B

43 These details come from a guideline document from the CBN for IMTOs that was shared with AfricaNenda.

As illustrated, mobile money IPS that have enabled cross-border use cases are partnering with aggregators to facilitate rapid cross-border payments. This approach relies on bilateral agreements between MMOs and aggregators, which is more burdensome compared to potential connections involving regional IPS and aggregators, as regional IPS has a larger number of PSPs connected to the IPS compared to domestic mobile money IPS.

IPS-to-PSP linkages

IPS-to-PSP linkages rely on the network of participants of the IPS to facilitate cross-border payments across Africa. This approach is used by PAPSS (African continent) and TCIB (SADC), which enable cross-border payments for member countries by transacting with participating PSPs licensed in member countries (see Figure 7.3).

Figure 7.3 | Connecting PSPs to regional IPS to facilitate cross-border payments

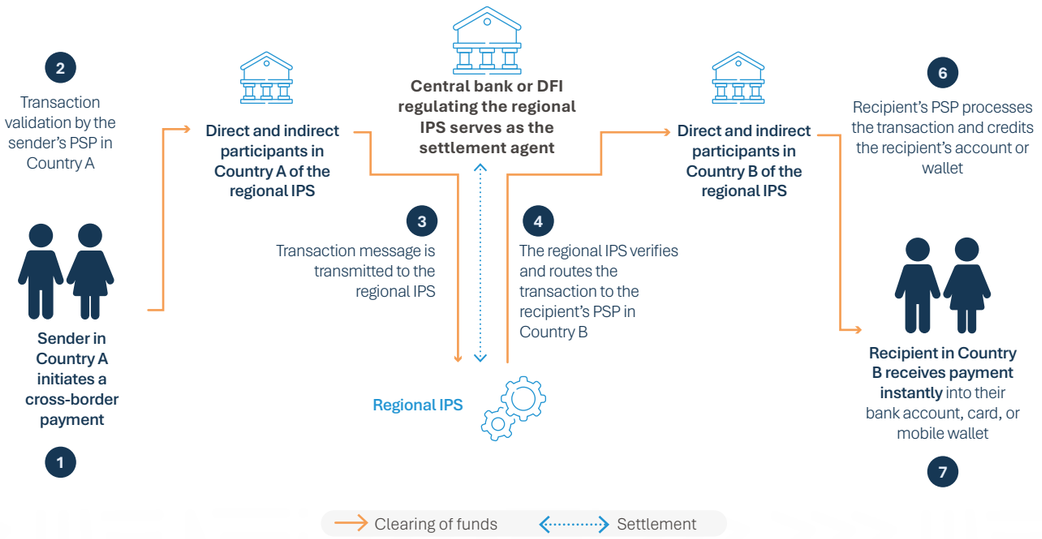


Table 7.3 | Connecting PSPs to regional IPS to facilitate cross-border payments

IPS implementation example		Cross-border use cases	Country coverage
Region: Continent-wide	**IPS name:** PAPSS		
Connects commercial banks of member countries directly to the PAPSS platform, facilitating cross-border transactions through participants in various African countries. The African Export-Import Bank (Afreximbank) facilitates the settlement of the payment, ensuring the beneficiary receives the funds in their local currency. PAPSS also implements the IPS-to-IPS linkage approach, connecting with domestic IPS, as in the case of Nigeria NIP.		Data not available	Djibouti, The Gambia, Ghana, Guinea, Kenya, Liberia, Malawi, Nigeria, Rwanda, Sierra Leone, Zambia, and Zimbabwe
Region: SADC	**IPS name:** TCIB		
Connects banks (direct participants) and MMOs (indirect participants) onto the TCIB platform to facilitate cross-border payments within the SADC region. Settlement of transactions is in South African Rand (ZAR) through the SADC Real-Time Gross Settlement (RTGS) system, operated by the South African Reserve Bank.		P2P	Namibia, South Africa, Zambia, and Zimbabwe

The Regional IPS-to-PSPs linkage also relies on one-to-one connections directly with individual PSPs to enable cross-border payment use cases across Africa. Establishing bilateral agreements with individual PSPs can be burdensome and is not an efficient way of facilitating cross-border payments across Africa.



IPS-to-IPS linkages

IPS-to-IPS linkages involve connecting two different IPS to enable cross-border use cases (see Figure 7.4). In the current cross-border landscape in Africa, there are two variations of this model:

1. **A domestic IPS** linked to another domestic IPS, utilized by MauCAS to facilitate cross-border transactions between Mauritius and India.
2. **Regional IPS** linked to a domestic IPS. Nigeria's NIP is linked to PAPSS to enable cross-border payments between NIP participants and PAPSS participants.

Figure 7.4 | Interlinking multiple IPS for cross-border payments

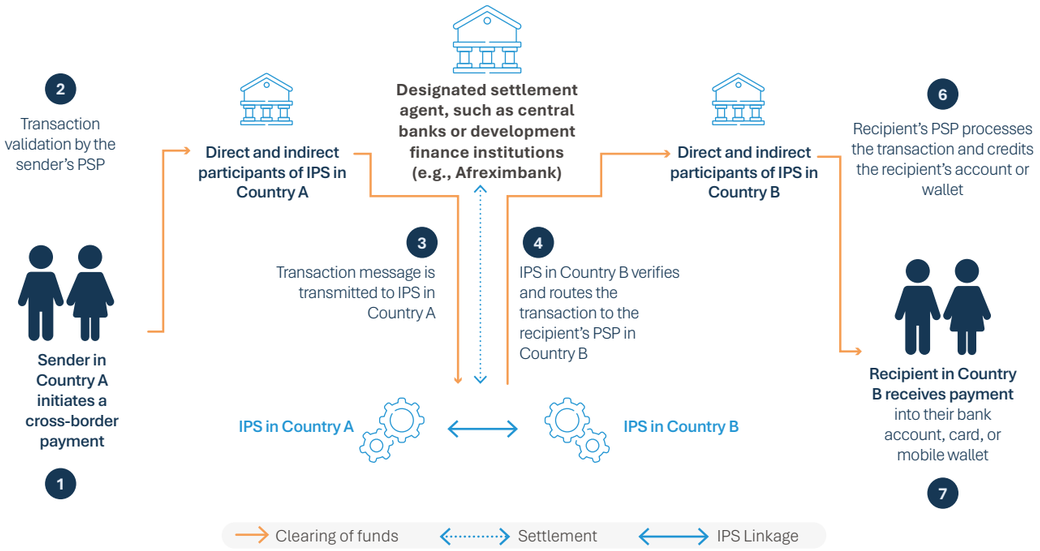


Table 7.4 | Interlinking IPS (regional and/or domestic IPS) to enable cross-border use cases

Domestic IPS		
IPS implementation example		**Cross-border use cases**
Region: Egypt	**IPS name:** IPN & Meeza Digital	
IPN and Meeza Digital enable inbound remittances from countries within the Gulf Cooperation Council (GCC) into Egypt by interlinking the IPN and Meeza Digital payment systems with BUNA, a cross-border IPS owned by the Arab Monetary Fund.		P2P, P2B, and B2B
Region: Mauritius	**IPS name:** MauCAS	
MauCAS enables instant cross-border payments with India's IPS, Unified Payments Interface (UPI), through a network-to-network agreement between the Bank of Mauritius and the National Payments Corporation of India (NPCI). Transactions are settled in Indian Rupees.		P2P, P2B, and B2B
Region: Nigeria	**IPS name:** NIP	
Nigeria's NIP facilitates cross-border payments across Africa from and to Nigeria through its integration with PAPSS. NIP acts as the single aggregator for all 22 Nigerian banks connected to PAPSS, thus streamlining cross-border payments.		P2P, P2B, and B2B

Domestic IPS to domestic IPS linkages rely on bilateral agreements between two domestic IPS to enable cross-border transactions between the two countries. While this approach improves reach, as end users can send or receive money from the full range of PSPs connected to the IPS, the need for bilateral agreements between IPS makes the process cumbersome.

Connecting regional IPS to domestic IPS facilitates greater reach for local PSPs without the need for an extensive number of bilateral agreements. For example, by connecting directly with Nigeria's NIP, PAPSS's participants gain access to all PSPs in the Nigerian market. While this approach is operationally more efficient, it requires all African countries to have their own domestic IPS or a regional block with an IPS to facilitate cross-border payment across the entire continent.



7.4 The challenges and opportunities in implementing cross-border payment use cases leveraging IPS across different African countries

Although an increasing number of IPS are enabling cross-border use cases, significant hurdles stand in the way of implementing and scaling them. These include fragmented payment system policies and regulations, technical and infrastructure limitations, and operational challenges around governance, settlement, and exchange rates. This section highlights these challenges and explores opportunities to address each challenge in order to optimize cross-border payments.

Challenge 1 | Policy and regulatory fragmentation

To facilitate cross-border use cases leveraging IPS, PSPs must navigate a complex web of varying regulations imposed by regulators in each country. These regulations encompass heterogeneous payment licensing guidelines, Know Your Customer (KYC) requirements, Anti-Money Laundering/ Counter-Financing of Terrorism (AML/CFT) regulations, data privacy standards, and consumer protection guidelines.

The wide variation in KYC requirements for sending and receiving remittances across the continent helps to illustrate the scope of the challenge. In Eswatini, for instance, customers are required to provide an identification document (ID or passport), proof of residence, and proof of income to send remittances exceeding E5000 (approximately $300). In Zimbabwe, customers are only required to present an identification document (ID, passport, or driver's license) to send up to $5,000 per day. While both countries have PSPs connected to the TCIB regional IPS to facilitate cross-border payments within, the different regulatory requirements create operational complexity for each. Differing data protection and data privacy laws pose further challenges for sharing information across borders.

Fragmented regulations create a high compliance burden for PSPs, including duplicative checks. This means both the sending and receiving institutions must perform transaction-level sanction screening to comply with regulations in both countries. Stringent and often uncoordinated foreign exchange control regulations add another layer of complexity. These lead to duplicated efforts, delays, and increased compliance costs, reducing the benefits of leveraging IPS for cross-border transactions.

Opportunities to address policy and regulatory fragmentation to optimize cross-border payments via IPS

Opportunity 1.1 | Harmonization of policy and regulatory frameworks

Harmonization of policy and regulatory frameworks across African countries is crucial for reducing complexity, fostering competition, and making cross-border payments more affordable, efficient, and accessible. As highlighted in the SIIPS 2023 report, governments and central banks across Africa must work to align their frameworks on PSP licensing and supervision, harmonize AML/CFT and KYC frameworks related to customer due diligence, and establish common principles for data privacy, cross-border data sharing, and cybersecurity. While full regulatory harmonization across Africa is a long-term goal, the growing number of PSPs connected to regional IPS presents an opportunity for near-term harmonization at the regional level.

In almost all instances, regional IPS are supervised by a regional regulatory body with representatives from IPS member countries. For example, TCIB is subject to oversight by the SADC Payment Systems Management Body and Payment System Oversight Committee, made up of representatives from all SADC member countries. Similarly, the GIMACPAY system was established by the regional central bank BEAC, which governs cross-border payments within CEMAC. Such integration provides a platform for regional IPS member countries to streamline and standardize the regulatory concepts that cause friction.

Once securely established, digital financial identities could also be used repeatedly across transactions and jurisdictions, potentially mitigating the need for duplicative and costly KYC/ AML compliance checks at every step and thus increasing the speed and security of cross-border payments leveraging IPS.

Opportunity 1.2 | License passporting

An aggregator noted that remittance fintechs face the costly burden of securing separate remittance licenses in every country they serve. Regulatory passporting would solve this: once a PSP is licensed in any one jurisdiction, that single cross-border approval would automatically extend to all other member states or countries within a passporting regime. Eliminating the need for dozens of duplicate applications reduces compliance costs and accelerates market entry, resulting in savings that ultimately benefit merchants and consumers through cheaper, faster, and more accessible cross-border payments.

Challenge 2 | Infrastructure and technical limitations

The web of IPS systems across Africa is marked by layers of variation in infrastructure and technical maturity, all of which hinder integration. Having domestic IPS capabilities is the foundation of a mature payments sector and should be in place to enable cross-border use cases through one of the described models. At present, African countries are at different stages of IPS development, and no single IPS has cross-border functionality that connects all payment systems on the continent. These discrepancies hinder integration efforts at both regional and continental levels.

Even where IPS are developed, not all are cross-domain and thus do not have universal reach across all customer accounts. The business case for participating in a new cross-border IPS can be unclear for PSPs, particularly given the upfront investment required to integrate with a new system, combined with uncertain future revenues. This impedes the scalability of IPS and the optimization of cross-border payments leveraging IPS.

Furthermore, the diversity in the technical design of different IPS and their proxy schemes (e.g., some IPS use mobile numbers as identifiers, whereas other IPS rely on bank account numbers) makes multilateral integration challenging.

Where domestic IPS exist, some conform to standards based on older ISO 8583, some use modern ISO 20022, and some have developed proprietary messaging standards. The presence of these different standards creates numerous potential points of failure and can be both operationally challenging and costly. This makes interlinking IPS difficult. While ISO 20022 is on the rise and enables richer data, conforming to its more advanced technical requirements can be complex and costly for IPS and their participants.

Opportunity to address infrastructure and technical limitations to optimize cross-border payments, leveraging IPS

Opportunity 2.1 | Adoption of a common messaging standard across IPS

A common messaging standard across Africa's domestic and regional IPS can reduce friction in facilitating cross-border payments. ISO 20022 is a global best practice, as it enables richer, more standardized data crucial for straight-through processing (STP), which minimizes manual human intervention in payment sub-processes. Yet ISO 20022 has not been adopted everywhere, and even messaging "standards" come in different flavors, creating the need for a multi-faceted integration approach.

Opportunity 2.2 | Implementing API integration layers

APIs can play a key role in smoothing electronic communication between networks and enabling connections to payment networks. They facilitate real-time data exchange, enhance integration between systems, and enable the creation of value-added services, such as payment pre-validation and real-time confirmation messaging. In the current context of IPS and PSPs with varying technical abilities, APIs facilitate seamless integration between different financial systems, thereby lowering costs for participants who are not yet ISO 20022 certified. Furthermore, the use of APIs enables systems built on different standards to communicate effectively. For example, Rwanda's eKash uses an API integration layer to enable banks and PSPs with legacy systems to connect to its modern platform.



Challenge 3 | Exchange rate and settlement complexities

Very few African currencies are directly convertible (i.e., easily bought or sold on the foreign exchange market without restrictions). As a result, most cross-border transactions on the continent are not settled in local currencies but are instead routed through a hard currency, such as the US dollar (USD). For example, a payment from Kenya to Nigeria typically begins with shillings being converted to USD, which is then converted to the Naira. Each step adds cost, introduces potential delays, heightens compliance demands, and creates a point of failure.

To facilitate instant payments, PSPs often need to maintain pre-funded accounts in multiple currencies across different jurisdictions, which ties up capital that could be used elsewhere. Given that IPS operate 24/7, this means they need to manage liquidity in multiple currencies 24/7, even when local currency markets are closed (e.g., on weekends or overnight) to facilitate cross-border payments. This is a significant cost driver.

Foreign exchange providers often make significant revenue from the margins on both the initial conversion to a hard currency and the final conversion back to a local currency. This structure makes the actual cost of a transaction opaque to the end user, and it creates a strong commercial disincentive for intermediaries to support new settlement models that would reduce their margins.

Opportunity to address exchange rate and settlement complexities to optimize cross-border payments leveraging IPS

Opportunity 3.1 | Settlement in local currencies

To bypass the complexities and costs associated with foreign exchange, regional IPS are employing innovative settlement models that rely to a greater extent on local currencies. For instance, GIMACPAY requires participants, including aggregators, to open a bank account within the CEMAC region, which has a single currency, ensuring all transactions are conducted and settled in XAF. Similarly, PAPSS enables settlement in local currencies, eliminating the need for foreign currency conversion and reducing dependency on USD. Furthermore, the SADC today uses the South African Rand (ZAR) as a regional settlement currency for all transactions on TCIB. SADC is actively working to integrate the USD into the SADC-RTGS system, as over 50% of inter-country transfers in the region are denominated in USD. This will increase the choice of currencies for cross-border payments, as there is a reliance on hard currency and a need for foreign currency conversions.

With over 40 national currencies, agreeing on a common African currency requires extensive collaboration among all central banks to develop a workable model that all parties can support and commit to. This will be a long-term, complex process, so employing and supporting the models described above is an important interim step.

Opportunity 3.2 | Central bank digital currencies (CBDCs)

Central bank digital currencies (CBDCs) hold the potential to simplify cross-border settlements, as they bypass the need for pre-funded accounts in multiple jurisdictions and the complexities of managing liquidity across different time zones. One emerging pilot, Project mBridge, uses a multi-central-bank digital currency platform shared among participating central banks and commercial banks to enable instant cross-border payments and settlements. Project mBridge reached the minimum viable product stage in mid-2024, highlighting the potential value of linking CDCDs to facilitate cross-border payments (BIS, 2025).

While digital currencies offer a potentially lower-cost method for cross-border payments, their adoption is still in its early stages. In Africa, only Nigeria's NIP has enabled the use of CBDCs. As a result, interlinking CBDCs to enable cross-border payments is not yet viable. Several central banks and IPS, such as Ghana Interbank Payment and Settlement Systems Limited (GhIPSS) Instant Pay (GIP) and TIPS (Tanzania), are exploring CBDCs with a focus on enhancing cross-border payments (IMF, 2022b).



Challenge 4 | Governance and scheme dynamics

Reaching a consensus on governance and a common scheme rulebook for a multi-jurisdictional system is a challenge in Africa. The fragmented payment landscape includes numerous overlapping systems, from regional IPS (PAPSS, TCIB) and global networks to private aggregators, all governed by different IPS scheme rules. Gaining buy-in from stakeholders, all with different policy objectives, risk tolerances, and commercial interests, is immensely difficult. The slow adoption of PAPSS, where the disconnect between the operational realities of various central banks raised concerns about relinquishing monetary policy control, is indicative of this challenge (Global African Network, 2025).

Opportunity to address governance and scheme dynamics to optimize cross-border payments leveraging IPS

Opportunity 4 | Collaboration to develop a common scheme rulebook for IPS

With IPS being developed and implemented in silos in different African countries and governed by different scheme rules, there are few structured opportunities for knowledge exchange among operators to optimize and enable cross-border uses. Collaboration between domestic and

regional IPS across Africa will be crucial to navigate the complexity of a multi-jurisdictional system and develop a common scheme rulebook. The Single Euro Payments Area (SEPA) scheme rules managed by the European Payments Council, and in line with the EU's Payment Services Directives (PSD1 and PSD2), are an example of a regional rule governing payment systems across multiple countries. The EU's Payment Services Directives have harmonized payments in Europe by creating a single, integrated market for retail payments. The directives foster a more integrated, efficient, and secure European payments market, while also enhancing consumer protection and promoting innovation.

In that vein, the African Union Commission (AUC) and AfricaNenda Foundation are collaborating on an advocacy program to support the implementation of the African Union (AU) Digital Transformation Strategy for Africa (2020-2030). The program aims to support a harmonized digital financial services policy and regulatory framework that would enable IIPS to reach and serve all financially excluded African adults, particularly women, by 2030. Through this program, AfricaNenda presented a concept note on a proposed Payment Services Directive for Africa (PSDA) as a potential policy and regulatory harmonization framework to support seamless cross-border payments on the continent. The legal construct is different from Europe's, given the distinct needs of the continent. The presentation took place in July 2024 in Tunis, Tunisia, during the seventh Specialized Technical Committee (STC) on Finance, Monetary Affairs, Economic Planning, and Integration of the African Union. The proposed PSDA agenda was tabled at the STC, with recommendations to conduct consultations and share updates at the next AUC STC convenings scheduled in South Africa from September 29 to October 3, 2025.

7.5 | Conclusion

The importance and potential of IPS to facilitate cross-border payments is evident in the use cases emerging across different African contexts. While interlinking IPS presents significant opportunities, challenges remain, including the complexity of establishing multilateral platforms, differing levels of technological readiness among the countries on the same corridor, and the ongoing need to align diverse legal and regulatory frameworks. Global momentum and ongoing initiatives nonetheless underscore the broad interest in linking IPS to optimize cross-border payment speed, efficiency, and cost. Opportunities exist to make this transition possible.

This third deep-dive concludes the research portion of the SIIPS 2025 report. The following chapter will focus on recommendations for IPS operators, central banks and regulators, payment service providers, and advocacy organizations interested in leveraging these findings to accelerate the launch or improvement of IPS in Africa.



8 | Recommendations and next steps

While the continent has made notable strides in enhancing inclusivity and increasing IPS transaction volumes and values, persistent challenges remain for instant payment systems (IPS) to reach sustainable scale and evolve into inclusive instant payment systems (IIPS).

The findings in this report highlight key challenges and opportunities for expanding the reach of IPS, ensuring seamless interoperability, and driving broad-based adoption. These insights draw on the state of the IPS landscape in Africa, the IPS Inclusivity Spectrum, end-user perspectives, continental trends, and lessons from IPS case studies and spotlight chapters. Collectively, they point to a critical moment for IPS in Africa. Operators, regulators, and participants each have strategic levers they can use to accelerate progress toward more inclusive IPS. The recommendations in this chapter focus on unlocking that potential by addressing systemic constraints and leveraging practical accelerators for short- to medium-term impact.

The following sections outline targeted recommendations for each actor (see Table 8.1). While some recommendations may overlap or aim toward similar outcomes, they are tailored to reflect the distinct roles, responsibilities, and points of influence each stakeholder has within the instant payment ecosystem.

Table 8.1 | Recommendations for IPS stakeholders to advance inclusivity in Africa

Stakeholder	Recommendation
IPS operator	Collect granular transaction data.
	Adopt affordable pricing models.
	Add key features.
	Enable third-party integration.
	Support end-user awareness and education.
	Support G2P payments.
	Invest in shared fraud prevention infrastructure.
IPS regulators, policymakers, and overseers	Mandate granular data collection and sharing.
	Strengthen payment-related consumer protection.
	Advance the digital public infrastructure (DPI) agenda.
	Advocate for essential financial services to be delivered at zero cost.
	Promote financial inclusion-enabling use cases.
	Advance acceptance of digital merchant payments.
IPS participants (banks, mobile money operators, fintechs, etc.)	Invest in helping end-users build digital and financial literacy.
	Implement trust-enhancing features.
	Pass on cost savings from IPS operators to end users.
Development partners	Facilitate knowledge sharing among IPS operators.
	Support non-bank participation in IPS.
	Support human-centered research into the drivers and inhibitors of digital payment adoption.
	Convene stakeholders around the DPI approach.

8.1 Recommendations for IPS operators

IPS operators play a foundational role in providing the technical infrastructure that powers instant payments. However, their responsibilities extend beyond infrastructure provision. As digital payment ecosystems mature and user expectations evolve, there is a growing demand for services that are not only fast and reliable but also inclusive, intuitive, and secure. IPS operators are uniquely positioned to support these services at the system level and thereby address many of the challenges that limit end users' embrace of digital payments.

The recommendations that follow aim to motivate IPS operators to embrace this expanded role and unlock the full potential of inclusive instant payments across diverse user groups and sectors.

Collect granular transaction data to inform IPS design for low-adoption segments.

End-user research presented in Chapter 3 shows that factors such as age, gender, and type of locality (urban/rural) significantly influence digital payment usage. However, IPS transaction data often lacks details on end-user demographics or locality, limiting operators' ability to conduct detailed analysis. End users who are new to digital payments or use them only intermittently also produce very little data, despite being exactly the profile that IPS and their participants need to learn more about. This data gap hinders efforts to identify who is underserved and develop targeted solutions to drive broader adoption.

Of the 30 IPS operators surveyed in the SIIPS 2025 report, only three were able to provide gender-disaggregated transaction data: Kenya Mobile Money, NIP (Nigeria), and eKash (Rwanda). Their data, analyzed in Chapter 2, revealed that men accounted for the majority of both transaction volumes and values across all three systems, with women initiating significantly fewer and lower-value transactions. These findings highlight a gender gap in usage and present an important opportunity for IPS operators to investigate the underlying causes. By understanding these disparities, systems can be better tailored through inclusive product design to support greater adoption among women. The AfricaNenda Gender Responsive IIPS framework offers guidance and tools for operators and central banks.

Furthermore, six IPS were able to provide transaction data split by use case (where multiple use cases were applicable): Kenya Mobile Money, Madagascar Mobile Money, SWAM (Morocco), Uganda Mobile Money, GIMACPAY (CEMAC), and Transactions Cleared on an Immediate Basis (TCIB,

SADC). Access to granular data—often accessed in cooperation with the payment service providers who hold it—enables IPS operators to conduct meaningful analysis, detect "laggard" segments with low uptake, and create user-centric services that address specific needs and pain points to drive broader use of instant payments. Systems leveraging ISO 20022 messaging standards are particularly well-positioned, as the enriched data these standards provide can inform tailored strategies to drive usage among underserved segments (Swift, 2025).

Adopt affordable pricing models to jumpstart and sustain adoption.

High transaction fees remain a barrier to digital payment adoption, particularly for low-income users and small-value transactions. Another AfricaNenda (2025) end-user study found that transaction costs are one of the significant factors influencing whether individuals adopt digital payments. This echoes the user insights in this report, which show that while affordability may not always be the top consideration, high and hidden fees hinder both adoption and sustained usage across a range of user segments. From the end-user perspective, lower fees compared to other payment methods are seen as a defining feature of inclusive digital payments.

To boost and sustain adoption, IPS operators should implement affordable pricing structures for PSPs, with support from the regulator/central bank. Affordability could include free or low-fee models, which lower the cost barrier, encourage initial uptake, and potentially build longer-term end-user trust. Creating a cost incentive is essential, given that many consumers perceive cash as cost-free, which it is not (Intelligent CIO, 2017). Digital alternatives must therefore provide clear value and be accessible. Particularly in contexts where the regulator/central bank is involved in setting or approving fee structures, IPS are uniquely positioned to jumpstart and sustain adoption through low fees. Deliberate subsidization efforts from the central bank may also enable IPS operators to extend fee-free or low-cost instant payment options to participants to motivate onboarding.

Global and African examples underscore the effectiveness of the free approach in accelerating digital payment adoption, as highlighted in Chapter 4 of this report. Thoughtfully designed pricing models, especially those that minimize processing costs for low-value transactions, can drive adoption at scale and support sustained use of digital payments.

Strengthen user trust, confidence, and convenience through key features.

A lack of user trust in digital payment systems can impede their adoption. Users need assurance that they can use digital payments in their everyday lives, that their transactions will be secure, and that their information is protected. Concerns about not having high-value use cases available, errors, lack of immediate confirmation, and the fear of making a mistake with no way to recover their money can deter users.

IPS operators should help end users build confidence in digital payments by supporting as many convenient, high-demand use cases as possible. One example with high potential is Request to Pay (RTP) functionality for P2B payments, discussed in Chapter 2. In Kenya, the Moja Expressway's toll gates have enabled RTP functionality (MOJA Tollpay), where the toll officer can trigger a payment request directly to the driver's phone for confirmation, streamlining the process (Techpression, 2024). This use case illustrates how advanced features can enhance the convenience and efficiency of P2B transactions.

IPS operators can also build trust by integrating key features such as account lookup services, transaction validation, and transaction confirmation notifications. Several IPS are already deploying account name confirmation/lookup to reduce user errors and transaction confirmation notifications to reassure people that their transactions have gone through and to prevent duplication. For example, BankservAfrica, the operator of PayShap (South Africa), offers Account Verification Services (AVS) to its participants. Data from the operator shows that real-time bank account verifications reached 3.4 million in May 2025, compared to 800,000 non-real-time account verifications, showcasing the end-user demand for real-time verification (BankservAfrica, 2025).

Transaction confirmation features provide immediate, clear, and unambiguous confirmation of successful transactions in the form of an on-screen message, SMS, or in-app notification. End-user findings in this report highlight that receiving an instant SMS confirmation is a defining characteristic of reliable and inclusive digital payment systems. The prevalence of real-time payment confirmation across 25 IPS (out of the 30 for which data was available) indicates a strong industry-wide recognition of its importance in building user trust.

Lastly, confirmation messages provide clear and concise messaging throughout the payment journey, which assures users that their transactions are processed correctly. Primary research conducted by AfricaNenda (2025) found that 25% of women and 22% of men view slow or untimely notifications as barriers to their willingness to receive digital payments in an account. Sixty percent of all digital users reported that a lack of payment notifications is the main reason they do not trust digital payments, and 80% would use digital payments more if payment alerts were consistently provided. Clear and timely confirmation notifications can keep the user informed about the progress of a transaction, enhance trust, and eliminate barriers. Together, these features help reassure users of the system's reliability and security.

Expand reach and scale by enabling third-party integration.

Limited integration with third-party services can restrict the reach and scalability of IPS, reducing their appeal for end users. Chapter 2 highlighted that only 10 IPS across Africa have enabled third-party connections: Meeza Digital (Egypt), Kenya Mobile Money and PesaLink (Kenya), SIMO (Mozambique), NIP (Nigeria), Salone Pement Swich (Sierra Leone), SIPS (Somalia), PayShap (South Africa), Uganda Mobile Money, and TCIB (SADC). This presents an untapped opportunity to broaden the access and utility of instant payments.

With third-party integrations, operators can support a wider array of sector-specific and user-centric applications, particularly in underserved vertical markets such as agriculture, education, health, and retail. For example, by integrating with third-party agriculture platforms, IPS can enable farmers to receive payments for their goods, purchase inputs such as subsidized fertilizer, and access loans. These benefits could reduce reliance on cash and the risk of post-harvest losses that come with it and strengthen resilience against food insecurity (World Bank, 2024c).

India's UPI offers a compelling case for integrations: it has been integrated into 36 third-party apps, including Google Pay, WhatsApp, PhonePe, and Amazon Pay, vastly expanding its user base and utility (NPCI, 2025b). Sectoral integrations like the Katyayani Krishi Direct app allow farmers to make input payments via UPI (Katyayani Krishi Direct, 2025). In Africa, several IPS operators have incorporated utility aggregators through third-party connections so they can offer utility payments, in some cases, without generally enabling the P2B use case. These examples illustrate how third-party connections can drive scale, inclusion, and long-term IPS sustainability.

Support user awareness and education.

IPS operators have a responsibility to drive adoption and usage through targeted awareness and marketing efforts, including IPS brand-building. To communicate the full value of instant payments, operators should actively collaborate with PSPs and other ecosystem players to position the IPS

functionality within participant channels, such as consumer-facing mobile banking applications or USSD channels.

This includes making the instant payment option clearly visible and easily accessible within user interfaces, accompanied by intuitive cues or branding that highlight its speed, security, and cost advantages. Strategic marketing campaigns, delivered through digital, mass media, and community-level channels, can help educate users on how IPS works, its benefits, and how to access it via the platforms they already use. For example, PesaLink is integrated into Kenya's DTB mobile banking app.

Engage governments to enable G2P as a catalyst for digital payment adoption.

G2P payments, such as social transfers, pensions, salaries, and subsidies, offer a powerful entry point for accelerating both financial inclusion and the adoption of digital payments. Around one in four adults worldwide opened their first account to receive either a government payment or a wage payment (World Bank 2025b). Once individuals receive money directly into their accounts or mobile wallets, they are more likely also to make digital transfers for everyday purchases, bill payments, and savings. This initial exposure builds familiarity and trust in digital financial services, particularly among previously unbanked or underserved populations. Yet only 11 IPS in Africa support the G2P use case, indicating that there is more opportunity to leverage the power of digital G2P payments to increase instant payment adoption for daily transactions.

To fully unlock this potential, IPS operators can support governments in addressing the technical, infrastructural, policy, and regulatory challenges outlined in Chapter 6 of this report. This requires proactive government engagement to secure buy-in at the policy and operational levels and to support public institutions in achieving digital readiness. IPS operators should develop robust government engagement strategies to advocate for digital G2P payments. IPS operators can also provide technical assistance and capacity building to government institutions to improve their digital infrastructure, including by connecting to relevant digital registries (e.g., beneficiary lists) to facilitate seamless and accurate digital disbursements.

Invest in shared fraud prevention infrastructure.

Chapter 4 of this report highlighted the sharp rise in authorized push payment (APP) fraud as a key market trend shaping the IPS landscape in 2025. For this reason, robust fraud prevention is essential to maintaining trust in digital payment systems. IPS operators should prioritize investment in shared fraud prevention infrastructure and intelligence platforms that can serve the entire network.

This includes developing and deploying centralized fraud monitoring systems, real-time alert mechanisms, and secure data-sharing protocols to identify and mitigate suspicious activities across the payment ecosystem. By pooling intelligence and enabling coordinated action, IPS can strengthen system-wide resilience against fraud.

Nigeria's NIBSS provides a case in point: it operates both a national fraud desk and a fraud intelligence system and publishes an annual fraud report (NIBSS, 2024). With these resources, it established the foundations for a coordinated response to new threats.

8.2 Recommendations for IPS regulators, policymakers, and overseers

Regulators, policymakers, and overseers play a pivotal role in determining the direction, structure, and inclusiveness of IPS. While their core mandate includes oversight and risk management, their influence goes far beyond compliance. These actors are instrumental in shaping an enabling environment that supports innovation, fosters trust, and advances financial inclusion. Without proactive regulatory frameworks, strategic policy alignment, and coordinated supervision, the benefits of IPS may fail to reach underserved populations or translate into widespread adoption.

This section outlines key recommendations for regulators, policymakers, and supervisors to accelerate inclusive IPS adoption and unlock the broader potential of digital public infrastructure (DPI). The recommendations aim to strengthen oversight, align incentives, and ensure that IPS infrastructure serves broader financial inclusion goals.

Mandate comprehensive ecosystem-wide disaggregated transaction data collection.

As mentioned in the recommendations for IPS operators, the lack of detailed, standardized, and ecosystem-wide transaction data impedes efforts to drive financial inclusion and optimize IPS functionality. This data deficit prevents IPS operators from identifying and tailoring products for underserved segments and blinds central banks to the quantifiable impact of financial inclusion initiatives. Furthermore, while PSPs are often mandated to report data to regulators, they may not collect it with the necessary granular detail, leading to incomplete oversight.

Central banks and regulators can consider issuing a directive requiring all participants in the payment ecosystem, including IPS operators and PSPs, to collect and share comprehensive and standardized transaction data, in compliance with user privacy. This directive should specify the types of data stakeholders must collect and what it will be used for, going beyond basic transaction records to include rich demographic and geographic (gender, age, location) and behavioral insights. For regulators, this data is indispensable for evidence-based policymaking. It enables regulators to monitor financial inclusion metrics more accurately, assess the real-world impact of regulatory interventions, and design targeted policies for segments with persistently low adoption rates. By identifying usage gaps, for instance, low adoption among rural women or informal workers, policymakers can set specific inclusion objectives, design interventions tailored to their needs, and assess whether those interventions achieve the expected results.

Strengthen instant payment-oriented consumer protection and fraud management frameworks.

As highlighted in Chapter 4 of this report and reflected in earlier recommendations for IPS operators, regulators also have a critical role to play in strengthening consumer-focused protection and fraud management frameworks in response to the rise in APP fraud (KPMG, 2025). From an end-user perspective, concerns around fraud and security, often shared by word of mouth, emerged as one of the most significant barriers across the customer journey among end-users surveyed for the report, particularly among cash-first users.

In most cases, the current consumer protection frameworks in many African markets are inadequate to address the speed and specific dynamics

of IPS fraud, leading to unclear or nonexistent reimbursement mechanisms for victims. This lack of clear recourse erodes consumer trust in digital payments and discourages broader adoption. Moreover, if financial institutions do not absorb the costs of fraud, they may lack the incentive to invest in robust prevention technologies.

Regulators must strengthen and tailor consumer protection and fraud management frameworks specifically for IPS. This involves adopting an outcome-based approach to consumer protection that prioritizes reimbursement and recovery for victims of fraud. Key measures include:

- **Mandate reimbursement mechanisms:** Establish explicit rules and mechanisms that define liability and require financial institutions (both sending and receiving) to reimburse victims of instant payment fraud, especially APP fraud. This shifts the incentive structure, compelling PSPs to invest in advanced fraud prevention measures.
- **Promote shared fraud intelligence:** Encourage and potentially mandate the development of shared fraud intelligence systems and data-sharing protocols across the ecosystem. This allows IPS operators and PSPs to collaborate to identify and prevent fraudulent activities in real time.

Advance the DPI approach.

The fragmented nature of digital infrastructure in many African countries limits the full potential of inclusive IPS (IPS), which often operate in a silo, disconnected from other foundational DPI layers such as national digital identity systems and digital registries.

Regulators can promote a holistic DPI approach by actively fostering connections and interoperability between IPS and other critical DPI components. They will need to establish regulations to enable secure, consented, and efficient data exchange between these different DPI components. As discussed in Chapter 5, the goal is to enable a richer ecosystem of digital services and products by moving from closed banking to open banking, then to open finance, and eventually towards an open economy.

Nigeria's recent operationalization of its open banking policy is a step towards enabling broader data sharing within the financial sector, laying the groundwork for an open finance ecosystem (CBN, 2023). While primarily focused on financial institutions, this policy creates a precedent for secure data exchange, which is critical for linking IPS with other DPI elements. In South Africa, the Financial Sector Conduct Authority (FSCA) issued its open finance policy recommendations in 2024, marking a significant step toward fostering a more robust and inclusive data-sharing ecosystem (FSCA, 2024). Similarly, Kenya has made progress toward open finance as a tool for economic and social inclusion. FSD Kenya, the Kenya Bankers Association, and the Association of Fintechs launched sector-wide consultations in 2024 to gather perspectives and identify practical use cases (FSD Kenya, 2024).

Advocate for zero cost for essential digital financial services.

As the demand-side challenges have highlighted, the cost of mobile data remains a barrier, particularly for low-income and rural users. This affordability challenge limits the reach and consistent use of digital financial services (DFS), even in contexts with modern instant payment infrastructure.

To address this, central banks and financial regulators can collaborate with telecom regulators to advocate for no-cost access to essential DFS, ensuring users can access banking apps, mobile money platforms, and IPS-linked services without accruing data charges. Such a policy would remove a key cost element of digital payments.

No-cost access to essential financial services has a precedent in Africa: during COVID-19, providers in Kenya and South Africa temporarily mandated no-cost access to educational and health platforms. MTN's partnerships to provide no-cost access to university portals in South Africa further illustrate the feasibility of this approach (MTN, 2022). Extending this to DFS would require strong regulatory coordination but could significantly advance inclusion.

Promote catalytic use cases that drive financial inclusion.

The mere existence of an IPS does not guarantee widespread adoption of digital payments, especially among financially underserved populations. Its full potential for financial inclusion is often untapped because key "catalytic" use cases, which motivate frequent and habitual usage of transactional accounts, are not actively promoted or enabled.

Governments should engage IPS operators to support the deployment and scale-up of catalytic use cases that demonstrably accelerate financial inclusion and the adoption of digital payments. These include G2P and P2G payments. On the G2P side, facilitating social welfare disbursements, pension payments, and salary payments through IPS platforms is a powerful driver for bringing unbanked populations into the digital financial ecosystem. On the P2G side, enabling citizens to pay taxes, fees, and government services digitally has the potential to increase digital transaction volumes, as was shown in Mozambique (Stakeholder Interviews, 2025). Promoting digital payments for essential services, like public transport, water, and electricity bills (often P2B or P2G), also increases digital transaction adoption by everyday citizens for repeat, cyclical expenses.

Advance digital merchant payment acceptance.

A significant challenge to the more widespread adoption and utility of IPS is the limited number of merchant acceptance points, particularly outside of major urban centers. Merchant acceptance often remains concentrated in urban centers, leaving vast rural and peri-urban areas underserved. PSPs may be hesitant to invest heavily in expanding merchant networks in these areas due to the perceived high cost of onboarding and potentially lower transaction volumes.

Central banks can take a leading role in advancing merchant acceptance strategies, with a particular focus on expanding reach into rural and underserved areas. This requires a collaborative, ecosystem-wide approach, such as working with development partners and PSPs to create a pooled merchant development fund. This fund can de-risk investments by individual PSPs and incentivize collective efforts to onboard merchants in underserved geographies and sectors.

In 2021, the Reserve Bank of India established the Payments Infrastructure Development Fund (PIDF) Scheme to expand payment acceptance among underserved merchants, particularly those providing essential services such as transport, hospitality, fuel, healthcare, and government payments. The fund subsidizes payment acceptance devices to support merchants who lack the capital or incentive to purchase them (LiveMint, 2025). The most recent impact assessment shows that since the implementation of the PIDF scheme, India has seen a 274% increase in UPI QR code deployment, a doubling of physical POS terminals, and a significant rise in UPI merchant payments—up from 34% to 59% of all UPI transactions (Grant Thornton, 2024).

8.3 Recommendations for IPS participants, banks, fintechs, mobile money operators, and other PSPs

IPS participants, including banks, fintechs, mobile money operators, and other PSPs, play a pivotal role in translating inclusive IPS infrastructure into real-world impact for end-users. As the primary interface between IPS and consumers, PSPs play an essential role in ensuring that the benefits of inclusive system design, regulatory support, and interoperable infrastructure reach individuals and businesses.

Without active and intentional effort by PSPs to drive awareness, build trust and confidence, and lower barriers to adoption, even the most inclusive infrastructure may fail to reach the end user. The following recommendations highlight priority areas where PSPs can take targeted action to increase adoption and enhance user trust and confidence.

Invest in ongoing digital and financial literacy initiatives.

Limited digital and financial literacy among end users is a barrier to payment adoption and a cause of heightened fraud risk. Many users, particularly those new to DFS, lack understanding of how payment systems work, the benefits they offer, and how to identify and protect themselves from fraud. While IPS operators may provide infrastructure, PSPs have direct responsibility for user education and support, given that it is the provider who interacts directly with consumers and is the first line of defense in fraud prevention and awareness.

Another study conducted by AfricaNenda (2025) reveals that a general lack of understanding about how DFS works and the benefits they provide remains a barrier. While younger users often find fintech platforms intuitive, older users, especially women, frequently perceive them as complex and difficult to navigate. Outdated phones compound this issue. Age and educational background consistently emerge as key factors influencing digital confidence, with older adults often preferring traditional methods due to unfamiliarity and resistance to new technology.

End-user findings in this report reaffirm that the lack of information and training is a widespread barrier, with many respondents expressing the need for clearer guidance to build trust and understand the benefits of digital payments. A key consumer trend identified in Chapter 4 highlights how negative experiences spread quickly through social networks, reinforcing mistrust. PSPs should not only ensure robust service security but also invest proactively in digital and financial literacy, particularly fraud awareness and prevention, to build long-term user confidence and promote safe, informed usage.

Implement trust- and confidence-enhancing features.

User errors such as mistyping an account number or entering the wrong amount are a common source of anxiety and a barrier to the adoption of digital payments. As discussed in Chapter 4, the fear of losing money to errors deters many users from making digital payments.

To address these concerns, some DFS providers are offering a short, configurable window during which to rectify mistakes. For example, Monzo Bank offers a 10-60 second period (configurable by the user), during which end users can reverse a payment if they make a mistake in the transaction amount or the recipient's account details (Monzo, 2025). Several IPS already have account name lookup/confirmation features in place (discussed under the recommendation for IPS operators) as an additional feature to bolster trust and reduce user error.

In the event of user error or fraud, opaque, complex, or stressful dispute resolution processes can erode trust. If users feel they have limited recourse options, they are more likely to revert to cash or avoid digital channels altogether.

To build and sustain trust, PSPs can develop user-friendly, transparent, and responsive dispute resolution mechanisms. This includes establishing easy-to-navigate processes for reporting transaction errors or unauthorized payments through multiple channels (e.g., in-app support, call centers, or in-person assistance). NIBSS, for example, enables users to escalate their disputes to the central bank through a clear process.

Transfer cost savings from IPS operators to end users.

While IPS operators should aim to provide low-cost payment infrastructure, this cost efficiency is often negated for end users if PSPs introduce markups on transaction fees. These fees make digital payments unattractive or unaffordable, particularly for low-income individuals, undermining financial inclusion goals.

In South Africa, PayShap's end-user transaction fees vary significantly across participating banks and are often higher than traditional EFT fees (Electrum, 2024). As a result, end-user transaction costs remain relatively high. The South African Reserve Bank noted in a consultation paper on interoperability that "PayShap [is] yet to bring the cost efficiencies that would benefit the end consumers (SARB, 2025)." This is despite the cost-recovery pricing model that the IPS operator has adopted.

PSPs bear a critical responsibility to ensure that the inherent low transaction costs offered by IPS operators are genuinely passed on to end users. PSP profitability can be otherwise maintained and even enhanced through strategies using payment data. Examples include Revolut, which offers a subscription model bundled with value-added services, including WeWork vouchers and subscriptions for other digital services (Revolut, 2025). In South Africa, Discovery uses customer payment transaction data to power its insurance loyalty program (Discovery, 2025). Similarly, businesses are using anonymous payment data from Mastercard to deliver hyper-targeted advertising to customers (Mastercard, 2025). These strategies can generate revenue independent of transaction fees.

8.4 Recommendations for development partners

Development partners, including multilateral institutions, philanthropic organizations, and economic development entities such as AfricaNenda Foundation, the World Bank Group, the International Monetary Fund, the United Nations Economic Commission for Africa, and the Gates Foundation, play a vital role in advancing inclusive IPS across Africa. With their global expertise, convening power, and catalytic funding capabilities, these actors are uniquely positioned, among other things, to address systemic gaps, foster cross-country collaboration, and promote alignment with international standards.

Beyond funding infrastructure projects, their influence extends to facilitating strategic dialogue, enabling cross-border integration, building the capacity of regulators and other ecosystem players, and embedding inclusion at the core of digital financial infrastructure. Their interventions help ensure that IPS are available, designed to meet the needs of underserved populations, and capable of catalyzing the broader DPI ecosystem. The following areas highlight where development partners can provide high-impact support to maximize the reach and impact of IPS in Africa.

Facilitate knowledge sharing between IPS operators.

Domestic IPS are often developed and implemented in a silo, with limited structured opportunities for knowledge exchange between operators in different countries. This leads to a duplication of efforts, a failure to learn from both successes and failures in other contexts, and a slower pace of innovation and adoption across the continent.

Donors and development partners are uniquely positioned to facilitate regular, structured knowledge exchange between IPS operators across Africa.

This can be achieved through:

- **Forums and peer learning networks:** Establish and fund dedicated forums, working groups, and peer learning networks where IPS operators can regularly convene to share experiences, discuss challenges, and disseminate best practices.
- **Technical workshops and training:** Leverage expertise from mature IPS markets for technical workshops focused on specific aspects of IPS development and implementation, such as system design, fraud prevention, interoperability, and data collection.
- **Documentation and dissemination of case studies:** Support the development of case studies about IPS (both successful and less successful) and disseminate these widely across the continent.

Support non-bank participation to promote inclusive IPS.

Financially underserved populations on the continent typically rely on non-bank financial institutions (NBFIs) such as Savings and Credit Cooperatives (SACCOs) and microfinance institutions (MFIs). However, these institutions often lack the digital readiness, technical capacity, and financial resources to integrate with domestic IPS. As a result, their members cannot benefit from instant payment capabilities, which limits the reach of digital payment-driven financial inclusion efforts.

Donors and development partners have an opportunity to provide dedicated funding, comprehensive technical assistance, and targeted capacity-building support to enable the participation of NBFIs in the IPS ecosystem.

Rwanda offers a compelling example: Rwanda Information Society Authority (RISA) partners such as the German Sparkassenstiftung (DSIK) Eastern Africa supported the digitalization of numerous Umurenge SACCOs onto a single platform, with plans to integrate with RSwitch (KTPress, 2024). Once they have been onboarded, this initiative plans to provide all participating SACCOs and their members with access to instant payments through a single integration point.

Support human-centered research to develop an IPS ecosystem that addresses the unique needs of underserved groups.

Despite broad financial inclusion goals, few IPS are designed with a deep understanding of the unique financial needs, behavioral patterns, and constraints of financially underserved groups, including women, youth, rural populations, and the elderly. This lack of human-centered research can lead to products and services that are not truly inclusive or equitable, resulting in low adoption by these critical segments.

Development partners have an opportunity to finance research focused on understanding underserved populations to ensure IPS and broader DPI efforts are inclusive and equitable. Notable examples include the Level One Project gender research led by the Gates Foundation in Côte d'Ivoire (L1P, 2019).

Convene stakeholders around the DPI Agenda

The successful implementation of DPI, including digital payments, digital identity, and digital registries, requires significant coordination across various government ministries, regulators, and private sector actors. As Chapter 5 on the state of DPI in Africa highlights, these entities operate in silos, with different mandates and priorities (e.g., central bank for payments, ministry of interior/home affairs, or ministry of ICT for digital ID), creating weak institutional and policy coordination. This fragmentation leads to a lack of alignment, hindering interoperability and the development of a cohesive digital economy.

Development partners can play a catalytic role in convening these stakeholders to foster alignment on a shared vision for DPI. This includes facilitating dialogue across institutional silos, promoting joint planning, and supporting the design and implementation of interoperable, inclusive systems. Structured, multi-stakeholder platforms, whether national or regional, are critical for ensuring that IPS and broader DPI components work together as part of a unified digital ecosystem that supports inclusive development.

8.5 Conclusion

African payment sector stakeholders have an opportunity to seize this pivotal moment to create a more efficient, affordable, competitive, and inclusive market. From prioritizing data collection and analysis to identify inclusivity gaps to supporting high-value use cases and pursuing shared, public infrastructure, stakeholders across the continent continue to have key roles to play.

AfricaNenda and its SIIPS 2025 partners at the World Bank and the United Nations ECA are committed to helping build the payments layer of DPI to serve all Africans.



Annexes

ANNEX A | Methodology

This report was developed using a mixed-methods research approach, combining both primary and secondary sources.

Mapping the IPS Landscape

To map the IPS landscape across Africa, data was gathered from a range of primary and secondary sources, including literature published by development partners. Primary data collection included a data survey and in-depth interviews with key stakeholders (list available in Annex B).

We are particularly grateful to the central banks and IPS operators in the following jurisdictions for their contributions, which helped close critical information gaps: **Angola, Egypt, Ethiopia, Eswatini, The Gambia, Ghana, Kenya, Lesotho, Malawi, Madagascar, Mauritius, Morocco, Mozambique, Nigeria, Rwanda, Sierra Leone, Somalia, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe, the Economic and Monetary Community of Central Africa (CEMAC), and the Southern African Development Community (SADC).**

Information was collected on the following systems: KWiK (Angola), IPN and Meeza Digital (Egypt), EthSwitch (Ethiopia), EPS Fast Payment Module (Eswatini), Gamswitch (The Gambia), GIP and Ghana MMI (Ghana), Kenya Mobile Money and PesaLink (Kenya), Natswitch (Malawi), Madagascar Mobile Money (Madagascar), MauCAS (Mauritius), MarocPay and Virement Instantané (Morocco), SIMO (Mozambique), NIP (Nigeria), eKash (Rwanda), Salone Pement Swich (Sierra Leone), Somalia Instant Payment System (SIPS) (Somalia), PayShap and RTC (South Africa), TIPS and Tanzania Mobile Money (Tanzania), Tunisia Mobile Money (Tunisia), Uganda Mobile Money, National Financial Switch (Zambia), ZIPIT (Zimbabwe), GIMACPAY (CEMAC), and TCIB (SADC).

This approach enabled the development of a robust database that supports the typological analysis of IPS. The data also provide the foundations for categorizing each IPS on the 2025 AfricaNenda Inclusivity Spectrum. The categorization considers dimensions such as system functionality, technology, governance models, and levels of inclusivity. All data is current as of June 1, 2025.

Consistent with previous SIIPS reports, the standards for achieving each level of inclusivity on the AfricaNenda Inclusivity Spectrum are as follows:

The basic level of inclusivity includes two key criteria regarding system functionality. IPS are not ranked if they fail to meet both of the following criteria:

- **Minimum channel functionality: Enable the primary local channel.** The IPS enables the payment channel or channels that the population within its geography uses the most. For example, the IPS facilitates mobile money transactions (via USSD, QR code, mobile app, or others) in markets where mobile money adoption is higher than bank account penetration. This ensures that the system serves the largest possible share of end users, rather than focusing only on the most profitable segment.
- **Minimum use-case functionality: Enable P2P and P2B use cases.** These use cases are required as a minimum because they both have a clear value proposition for end users. P2P payments, and domestic long-distance

payments in particular, are key for initial digital payment user adoption, as cash payments can be expensive and inconvenient due to transportation costs and safety concerns. By offering digital P2P transactions, IPS provides a more convenient alternative. In the case of digital P2B payments, these include bill payments and merchant payments, which are necessary for transitioning economies to cash-lite models. Instant digital merchant transactions increase e-commerce adoption and reduce the need for cash in stores. They are also the main driver of transaction scale for an IPS and therefore directly contribute to a sustainable business model.

The **progressed** level of inclusivity requires IPS to meet all basic-level requirements as well as the following three additional criteria:

- **Participation by all PSPs (cross-domain model).** Allow all licensed PSPs to utilize the system: The IPS is open to any licensed payment service provider, including a commercial bank, mobile money operator, MFI, or fintech. The IPS, therefore, facilitates cross-domain transactions, enabling end users to transact with any other user, regardless of which institution has their respective accounts. This increases end-user convenience. The IPS design and the supporting scheme rules achieve all-to-all interoperability, which helps expand the overall payment network. These positive network effects can increase transaction volumes and thereby increase the efficiency of sharing infrastructure, resulting in reduced costs.
- **Pro-poor governance through joint decision-making.** The IPS has established provisions and processes to allow all system participants to provide input into decision-making and design. Alternatively, it has an explicit inclusivity mandate specified in the scheme rules. Having a process for soliciting inputs from all stakeholders into the system design and its rules—not just from a select number of dominant PSPs—creates a level playing field and improves industry collaboration. This leads to a clearer distinction between a competitive and a cooperative space and keeps bigger players from dominating the market.
- **Central bank involvement in governance.** The IPS actively collaborates with the central bank as the regulator and supervisory entity. The scheme rules also specify the central bank's involvement in system design and governance processes. This could entail direct ownership and operation by the central bank. Alternatively, both the public and private sectors could provide input to decision-making, irrespective of ownership and operating model, through committees or working groups. Involving the regulatory authority in operator and IPS participant engagements ensures a continuous feedback loop around necessary policy or regulatory reforms. The central bank, for its part, can ensure that the IPS design and scheme rules reflect the inclusivity goals specified in its policies and prevent dominance by commercial interests. The central bank can also champion the goal of interoperability between all PSPs, especially in markets with limited PSP competition.

IPS that achieve a **mature** level of inclusivity have fulfilled the basic and progressed level criteria, as well as three additional functionality and governance conditions:

- **Enable all use cases:** The IPS enables the full range of use cases, including P2P, P2B, G2P, P2G, B2B, B2P, B2G, and G2B, for a holistic digital payment ecosystem that enables the circulation of liquidity completely through digital channels. Being able to transact for any use case enhances digital utility for end users and allows capital to flow more easily and efficiently between economic actors.
- **Provide additional recourse.** The IPS sets standards for participants to ensure end-user recourse is in place, consistent with consumer protection, data privacy, and cybersecurity laws. The IPS effectively monitors how participants enable recourse and how effective those mechanisms are, thereby mitigating end-user risks from fraud and erroneous transactions. The scheme rules also mandate recourse options at the IPS level and the conditions under which they can be used. This ensures that end users trust digital payments, as they have an additional avenue for disputes should provider channels prove insufficient.
- **Serve end users at low cost.** The IPS operates according to cost-recovery or not-for-loss principles so that end-user transaction fees are as low as possible. The IPS stakeholders continuously monitor participant pricing and non-compliance with system-wide pricing conditions, such as caps or zero-fee requirements.

Consumer research

User research methodology

The primary consumer research focused on analyzing the evolution of inclusive instant payments across the four countries: Angola, Côte d'Ivoire, Madagascar, and Tunisia. The study targeted low-income segments in urban, peri-urban, and rural populations, uncovering user insights by addressing the specific needs of excluded segments and identifying persistent barriers to awareness, access, adoption, and usage of digital payments.

The study used a combination of methods, including surveys, one-on-one interviews, immersion techniques, and mystery shopping where needed, to achieve a holistic understanding of the individual and merchant digital payment experiences, perspectives, and perceptions.



Table A.1 | Quantitative and qualitative methods

	Surveys	In-depth interviews	Mystery shopping
Objectives	• Understand the consumer's depth of usage. • Measure the frequency of digital payment usage and transaction profiles. • Ranking of the most used payment instruments. • Identify core barriers.	• Map use case characteristics and payment behavior. • Determine consumer perceptions of digital payments using AfricaNenda's access, adoption, and usage framework. • Frame the consumer journey.	• In-depth understanding of the user journey: validate cost, recourse, and customer support.
Sample size per country	**Number of individuals:** • Angola—50 • Côte d'Ivoire—59 • Madagascar—54 • Tunisia—54	**Number of individuals:** • Angola—24 • Côte d'Ivoire—20 • Madagascar—20 • Tunisia—20	
	Number of merchants: • Angola—62 • Côte d'Ivoire—50 • Madagascar—55 • Tunisia—53	**Number of merchants:** • Angola —24 • Côte d'Ivoire—20 • Madagascar—20 • Tunisia—20	
Fieldwork itinerary	**Survey data collection:** February 2025 to March 2025	**IDI data collection:** February 2025 to March 2025	
Locations	• Urban • Peri-urban • Rural		

Table A.2 | Sampling quantitative respondents

	Individual users		Merchants	
	Infrequent income earners	**Frequent income earners**	**Micro-entrepreneurs**	**Small businesses**
Definition	Include urban poor who live "hand to mouth" and lack regular employment and stable earning opportunities, intermittent piecework/gig workers, and people who are dependent on others in the family/community and/or on social grants.	These are the slightly more affluent part of the lower-income mass market, earning a steady income (wages) or a salary in the formal or informal sector. Mostly support the infrequent income earners; therefore, they may be high remitters.	Traders/merchants like hawkers, grocers, and craft traders have small, temporary premises or (mostly informal) shops. In this study, the selection criteria used for micro-businesses were those with 0–1 employee.	Traders/service providers who have small to medium, fixed formal premises, such as small shops, restaurants, or chemists, sometimes with branches across different locations. In this study, the selection criteria used for medium businesses were those with between 2 and 5 employees per premises.
Sample Proportion (Survey)	35.4%	65.6%	37.5%	62.5%
	62% of the total sample for the quantitative survey are digital payment users (individuals and businesses).			
	Within each of the four groups, adequate coverage of women and youth was ensured.			
	The businesses in the sample engage in a diverse range of activities. The study sample focuses on both the **'emerging segment'** that is expected to use digital payments in urban and peri-urban populations and the **'excluded segment'** in rural settings that use digital payments in a limited or intermittent way. The sample is **not nationally representative**, and any inferences made on a country-by-country basis concern only the sampled respondents.			

Detailed sample breakdown

The breakdown of the quantitative component and exact sampling of each method for the qualitative component across the four markets are provided in Table A.3. In total, the sample included 437 respondents across the four markets. The collection of the quantitative data took place between March 17, 2025, and March 21, 2025.

For the qualitative component, the sample included 168 respondents across the countries. The qualitative data collection took place within these four countries between February 15, 2023, and March 6, 2023.

Table A.3 | Detailed sampling breakdown

Country	Respondent profile	Quantitative
Angola	Infrequent income earners—individual	19
	Frequent income earners—individual	43
	Micro-enterprises	22
	Small businesses	28
	Percentage of the sample that are digital payment users	73%
Côte d'Ivoire	Infrequent income earners—individual	26
	Frequent income earners—individual	33
	Micro-enterprises	36
	Small businesses	14
	Percentage of the sample that are digital payment users	66%
Madagascar	Infrequent income earners—individual	32
	Frequent income earners—individual	22
	Micro-enterprises	10
	Small businesses	45
	Percentage of the sample that are digital payment users	45%
Tunisia	Infrequent income earners—individual	4
	Frequent income earners—individual	50
	Micro-enterprises	10
	Small businesses	43
	Percentage of the sample that are digital payment users	63%

Country	Respondent profile	Quantitative
Total sample		437
Digital users		270 (62%)
Cash users		167 (38%)

User profile definitions

Table A.4 | Definitions of the five end-user profiles.

Profile No.	Profile name	Sample represented by this profile	Population	Defining characteristics (conditions)	Proportion of regular digital users (weekly)
1	**Cash user**	10%	N=437	• Has either a mobile money account or a bank account, but not both. • Rural or peri-urban location • Mostly uses cash for transactions. • Prefers cash over digital payment methods. • Recent use case: used mobile money or bank service to send money to friends or family.	5%
2	**Situational user**	35%	N=229, individual customer respondents	• Has a mobile money or bank account. • Owns a mobile phone. • Recent digital use cases: bill payments and sending money. • Lives in a non-rural (urban or peri-urban) area.	74%

Profile No.	Profile name	Sample represented by this profile	Population	Defining characteristics (conditions)	Proportion of regular digital users (weekly)
3	**Digital mover**	13%	N=229, individual customer respondents	• Receives income digitally (not in cash or by check). • Income source is frequent. • Recent digital use cases: bill payments, merchant payments, and sending money. • Has a mobile money or bank account. • Owns a mobile phone. • Urban resident. • Prefers digital payments over cash.	15%
4	**Juggling merchant**	27%	N=208, merchant respondents	• Merchant with 0 or 1 employee. • Has a mobile money or bank account. • Owns a mobile phone. • Located in a non-rural (urban or peri-urban) area.	27%
6	**Structured boss**	13%	N=208, merchant respondents	• Merchant with two or more employees. • Has a mobile money or bank account. • Uses a mobile phone or a POS device. • Urban location. • Prefers digital payments over cash.	10%

Methodology notes 1: A mixed–method triangulation analysis was applied to draw out these profiles. The research team used qualitative data to conceptualize the definitions, while quantitative data validated them using SIIPS 2025 data from the four focus countries (see annex Table A.4: Definitions of five end-user profiles). Collectively, the profiles speak to approximately 81% of all sampled respondents at an aggregate level, irrespective of cross-country IPS.

Methodology notes 2: The profiles help to simplify data and do not always account for the adaptability of real-life behavior. For example, a low adopter of digital payments may use it more than cash if offered incentives such as promotional pricing or giveaways that a new market entrant offers. The range of other factors at play is not exhaustive and warrants further investigation.

ANNEX B | Consulted Stakeholders

Organization	Stakeholder	Role
BankservAfrica: Transfer Cleared on Immediate Basis (TCIB)	Moshabela Mokone	TCIB: Group Risk and Administration Manager
Central Bank of Egypt: Instant Payment Network (IPN)	Mohamed Abdelrahman	Head of Payment Instruments and Electronic Acceptance Channels (IPN and InstaPay)
	Hussein Habib	Head of Instant Payment Network (IPN)
Centre for Digital Public Infrastructure (CDPI)	Emmanuel Khisa	Africa Director for the Centre for Digital Public Infrastructure (CDPI)
DFS Lab	Jake Kendall	Founder and Director at DFS Lab
EthSwitch	Yilebes Addis	Chief Executive Officer
	Abeneazer Wondwossen	Chief Portfolio Officer
	Nebiyu Mengistu	Chief Operation Officer
	Solomon Mohammed	Director, IT Infrastructure Department
	Beza Mamo	Director, Payment Application
	Abreham Kassahun	Payment Consultant
Egyptian Banks Company	Mohamed Shawky	Deputy Head of Operational Excellence
Gates Foundation	Sanjay Jain	Director, Digital Public Infrastructure
	Konstantin Peric	Deputy Director, Inclusive Financial Services Global Growth & Opportunity
	Camilo Tellez-Merchan	Senior Program Officer, Payments, Inclusive Financial Services
Ghana Interbank Payment and Settlement Systems Limited (GhIPSS)	Tettey Kwaku	Head, Real-Time Payments
GIMACPAY	Valentin Mbozo'o	Managing Director of GIMAC
Inclusive Action Lab	Arunjay Katakam	Co-Head, Inclusive Action Lab

Organization	Stakeholder	Role
Integral Solutions	David Porteous	Founder and CEO
MTN Momo Ghana	Cutie Mireku	Manager, Fintech Business Development
Nigeria Inter-Bank Settlement System Plc (NIBSS)	William Uko	Head, Strategy & Research
	Chinedum Ezenwoko	Strategy Analyst
	Akinkunmi Ogunsola	Principal Architect
	Fredrick Kio	Senior Product Development Manager
	Chioma Okeke	Head, Enterprise Project Management Office
	Daramfon Akpanuwa	Enterprise Project Manager
	Gbotemi Komolafe	Business Analyst
Onafriq (formerly called MFS Africa)	Tanya Alvis	Vice President, Commercial
	Rachel Balsham	Managing Director, Southern & East Africa
	Zama Ndlovu	Group Head of Corporate Communications & Marketing
PesaLink	Plounne Oyunge	Chief Growth Officer
Sociedade Interbancaria De Mocambique (SIMO)	Bruno Sengulane	Executive System Administrator
	Cláudia Caetano	Application and Functional Support Service Coordinator
	Manuela Simões Chacuamba	Information Systems and Technology
	Gabriel Domingos	Payment Subsystems Management Assistant
South African Reserve Bank	Tim Masela	Head: National Payment System Department and SADC Payments Systems Chairperson
Standard Bank South Africa	Brad Gillis	Head: Africa Regions Payments and Group Remittances Domain Standard Bank

Organization	Stakeholder	Role
World Bank	Holti Banka	Senior Financial Sector Specialist
	Julia Clark	Senior Economist
	Maria Teresa Chimienti	Senior Financial Sector Specialist
	Gynedi Srinivas	Senior Financial Sector Specialist
	Guillermo Alfonso Galicia Rabadan	Financial Sector Specialist
	Minita Mary Varghese	Program Officer with the G2Px Initiative
	Fredes Montes	Senior Financial Specialist

ANNEX C | Current USD Exchange Rate Calculations

To calculate values data, AfricaNenda retrieved the World Bank's Atlas-based GNI in USD and the corresponding GNI in local currency for each country. We then calculated the implied conversion factor by dividing GNI in USD by GNI in the local currency. We used this factor to convert all value data from the report, including data from previous years, to enable consistent comparisons.

The exception is Zimbabwe. Given its high exchange rate volatility during 2023 and 2024, we opted for that country to use the IMF period-average exchange rate from the IMF Exchange Rate Dataset, which provides historical exchange rate data between USD, Special Drawing Rights, the Euro, and other national currencies.

Figure C.1 | Transaction value (USD billion) 2020-2024 (n=30)*

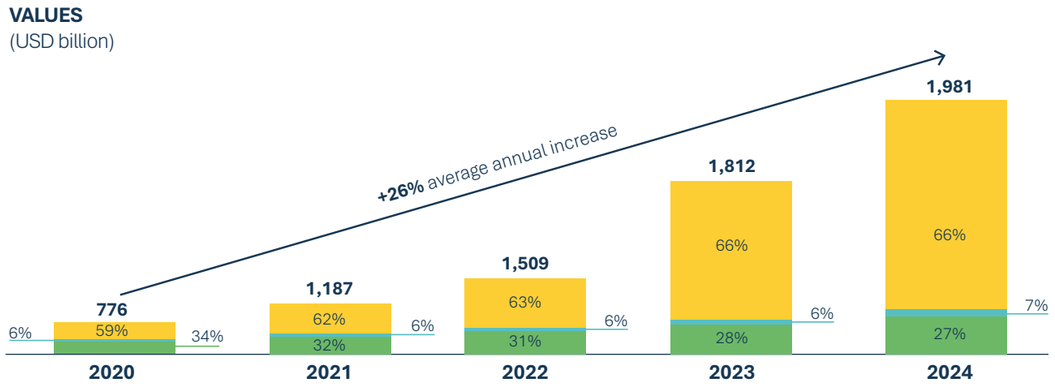


Table C.1 | Transaction value (USD billion) 2020-2024 (n=30)

IPS Type	2020	2021	2022	2023	2024	2023/2024 Growth rate
Cross-domain IPS	460	732	943	1,195	1,299	9%
Bank IPS	50	71	96	114	47	28%
Mobile money IPS	266	383	470	502	535	7%
Total	**776**	**1,187**	**1,509**	**1,812**	**1,981**	**9%**

Note: Volume and value data were unavailable for four of the new systems—Switch Mobile (Algeria), LYPay (Libya), Salone Pement Swich (Sierra Leone), and SIPS (Somalia)—and no data was received from PAPSS (Continent-wide). Volume data was available for SIMO (Mozambique), but value data was not; therefore, its transaction data is not included in the analysis. As a result, these calculations include 30 IPS (see Box 2.1.1). As eNaira (Nigeria) is the only sovereign currency IPS, and data were included in the NIP (Nigeria) data, sovereign currency IPS are excluded from the IPS performance analysis.

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