

THE STATE OF INSTANT AND INCLUSIVE PAYMENT SYSTEMS IN AFRICA

SIIPS 2022

SUMMARY REPORT



About this report

This is the first of a series of annual reports by AfricaNenda on the landscape and state of instant and inclusive payment systems in Africa and the extent to which these systems are inclusive, especially for low-income consumers.

It is based on a cataloguing of instant payment systems in Africa, insights from a range of expert and stakeholder interviews across the continent, primary consumer research in seven countries, and detailed case studies.

This report was made possible through the partnership involving AfricaNenda, the World Bank, and the United Nations Economic Commission for Africa (UNECA). Cenfri conducted the research.

This report would not be possible without the generous support of the Bill & Melinda Gates Foundation and AfricaNenda's fiscal sponsor, Rockefeller Philanthropy Advisors (RPA).

BILL & MELINDA
GATES *foundation*

ROCKEFELLER
Philanthropy
Advisors



The full report is available at
www.africanenda.org/SIIPS2022

Only **instant payment systems** that were processing transactions by June 2022 were considered to be “live” for the purpose of the report.

Abbreviations

ACH	Automated clearing house	NIP	NIBSS Instant Payment
ATM	Automated teller machine	NPS	National payment system
B2B	Business-to-business	OCT	Original credit transfer
B2P	Business-to-person	PAPSS	Pan-African Payment and Settlement System
BSA	BankservAfrica	P2B	Person-to-business
CAR	Central African Republic	P2G	Person-to-government
CEMAC	Central African Economic and Monetary Community	P2P	Person-to-person
CBDC	Central bank digital currency	POS	Point-of-sale
CICO	Cash-in and cash-out	QR	Quick response
CAGR	Compound annual growth rate	RTC	Real Time Clearing
COMESA	Common Market for Eastern and Southern Africa	RTGS	Real-time gross settlement
DFSP	Digital financial service provider	RTP	Request-to-pay
DRC	Democratic Republic of the Congo	SIIPS	State of instant and inclusive payment systems
CDD	Customer due diligence	SIMO	Sociedade Interbancaria de Mocambique
EAC	East African Community	SADC	Southern African Development Community
EFT	Electronic fund transfer	SYRAD	Système de Règlement Automatisé de Djibouti
GhIPSS	Ghana Interbank Payment and Settlement Systems	TIPS	Tanzania Instant Payment System
GIP	GhIPSS Instant Pay	TCIB	Transactions Cleared on an Immediate Basis
G2P	Government-to-person	US	United States
GNI	Gross national income	USD	United States dollar
IIPS	Instant and inclusive payment system	USSD	Unstructured supplementary service data
IPS	Instant payment system	WAEMU	West African Economic and Monetary Union
MauCAS	Mauritius Central Automated Switch	ZAR	South African rand
MFB	Microfinance bank	ZECHL	Zambia Electronic Clearing House Limited
MMI	Mobile Money Interoperability	ZIPIT	Zimswitch Instant Payment Interchange Technology
MMO	Mobile money operator		
MSMEs	Micro, small and medium enterprises		
NFC	Near-field communication		
NIBSS	Nigeria Interbank Settlement System		

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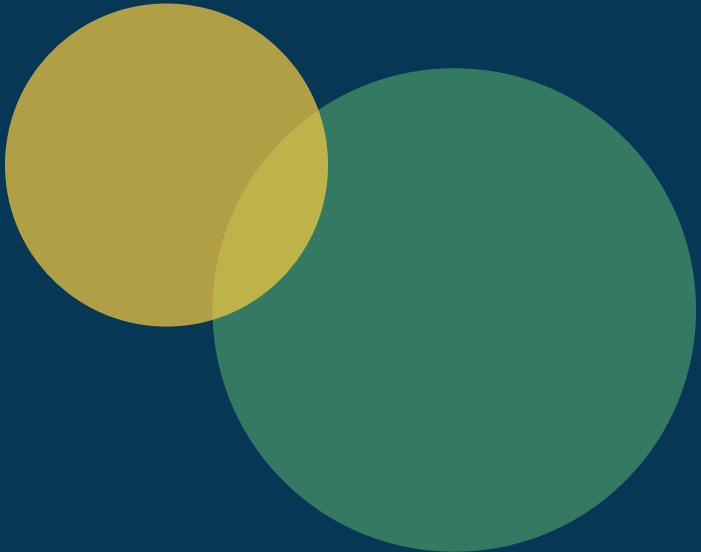
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Instant and inclusive payment systems are an essential foundation for financial inclusion in Africa

The need to transact and make payments is a core financial need for individuals and MSMEs. Digital payments serve as a key gateway to other financial services. Cash is at times the only option in the absence of underlying infrastructure supporting digital transactions.

Digital payments can help individuals and MSMEs to manage their finances more optimally and, in that way, support financial inclusion and broader economic policy goals.

To incentivize a sustained shift to frequent digital transaction behavior, digital payments need to be widely available, easy to use, quick, and reliable.

WHAT IS AN INSTANT PAYMENT SYSTEM, AND WHEN DOES IT BECOME INCLUSIVE?



IPS

INSTANT PAYMENT SYSTEMS

are multilateral, open-loop retail payment systems that enable digital push payments in near real time for use 24 hours a day, 365 days a year, or as close to that as possible.



IIPS

INSTANT AND INCLUSIVE PAYMENT SYSTEMS

process retail transactions digitally in near real time and are available for use 24/7, 365 days a year, or as close to that as possible.

They enable low-value, low-cost push payments that are irrevocable and based on multilateral, open-loop interoperability arrangements. Licensed payment providers have fair access to the scheme, and participants have equal input opportunities into the scheme. 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.

IIPS are designed to serve the lower- and no-income population.



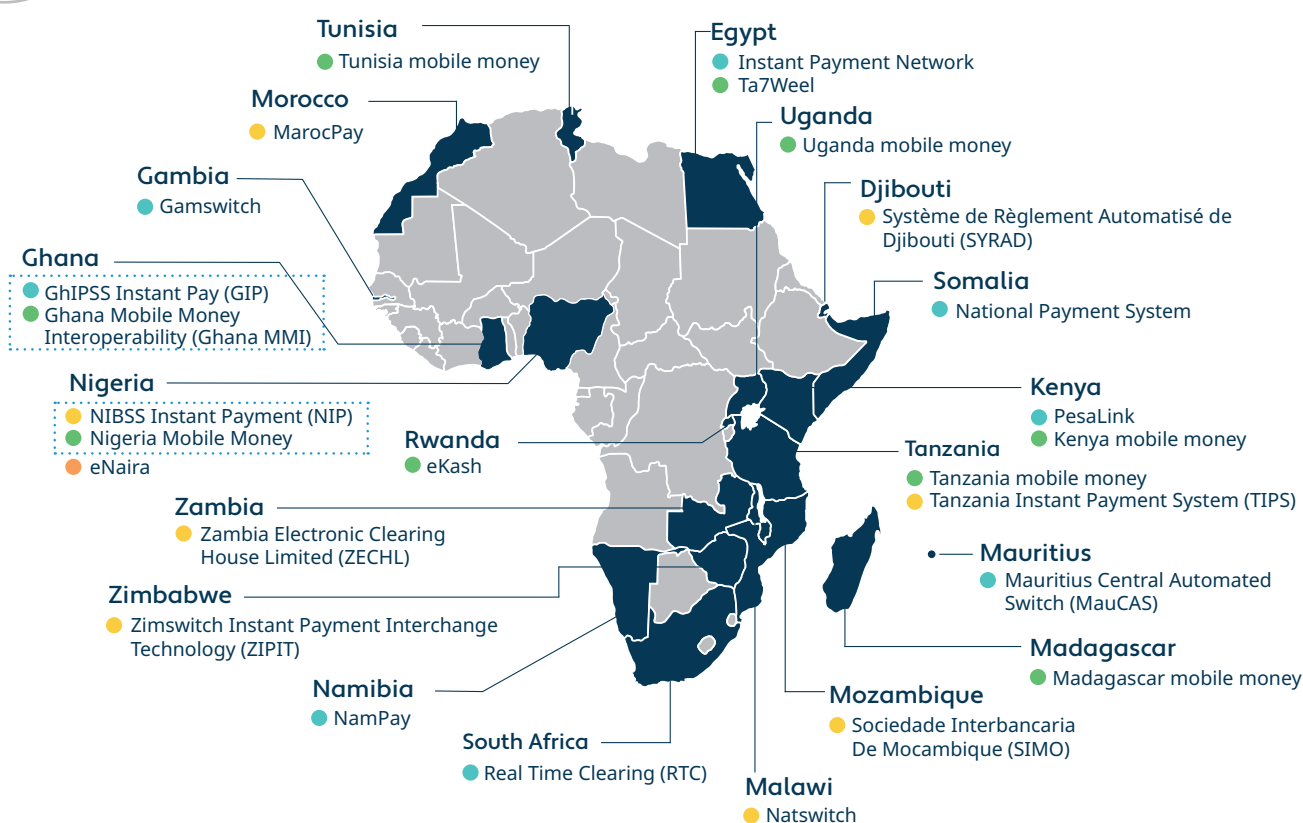
66%

The consumer research conducted for this study shows that 66% of low-income digital payment users, use digital payments weekly.

Africa is witnessing a dramatic growth in IPS, scaling from 2 systems in 2012 to 29 today, with more than a third of these coming online in the past year



Although the average annual growth in total transaction volumes and values since 2017 was 32% and 40% respectively, a multitude of systems and the young age of many systems mean that few individual IPS have scaled.



Bank IPS



Mobile money IPS



Cross-domain IPS



Sovereign currency IPS



Scheme interoperability

Three regional IPS:



GIMACPAY (CEMAC)

Cameroon | Central African Republic |
Chad | Republic of Congo |
Equatorial Guinea | Gabon



TCIB (SADC)

Angola | Botswana | Comoros |
DRC | Eswatini | Lesotho |
Madagascar | Malawi | Mauritius
| Mozambique | Namibia |
Seychelles | South Africa | Tanzania |
Zambia | Zimbabwe



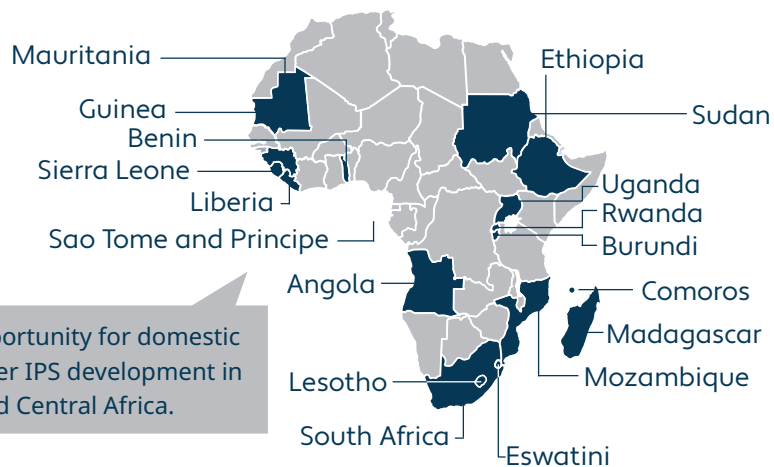
PAPSS (Africa-wide)

All countries

An additional 18 domestic and 3 regional IPS are under development: opportunity to strengthen financial inclusion in North and Central Africa

18

DOMESTIC IPS IN DEVELOPMENT



Domestic IPS are developed with the purpose of enabling interoperability among digital financial service providers (DFSPs), promoting competition, and enhancing the value proposition of digital payments for end-users. Financial inclusion is often an overarching goal.

3

REGIONAL IPS IN DEVELOPMENT

Although monetarily integrated, low-value cross-border transactions remain difficult between WAEMU countries.



WAEMU

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



EAC

Burundi | DRC | Kenya | Rwanda | South Sudan | Tanzania | Uganda



COMESA

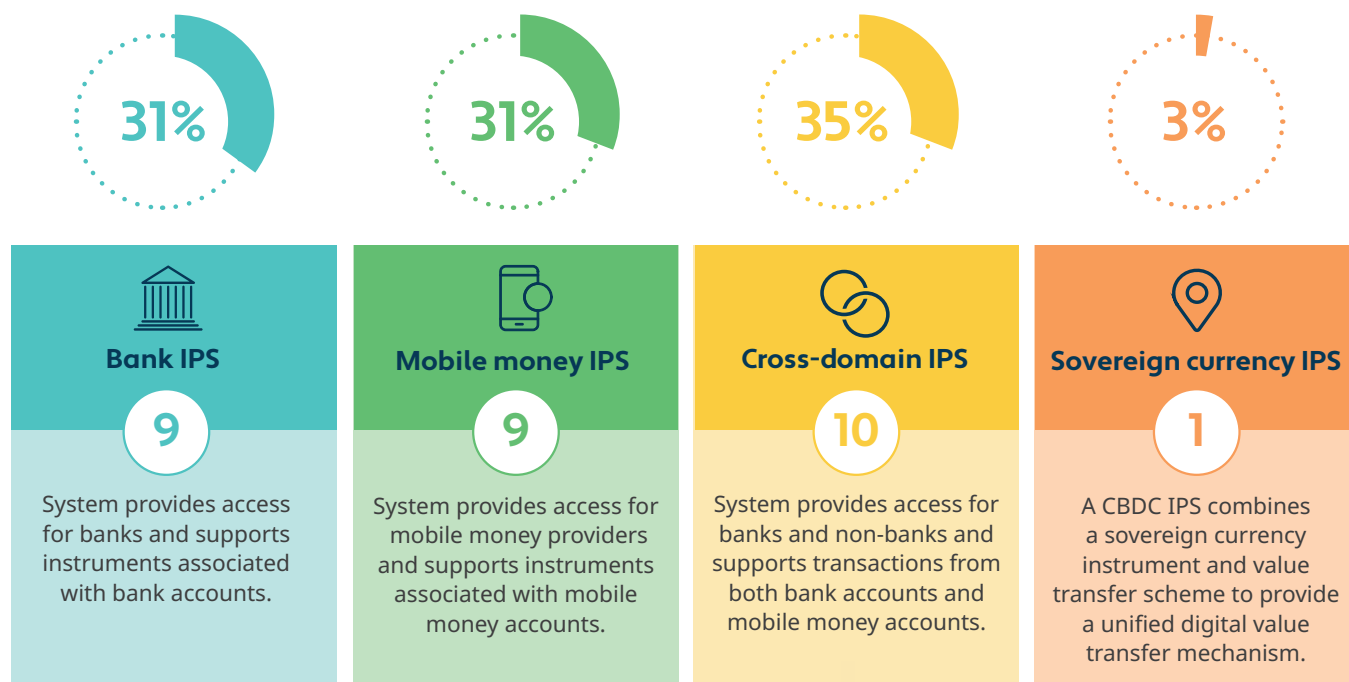
Burundi | Comoros | DRC | Djibouti | Egypt | Eswatini | Eritrea | Ethiopia | Kenya | Libya | Madagascar | Malawi | Mauritius | Rwanda | Seychelles | Somalia | Sudan | Tunisia | Uganda | Zambia | Zimbabwe

Of 21 COMESA member states, 14 already have a domestic IPS.

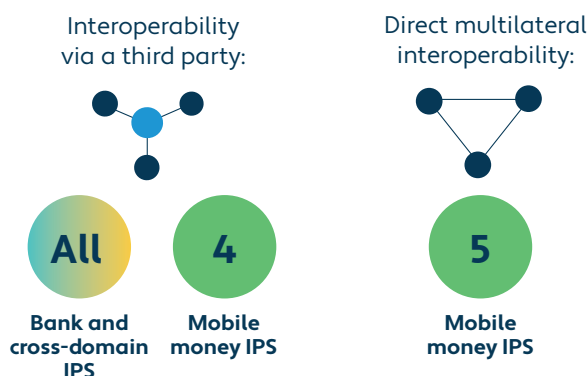
Regional IPS primarily aim to facilitate cross-border solutions for remittances, P2B and B2B payments. They also have the potential to serve domestic payment needs where no IPS exists.

While within-sector schemes have traditionally dominated, cross-domain schemes have an accelerated trajectory

Of the existing 29 IPS:



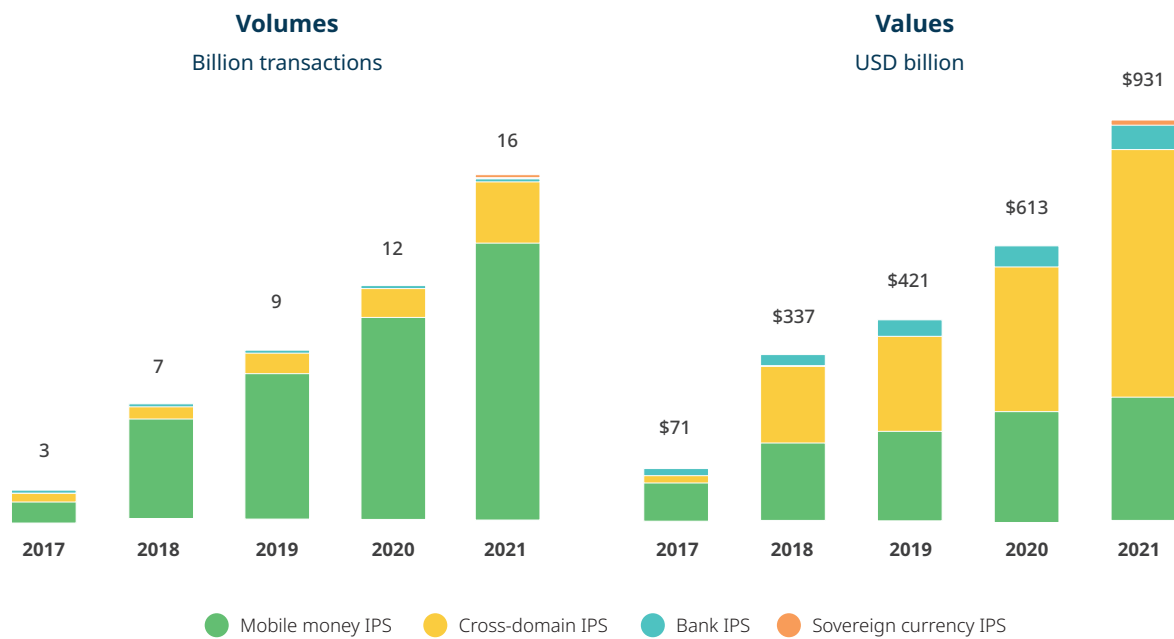
Interoperability is needed to ensure effective competition and a level playing field between incumbents and new market players. The type of interoperability arrangement depends on the market context.



INCLUSIVITY IMPLICATION

The rise in cross-domain schemes supports integration for scale, resulting in a competitive market that delivers value to consumers.

IPS process nearly USD 1 trillion in value across 16 billion transactions annually, driven by mobile money and cross-domain systems



Total transaction values and volumes have been steadily increasing over the last five years. Growth rates have been most rapid for cross-domain IPS relative to mobile money and bank IPS.

Average transaction values (USD) in 2021

IPS that support mobile money payments are attractive for consumers that want to make small ticket digital payments. Adding bank functionality means that larger transactions are also supported.

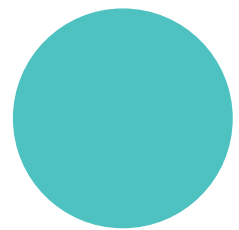
●
\$23

Mobile money IPS



\$73

Cross-domain IPS



\$418

Bank IPS

Increased prominence for cross-domain IPS. Mobile money-led systems processed the highest share of total IPS transaction volumes between 2017 and 2021. Mobile money IPS are the most common IPS and are typically used for low-value payments.

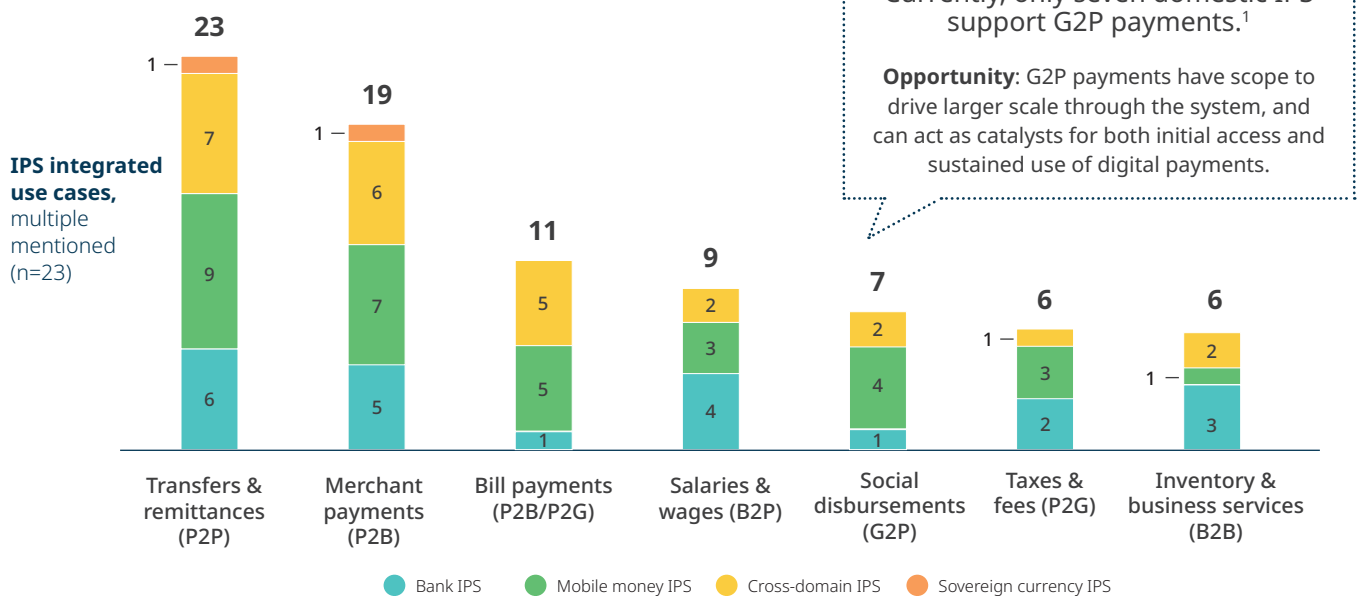
Disclaimer: Countries with missing data in the public domain were excluded from the calculations. These included ZIPIT (Zimbabwe), Tanzania mobile money, TIPS (Tanzania), SIMO (Mozambique), SYRAD (Djibouti), Madagascar mobile money, Instant Payment Network (Egypt), Ta7Weel (Egypt), Tunisia mobile money, Gamswich (The Gambia), TCIB (SADC), PAPSS (Africa-wide), eKash (Rwanda), Somalia National Payment System, and NamPay (Namibia).

There is an opportunity to integrate recurring use cases that have the most potential to drive scale

USE CASES



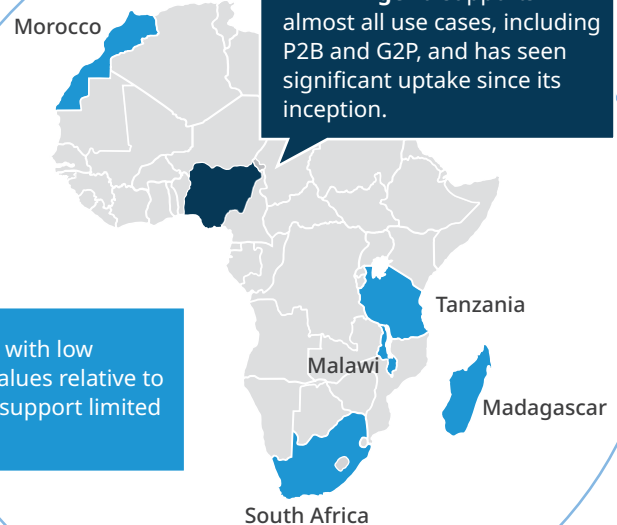
Apart from P2P and P2B, no other use cases are broadly supported by IPS.



INCLUSIVITY IMPLICATION: P2P and P2B use cases offer the most immediate utility for end-users and are already supported. However, use cases that provide inflow of digital funds and can drive first-time use, such as salaries and government payments, are not yet widely integrated.

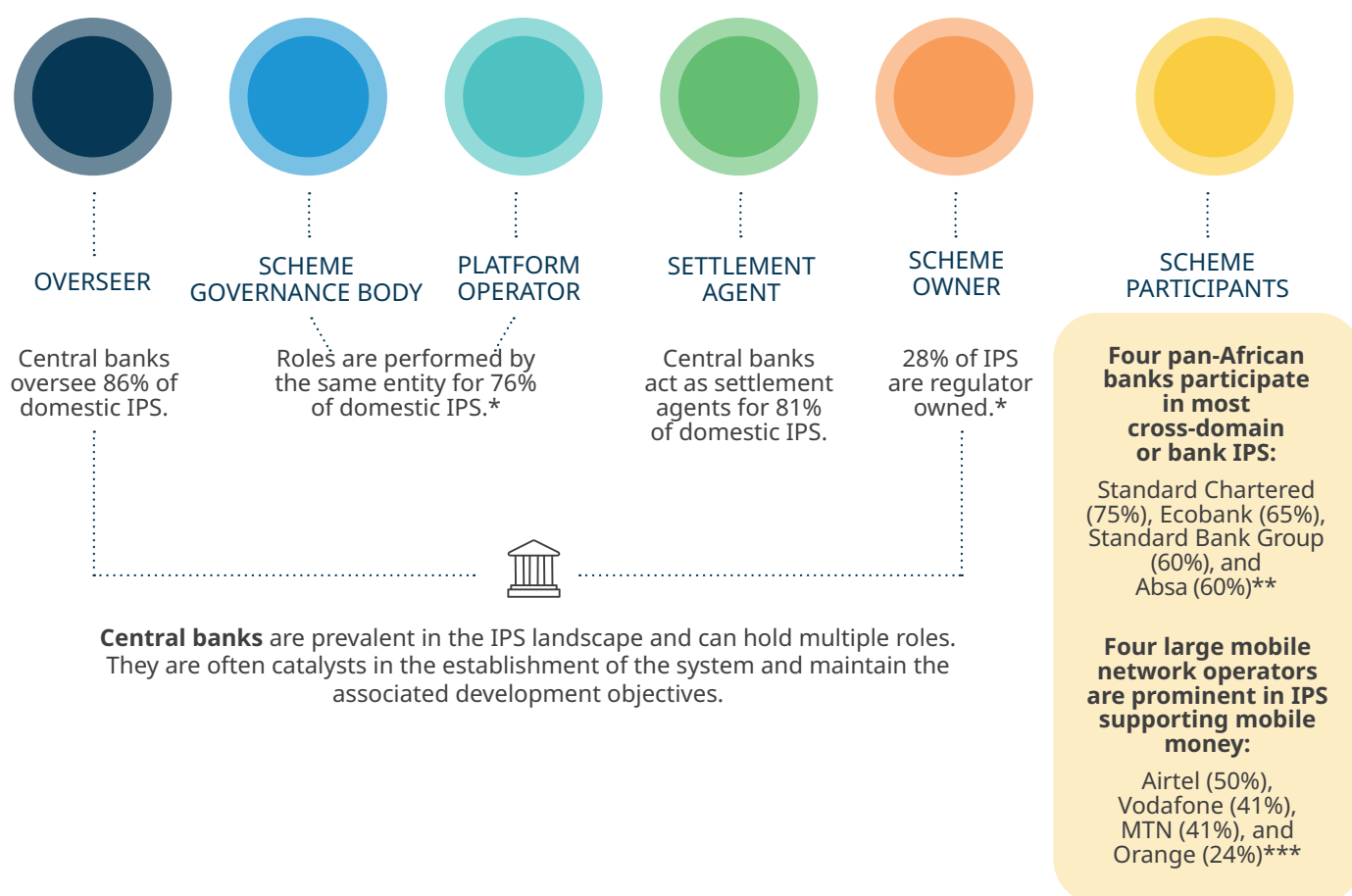
Domestic IPS with low transaction values relative to GNI typically support limited use cases.

NIP in **Nigeria** supports almost all use cases, including P2B and G2P, and has seen significant uptake since its inception.



¹ GIP (Ghana), Ghana MMI, MarocPay (Maroc), Madagascar mobile money, Nigeria mobile money, Uganda mobile money and ZIPIT (Zimbabwe).

A range of public and private stakeholders support IPS, usually guided by a central bank, with roles often overlapping and shifting



* Roles can also be fulfilled by a private company or association, public-private partnership, or NPO

** Percentages refer to the percentage of countries with a bank or cross-domain IPS in which the particular institution is present

*** Percentages refer to the percentage of mobile money or cross-domain IPS in which the particular institution participates

Scheme governance determines the rules and processes for IPS. Current governance arrangements largely exclude non-banks from decision making.



More than half of IPS are directly governed by the central bank or under a public-private partnership, and 12 IPS are governed by a private association.



Central banks are typically consulted due to their established relationships with participant DFSPs. Non-banks are mostly excluded in decision making.



The nature of voting rights determines the relative power balance between participants, both direct and indirect. Smaller players inevitably have less influence.

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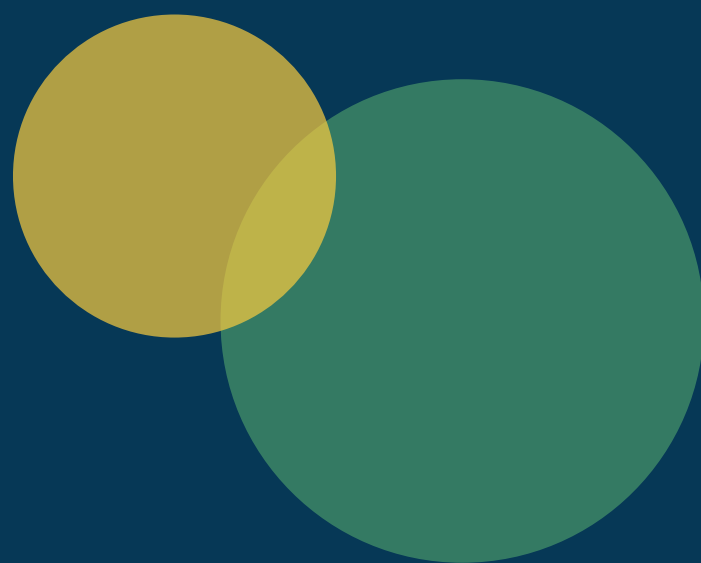
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Building more inclusive IPS
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Functionality and governance design inform the extent of IPS inclusivity: for end-users, breadth and depth of use of digital transactions facilitated by the IPS are clear indicators

Based on the cataloguing exercise, the IPS landscape in Africa can be classified into three broad levels of inclusivity, ranked according to the inclusivity of their features, governance, the use cases supported, cost, and recourse for low-income users:

Not ranked

Not ranked if the IPS does not fulfill basic inclusivity criteria where it does not enable P2B or P2P transactions, or does not offer channels that are most used.

Basic level

- **Minimum channel functionality:** most-used channel is supported
- **Minimum use-case functionality:** P2P and P2B transactions are supported

Progressed level

In addition to basic-level criteria:

- **Participation by all PSPs** (cross-domain model) in the IPS
- **Pro-poor governance:** inputs possible by all PSPs or there is an explicit inclusivity mandate
- **Central bank involvement** in governance

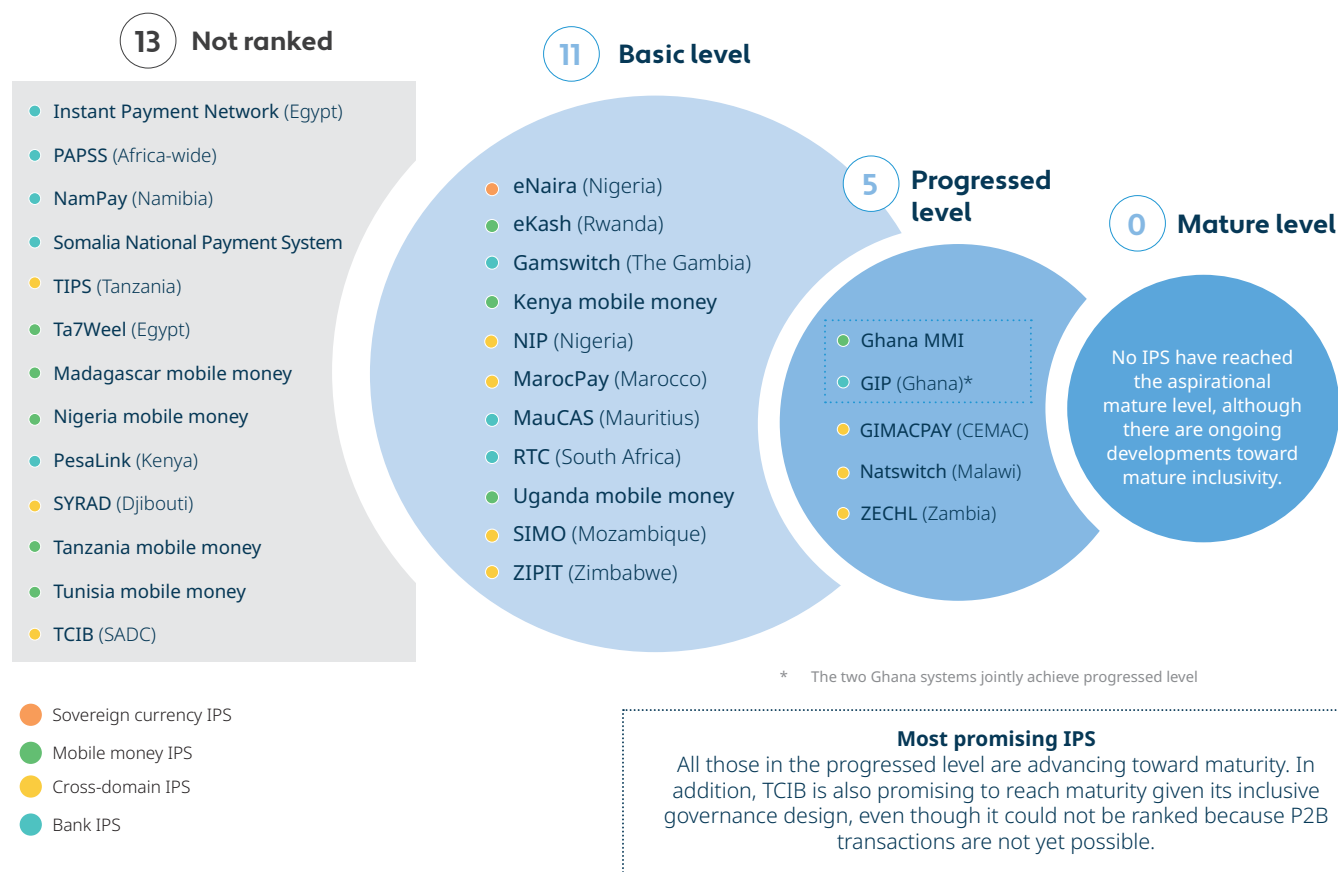
Mature level

In addition to basic- and progressed-level criteria:

- **Expanded use cases** supported
- **Transparent and efficient consumer recourse mechanisms**
- **Low-cost for end-users** within a not-for-profit business model



Where IPS offer preferred use cases and channels, there is potential to improve inclusivity, with a few promising examples toward mature level



Better design of IPS features can expand the potential reach to underserved individuals and MSMEs

Many IPS fall short in meeting the needs and preferences of individuals and MSMEs who, as a consequence, might not use digital payments consistently and frequently. There is still scope for IPS in Africa to effectively reach underserved and financially excluded individuals by designing and implementing IPS that reflect end-user preferences and needs.

Are instant digital payments inclusive in the eyes of consumers?



Digital payments offer convenience, but user frustrations regarding **cost, reliability, and frictions around reversals** are holding back true inclusivity.



Digital payments are used for **limited use cases** and are not truly mimicking the value proposition of cash in African economies.



Women are disproportionately affected by access barriers and exploitative agent behaviour.

Male respondent in Tanzania

"You might try even up to five times and it is still telling you that the transaction has failed, yet the money has already been sent five times to that person."

Young respondent in Tanzania

"I like using cash because mobile money has a big charge."

Female respondent in Egypt

"The payroll card doesn't include all transaction services, just withdrawing the salary."

Female respondent in Ghana

"They will call you in the name an MMO or whatever company to try to defraud you; that's our biggest challenge."

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There is scope to promote digitalization of important household use cases by streamlining digital P2B payments

The consumer research conducted for this report provides telling insights on the extent to which key payment needs are already digitalized

Rank of the top 5 payment types based on the percentage of individual respondents that have the payment need at least once a week	INDIVIDUAL-LEVEL						
	Level of digitalization						
	Kenya	Ghana	Tanzania	Zambia	Nigeria	DRC	Egypt
1	Airtime	Airtime	Airtime	Airtime	Airtime	Transport	Transport
2	Transport	Transport	Receive money	Household goods	Transport	Charity	Household goods
3	Household goods	Household goods	Send money	Transport	Household goods	Household goods	Send money
4	Send money	Receive income	Household goods	Charity	Receive income	Airtime	Receive money
5	Receive income	Send money	Transport	Receive money	Receive money	Receive money	Receive income
Most digitalized payment type overall	Pay for government services	Receive money	Receive money	Send money	Send money	Receive money	Purchase airtime

P2P use case need is well met:



82.5%

send money to friends and family digitally.



79.8%

receive money from family and friends digitally.

Potential opportunities for further digitalization of P2B use cases:



To promote the adoption and use of digital payments for household shopping and transport, IPS should maximize the availability of payment channels and maintain a simple pricing structure with low-costs. Ensuring quick and easy settlement increases the use of digital payments for purchasing goods and transport services.

For more MSMEs to receive customer payments digitally, IPS need to integrate solutions for merchant acceptance that are easier and more efficient than cash

MSME-LEVEL								
		Level of digitalization						
		Very low						Very high
Rank of the top 5 payment types based on the percentage of MSME respondents that have the payment need at least once a week		Kenya	Ghana	Tanzania	Zambia	Nigeria	DRC	Egypt
	1	Receive customer payments	Receive customer payments	Receive customer payments	Receive customer payments	Receive customer payments	Receive customer payments	Receive customer payments
	2	Supplier payments	Supplier payments	Supplier payments	Supplier payments	Supplier payments	Supplier payments	Send staff money for transport
	3	Send staff airtime	Send staff money for transport	Utility payments	Send staff money for transport	Send staff money for transport	Send staff money for transport	Send staff airtime
	4	Send staff money for transport	Send staff airtime	Send staff airtime	Send staff airtime	Send staff airtime	Send staff airtime	Supplier payments
	5	Utility payments	Utility payments	Loan repayments	Receive money	Utility payments	Utility payments	Loan repayments
Most digitalized payment types overall		Loan repayments	Send staff airtime and loan repayments	Pay for business government services	Pay for utilities	Send staff airtime, send staff money for transport, loan repayments	Send staff airtime	Send staff airtime

B2P and B2B are the most digitalized use cases:



68%

frequently pay staff airtime digitally.



76%

use digital means to pay suppliers.

P2B use case is currently underserved, with scope to digitalize:



Increasing digitalization of the P2B use case should be accompanied by IPS features that make digital payments as tangible and instant as cash for merchants, for example, by supporting payment acceptance technology like QR codes or request-to-pay (RTP) services.

For individuals to complete the financial inclusion journey, actors across the IPS value chain must provide ongoing, coordinated support



Context matters. It shapes the pathway for individuals and businesses.

Individuals and businesses adopt digital payments because they are convenient and save time for long-distance transfers. They find any value-added services attractive. They want to avoid risks relating to cash-handling.

Individuals and businesses use digital payments if they find it easy and simple enough. Merchant acceptance of digital payments helps individuals to use it consistently, especially if there is instant verification of beneficiary details. MSMEs use it to track sales and to monitor finances.

Can you
ACCESS
digital
payments?

Consumers cannot access digital payments if they cannot meet the requisite registration requirements and cannot access transaction accounts. Access is limited by lack of mobile phone ownership, inadequate network coverage, and limited access to agents or CICO infrastructure. Not all IPS support USSD; without access to USSD, end-users with no smartphones are barred from accessing digital payments.



Women are the most impacted by barriers.

Why did or
didn't you
ADOPT
them?

Consumers are reluctant to adopt digital payments if they are familiar with cash and don't trust the banking sector or digital payments because of security concerns. They are further deterred if services are not offered in their native language.

Do you
USE
them?

Low level of digital payments in the ecosystem creates a barrier to usage. Usage is lacking because of unreliable infrastructure and fears of fraud and harassment. Transaction costs and perceived unfairness around pricing deter usage. Cash is still considered instant for many use cases.

**SUSTAINED USE
OF DIGITAL PAYMENTS**

Digital payments are used consistently and frequently



Insights are from consumer research across seven countries, including Kenya, Ghana, Tanzania, Zambia, Nigeria, DRC, and Egypt, with a quantitative sample size of 1,200 respondents and qualitative sample of 50 to 110 respondents per country.

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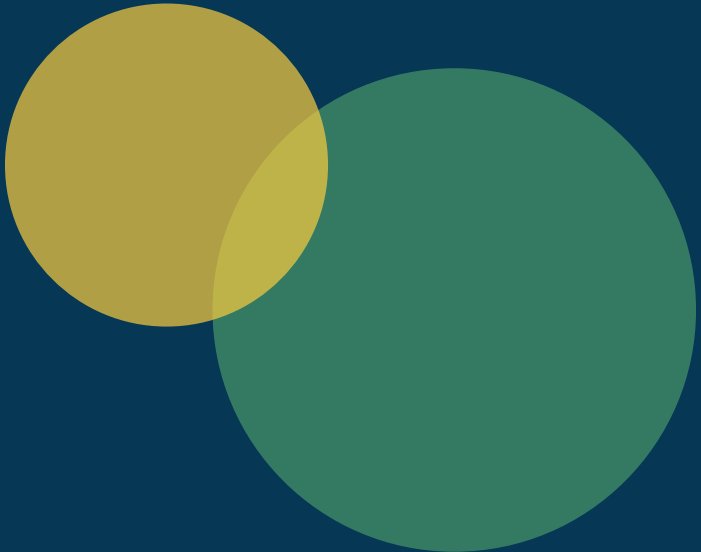
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GhIPSS

Established in 2015

GhIPSS INSTANT PAY (GIP) | GHANA

Completing the financial inclusion triangle

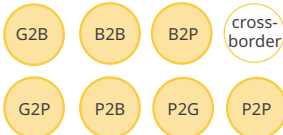
Value proposition

For consumers: Provides a convenient, liquid, and low-cost alternative to cash.

Inclusivity ranking

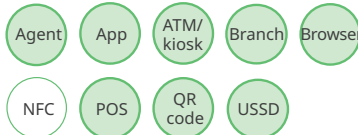
Progressed: Supports the most used channels and essential use cases. Potential to achieve inclusive governance with more ownership and decision-making power by participants.

USE CASES



● Supported ○ Not supported

CHANNELS

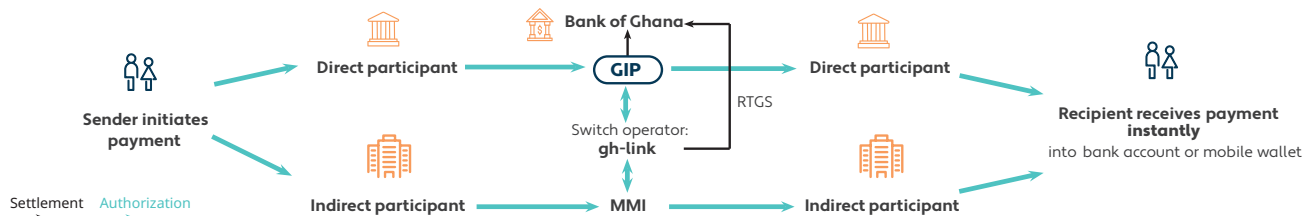


PARTICIPANTS

- 53**
- 1 central bank (direct)
 - 23 banks (direct)
 - 7 MMOs (indirect)
 - 18 fintechs (indirect)
 - 4 savings & loans companies (indirect)

Due to the introduction of COVID-19 measures promoting digital forms of payments, the CAGR (compound annual growth rate) between 2019 and 2021 for volumes and values were 240% and 141% respectively.

TRANSACTION FLOW



Established 2011

NIBSS INSTANT PAYMENT (NIP) | NIGERIA

An integrated ecosystem of instant payments

Value proposition

For consumers: Convenient, instant, low-cost digital payment
For providers: No need for complex bilateral arrangements and access to additional service offerings

Inclusivity ranking

Basic: Serves most use cases and offers many payment channels, but governance structure does not allow for inclusive decision-making

USE CASES



● Supported ○ Not supported

CHANNELS

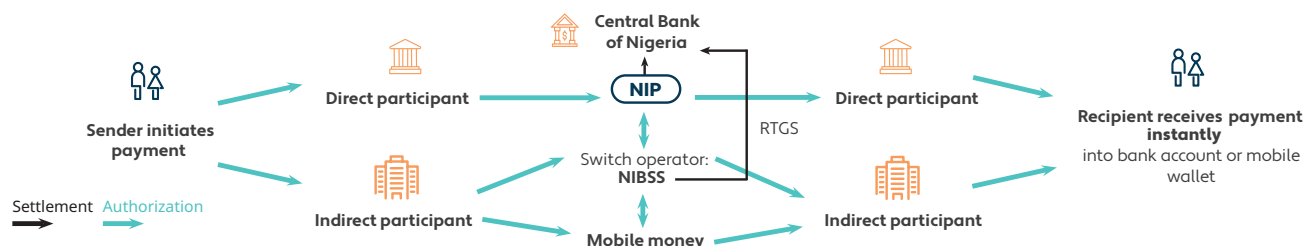


PARTICIPANTS

- 230+**
- 1 central bank (direct)
 - 25 commercial banks (direct)
 - 7 MMOs (direct)
 - 200+ MFBs (direct), fintechs and super agents (indirect)

The CAGR between 2019 and 2021 for volumes and values were 74% and 61%, respectively.

TRANSACTION FLOW





Established 2017

PESALINK | KENYA

The banking industry's real-time platform

Value proposition

For consumers: Low-cost alternative to M-Pesa for bank customers
For providers: Competition between banks and M-Pesa

Inclusivity ranking

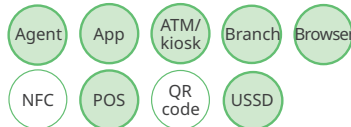
Not ranked: Does not support P2B payments or access to widely used channels. Provides for equal input opportunity for participants in decision-making, but lacks clear governance role for the central bank and pro-poor mandate.

USE CASES



● Supported ○ Not supported

CHANNELS

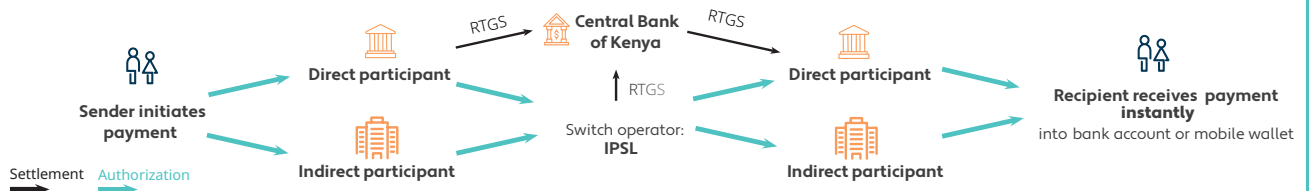


PARTICIPANTS

- 37+**
- 1 central bank (direct)
 - 31 banks (direct)
 - 5+ MFBs, PSPs, MMOs, fintechs, SACCOs (indirect)

The CAGR between 2019 and 2021 for volumes and values were 15% and 29%, respectively.

TRANSACTION FLOW



TRANSACTIONS CLEARED ON AN IMMEDIATE BASIS (TCIB) | SADC

Multi-country collaboration for inclusion

Established 2021

Value proposition

For providers: Improves the cross-border payment process, standardizes compliance requirements, and removes the need for complex bilateral arrangements.

Inclusivity ranking

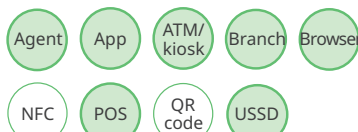
Not ranked but shows considerable promise. It has inclusive governance, but does not offer P2B.

USE CASES



● Supported ○ Not supported

CHANNELS

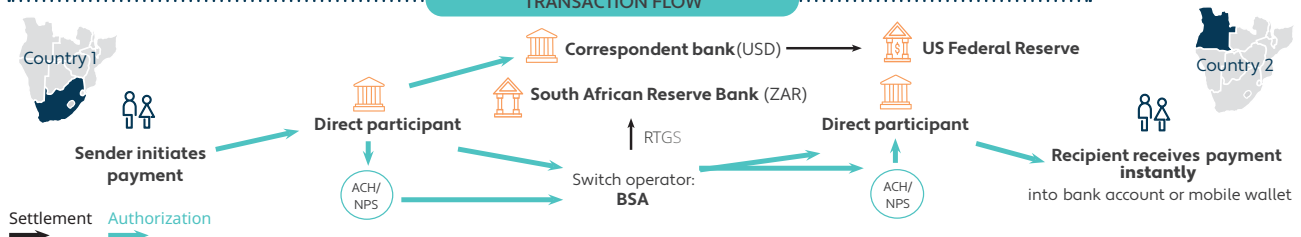


PARTICIPANTS

- 14**
- 1 bank
 - 1 PSP
 - 12 member countries

No values and volumes available yet due to young age but significant integration pipeline of participants.

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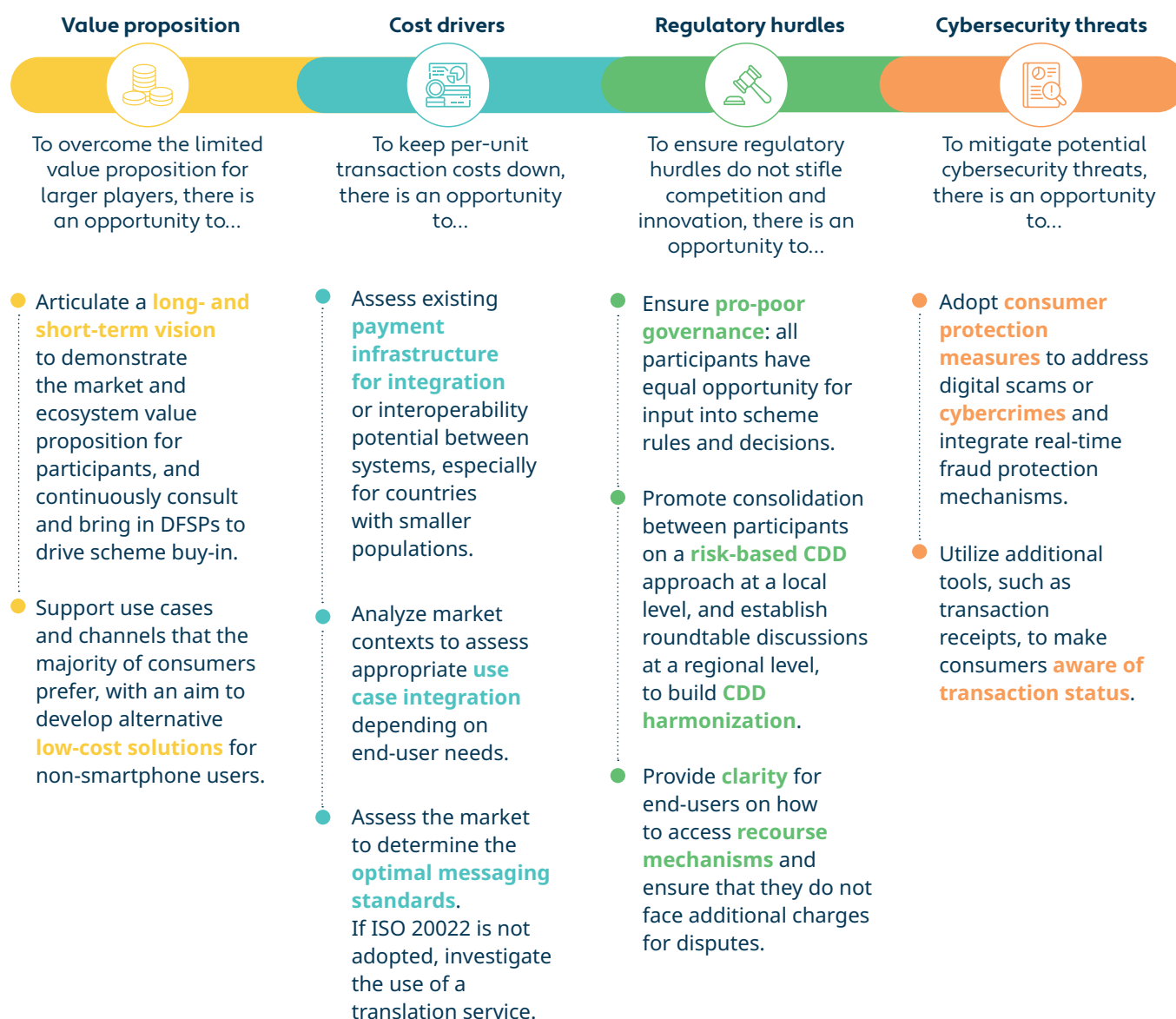
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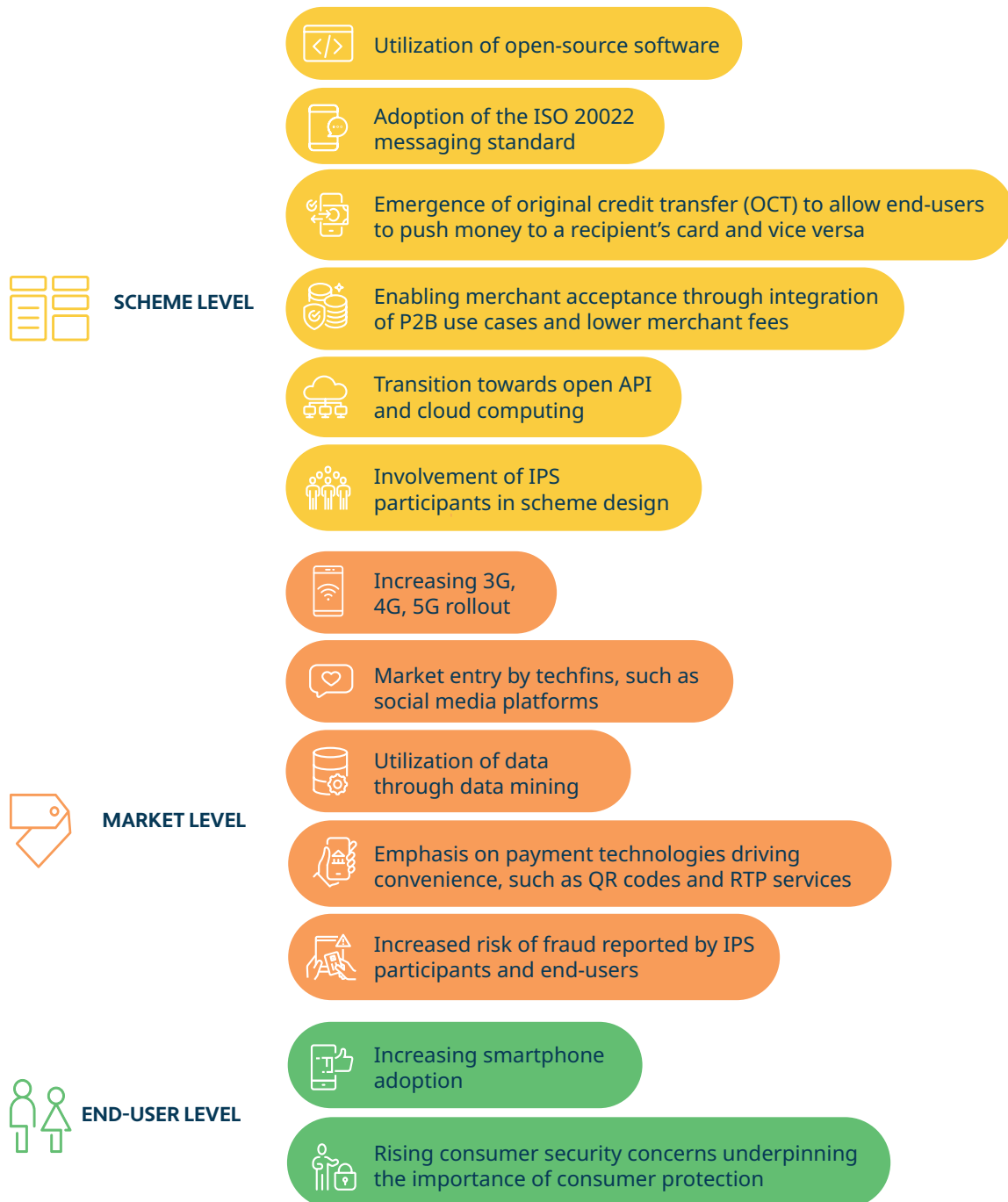
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Levers for inclusivity: a multistakeholder approach can ensure that the design and implementation of IPS meet end-user needs

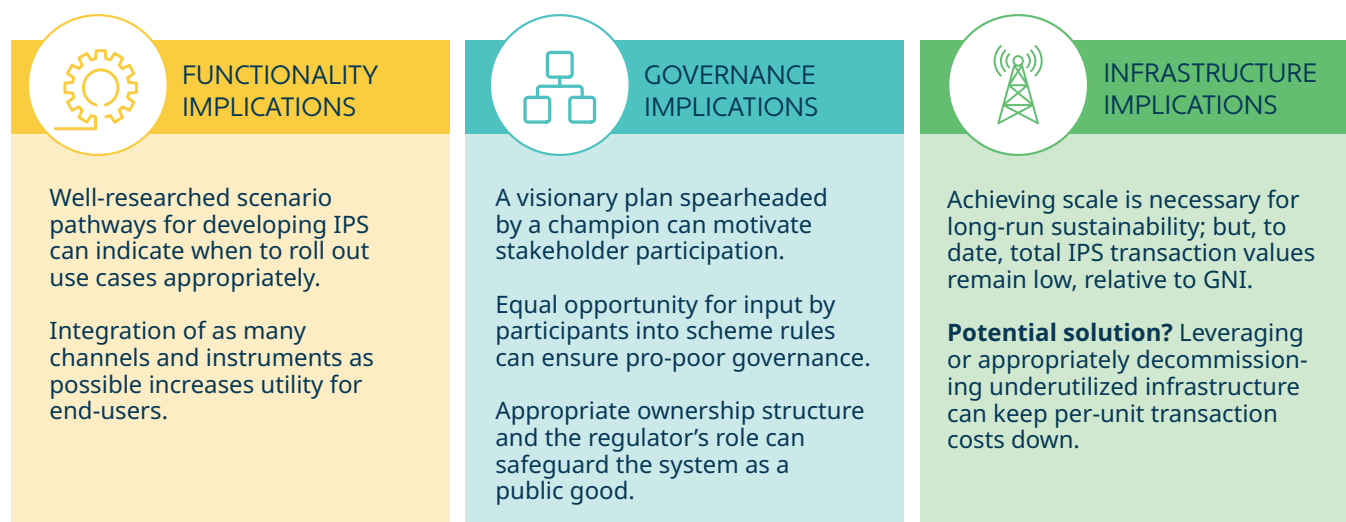


As underlying technology and user needs evolve, a number of scheme-, market- and end-user-level trends will shape the IPS ecosystem for years to come



Nascent but broad exploration of retail CBDC. Nigeria has already launched the eNaira, and Ghana is set to launch the pilot of its e-Cedi. Fifteen (15) other African countries are considering retail CBDC to enhance or supplement IPS, with the longer-term objectives of leading to deeper engagement and inclusion.

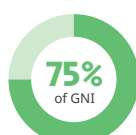
To close the inclusivity gaps, various payment system stakeholders must collaborate to design IPS that meet end-user needs



Opportunity for private sector players together with public sector efforts:

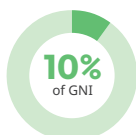
Upgrading and improving mobile network infrastructure, and making mobile network connections more affordable can drive uptake of capable mobile phones in underserved areas, allowing end-users to access the IPS available.

Transaction values



4 IPS

have transaction values in excess of 75% of GNI.*



10 IPS

have transaction values of 10% of GNI or lower.

*NIP (Nigeria), GIP/Ghana MMI, Uganda mobile money, and Kenya mobile money

AfricaNenda invites stakeholders and partners to pave the way towards fully inclusive IPS across Africa

The foundation is there: Instant payments have a foothold on the continent, and IPS have made substantial efforts to extend access to low-income users.

But more is needed: To truly transform the way that African citizens and MSMEs transact to meet their daily needs, deliberate steps are needed to make the IPS landscape even more inclusive.

THE ROAD TO GREATER INCLUSIVITY REQUIRES:



Inclusive functionality that paves the way for a digital ecosystem that has a compelling value proposition for all use cases relevant to users

Inclusive governance with fair access for all digital financial service providers and equal input into decision-making



AfricaNenda
ACCELERATING INCLUSIVE PAYMENT SYSTEMS

A call to action:

The more IPS share their data and stories on progress and performance, the greater the learnings will be to the benefit of all.

AfricaNenda – a trusted partner to stakeholders on the continent

AfricaNenda is committed to achieving the common goal of making digital instant payments more accessible and useful for all. AfricaNenda acknowledges the role and contributions of other development partners in pursuing this mission.

Forthcoming: SIIPS 2023



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