



DIGITAL FINANCIAL SERVICES
(DFS) WORKING GROUP

LANDSCAPE STUDY ON INCLUSIVE PAYMENT SYSTEMS IN AFRICA REPORT



CONTENTS

EXECUTIVE SUMMARY	3
1 INTRODUCTION	5
2 THE STATE OF IPS IMPLEMENTATION ACROSS AFI MEMBER COUNTRIES	8
3 DRIVERS OF CHANGE AND IPS DESIGN CHOICES: A DECISION FRAMEWORK FOR POLICYMAKERS	14
4 THE STRATEGIC LANDSCAPE OF ACTORS SHAPING IPS DEVELOPMENT IN AFRICA	46
5 STRATEGIC CHOICES AND FUTURE PATHWAYS FOR AFRICAN POLICYMAKERS	65
6 EMERGING TRENDS, OPPORTUNITIES, AND POLICY CONSIDERATIONS FOR THE NEXT FIVE YEARS	80
APPENDIX	84

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EXECUTIVE SUMMARY

Instant payment systems (IPS) are becoming foundational infrastructure for Africa's digital economies. Beyond enabling faster and cheaper payments, they increasingly underpin financial inclusion, digital commerce, government-to-person transfers, competition, and regional economic integration. IPS are emerging as critical public infrastructure with implications for economic resilience, national sovereignty, and inclusive growth, and their adoption across the continent is now accelerating.

As of August 2026, 31 of the Alliance for Financial Inclusion's (AFI) 39 African member institutions have live IPS, with a further seven actively developing or implementing new systems. This progress reflects a strategic shift from questions of whether to establish IPS, to how the design, governance, financing, and operational choices being made today can produce infrastructure that remains inclusive, sustainable, resilient, interoperable, and fit for purpose over the long term. Getting those choices right is now the central task facing policymakers.

Drawing on evidence from across AFI member jurisdictions and comparator experiences in Brazil, India, and Malaysia, this study examines the structural forces acting on IPS design. It sets out what informs design choices, why they are contested, whose interests shape them, what risks accumulate when they are made, and what policymakers can do to navigate these dynamics. Across every member journey, the same four questions recur.

Governance and ownership arrangements shape whose interests direct a system's long-term evolution: central bank-led models such as Mozambique's SIMO and Namibia's Instant Payment Namibia preserve policy control, while industry-led models can offer commercial agility but require careful governance to keep inclusion objectives central. Participation and ecosystem design determine whether adoption follows: voluntary frameworks slowed onboarding in Namibia and Liberia, while clearer regulatory expectations accelerated it. Technology and operational control turns less on the choice of platform than on the trade-offs between speed, flexibility, dependency, and institutional capability. Financial sustainability underpins long-term success: Mozambique's METIX demonstrates how diversified revenue streams beyond person-to-person payments can support ongoing investment without undermining affordability. None of these questions is answered by the central bank alone.

Each choice is made within a complex ecosystem of stakeholders, central banks, technology providers, payment operators, banks, mobile network operators, development partners, regional institutions, open-source communities, and sovereign technology partners, whose interests, incentives, and influence increasingly shape the options available to policymakers. The influence of external actors extends beyond technology selection and can shape governance, financing, and future strategic options. The policy challenge is not to avoid partnerships or dependencies, but to understand, manage, and periodically reassess them. Regardless of the model adopted, institutional capability, technical, operational, supervisory, and strategic, is emerging as the single most important determinant of long-term success and should be treated as a core design requirement from the outset, not a post-implementation add-on.

These dynamics together generate a set of strategic choices. Five recur across members: balancing public policy objectives with commercial sustainability, strategic autonomy with external support, domestic priorities with regional integration, near-term deployment with long-term capability, and ecosystem openness with resilience and effective governance. The greatest influence policymakers will ever have over their IPS is at the design stage. Governance, participation, technology architecture, financing, interoperability, and stakeholder relationships become progressively harder and costlier to change once systems are operational; **dependencies established early often shape system trajectories for years to come.**

Looking to the next five years, six trends will shape the direction of IPS development across AFI African members: cross-border interlinking building on WAEMU's PI-SPI, CEMAC's GIMACPAY, SADC's TCIB, and PAPSS (with BEAC formally joining PAPSS in July 2026 and BCEAO's PAPSS pilot planned for later in the year); expanding functional scope and open finance; public-private collaboration and clearing-house integration, exemplified by Namibia's IPN, PayInc and NamClear; digital trust and consumer protection against a rising fraud threats; artificial intelligence on both sides of the payment, in defence and in attack; and the regulation of central bank digital currencies, stablecoins, and tokenisation. Each trend opens a distinct opportunity and raises a distinct policy consideration for central banks, regulators, and IPS operators.



Consequently, the choices African policymakers make today will determine whether IPS evolves into a transformative public infrastructure that expands economic opportunity, strengthens resilience, supports regional integration, and advances inclusive growth across the continent. The opportunity is substantial, but so too is the responsibility to design systems not only for the payment needs of today, but for the digital economies Africa seeks to build.



1 INTRODUCTION

GROWING IPS ADOPTION ON THE CONTINENT

IPS are expanding rapidly across Africa, with transaction volumes growing at an average annual rate of 35 percent between 2020 and 2024.¹ This momentum reflects a deliberate shift toward interoperable digital payment infrastructure as a core pillar of digital public infrastructure that supports financial inclusion.² Beyond speed, IPS strengthens payment ecosystems by giving end users immediate availability of funds with transaction certainty, reducing transaction costs, and enabling interoperability across banks and mobile money providers.

Yet scale alone does not ensure developmental impact. IPS achieve sustainable outcomes only when governance arrangements, access rules, interoperability standards, and pricing structures are well-designed.³

Africa's current expansion therefore marks an inflection point, as regulators and central banks must ensure institutional design advances competition, resilience, and inclusion so that IPS functions as transformative public infrastructure rather than merely faster payment rails.

IPS AS A CATALYST FOR FINANCIAL INCLUSION

Scaling IPS will be central to achieving universal financial inclusion in Africa by 2030. Across AFI African member countries, IPS are expanding rapidly: four new domestic systems went live in late 2025 and 2026 in Mozambique, Liberia, Burundi, and Guinea, bringing live coverage to 31 of AFI's 39 African members, through domestic systems or the regional platforms serving their currency unions (WAEMU's PI-SPI and CEMAC's GIMACPAY). Seven members (Botswana,

Comoros, DR Congo, Mauritania, Namibia, São Tomé and Príncipe, and Sudan) have IPS under development, signalling a network commitment to instant payment infrastructure as the foundation for digital financial inclusion.

At the core of this expansion, IPS enables real-time transactions across interoperable platforms, reducing fragmentation and costs while facilitating access across providers.⁴ Beyond speed, their design supports adoption by reducing reliance on cash and enabling simple, low-friction transactions. Payments using identifiers such as bank account and mobile numbers or QR codes support everyday use cases, while the immediate availability of funds enhances trust liquidity, reduces cash-handling risks, and improves transaction certainty.

These outcomes depend on effective system design. India's UPI shows how low-cost interoperability and strong merchant integration can drive widespread usage, accounting for 85.5% of digital payment transactions by volume in H2 2025.⁵ UPI also generates transaction records that improve transparency and creditworthiness, facilitating access to formal credit and financial services.⁶

Building on these features, IPS forms a core component of digital public infrastructure (DPI), providing a shared foundation that enhances financial inclusion by giving non-bank providers low-cost, interoperable rails to reach unbanked customers. This bridges the gap between formal banking and the informal economies where most unbanked Africans transact. The transaction data generated can help individuals and firms establish financial histories, improving access to credit and other formal financial services. For African countries, scaling such systems offers a clear pathway to deepen financial inclusion beyond payments alone, with outcomes shaped not only by system design choices alone, but broader policy aspirations.

¹ AfricaNenda Foundation, 2025. Available [here](#)

² World Bank, 2023. Available [here](#)

³ World Bank, 2024a. Available [here](#)

⁴ World Bank, 2021. Available [here](#)

⁵ Reserve Bank of India, 2025. Available [here](#)

⁶ Nandhini Devi, N., Nagarajan, H., & Banu, A, 2026. Available [here](#)

PURPOSE AND STRUCTURE OF THE REPORT

This report will help AFI member central bank leaders make better-informed IPS design choices by synthesising comparative evidence across key design dimensions. The report provides practical, implementation-focused insights for central banks designing or scaling IPS, drawing on comparative analysis of system architectures, governance arrangements, ownership and funding models, priority use cases, and the ecosystem of actors, including technology providers, infrastructure operators, and financing partners, that shape how these systems are built and sustained.

What distinguishes this study from prior analyses is its focus on the structural forces acting on IPS design rather than on cataloguing what exists. It examines what informs design choices, why design choices are contested, whose interests shape them, what risks accumulate when they are made, and what policymakers can do to navigate these dynamics more effectively. It draws on international evidence, including comparative cases from India, Malaysia, Brazil, and the Arab region, to inform design choices, scaling strategies, and policy decisions that support inclusive, resilient, and interoperable digital payment systems across Africa.

BOX 1: METHODOLOGY

This report draws on two primary research streams. The first is structured desktop research reviewing publicly available documentation on IPS design, implementation, and governance across African and global markets, including AfricaNenda's annual SIIPS reports, World Bank fast payments guidance and country assessments, IMF departmental papers on digital payment innovations in Sub-Saharan Africa, central bank policy documents and national payment system strategies, and published case studies on individual IPS deployments. Country cases examined include Nigeria, Rwanda, Ghana, Tanzania, Kenya, South Africa, Egypt, Malawi, The Gambia, Brazil, India, and Malaysia, among others.

The second stream is a programme of key informant interviews conducted between March and April 2026, covering four stakeholder categories: central banks and regulators, IPS operators and technology providers, development partners and multilateral institutions, and regional and global advocacy organisations. Interviews followed a structured discussion guide tailored to each institution's role in the IPS ecosystem.

The report is structured in six chapters:

- 1 | **CHAPTER 1:** Introduction
- 2 | **CHAPTER 2** provides a snapshot of IPS implementation across AFI African member countries, covering both domestic systems and the regional schemes that extend connectivity across the continent.
- 3 | **CHAPTER 3** introduces the four dimensions of IPS design (governance and ownership, functional scope and use cases, infrastructure and technology, and financing and cost structure), examines the trade-offs and interdependencies each involves, and analyses the six drivers reshaping those dimensions: ambition and public value, sustainability, political economy and regional integration, cybersecurity and operational resilience, talent and institutional capacity, and future-proofing.
- 4 | **CHAPTER 4** maps the landscape of actors shaping IPS development in Africa, examining the interests, incentives, and influence of each stakeholder group and how these shift across the four stages of the IPS lifecycle.
- 5 | **CHAPTER 5** synthesizes the analysis into five strategic choices facing African policymakers, sets out four future pathways for IPS development, and offers a set of strategic considerations to inform the next phase of IPS design and governance across the continent. A scenario-based decision framework in the Appendix translates these considerations into practical design guidance organised by country context.
- 6 | **CHAPTER 6** looks forward to the next five years, identifying five emerging trends shaping IPS development across AFI African members: cross-border interlinking, expanding functional scope, public-private collaboration, artificial intelligence in fraud defence, and the regulation of central bank digital currencies and stablecoins. For each trend, it sets out the opportunity it creates and the policy consideration it raises for central banks, regulators, and IPS operators.

KEY POLICY TAKEAWAYS

1

25 AFI members now run a national IPS and four more access instant payments through BCEAO's PI-SPI, bringing live coverage to 31 of 39 institutional members. Focus for those already live has shifted from establishment to scaling adoption, interlinking with peers, and sustaining the infrastructure.

2

IPS pathways across members diverge widely by market size, institutional capacity, and policy priorities. Benchmarking against peer experience informs but does not resolve national strategy; the questions of national positioning, alignment, integration ambition, and capability retention must be answered domestically.

3

Regional platforms (WAEMU's PI-SPI, CEMAC's GIMACPAY, SADC's TCIB, and PAPSS as the continental settlement layer under AfCFTA) extend IPS reach across borders. Members should plan cross-border connectivity from the outset of domestic design, and AFI is well placed to strengthen peer exchange between central banks in the same regional bloc and to convene standards alignment work across blocs.



2 THE STATE OF IPS IMPLEMENTATION ACROSS AFI MEMBER COUNTRIES

The landscape of IPS across AFI African members is evolving rapidly, reflecting a shift toward interoperable infrastructure and expanded digital financial inclusion.

31

As of August 2026, 31 of AFI's 39 African members have live instant payment systems.

Of the 31 live members, 25 country members operate a national IPS, four (Côte d'Ivoire, Niger, Senegal, and Togo) access instant payments through the shared platform of the West African Economic and Monetary Union (WAEMU), and both regional central bank members, the Central Bank of West African States (BCEAO) and the Bank of Central African States (BEAC), operate live regional systems serving their currency unions (see table below).⁷

In several members, multiple live IPS of different types operate in parallel. Ghana, for example, runs GhIPSS Instant Pay (a cross domain IPS) alongside Mobile Money Interoperability (a mobile money IPS), and South Africa operates PayShap and Real-Time Clearing. Some of these systems are interoperable, while others are not yet connected, underscoring the policy value of moving towards fully interoperable, cross-domain IPS for greater efficiency, inclusion and integration.

EMERGING IPS DEVELOPMENT JOURNEYS ACROSS AFI AFRICAN MEMBERS

AFI members across Africa are increasingly converging around instant payment infrastructure as a foundational component of inclusive digital financial systems. However, countries are progressing at different speeds, pursuing different implementation models, and responding to distinct national priorities and market conditions.

While some members have operated IPS for several years and are increasingly focused on interoperability, value-added services, and cross-border connectivity, others remain focused on establishing foundational infrastructure, strengthening ecosystem participation, and expanding access to instant payments.

Viewed through an IPS development journey lens, AFI members can be broadly understood as occupying different stages of implementation and evolution. These stages reflect where countries currently sit in their IPS journey rather than a ranking of progress or performance. Countries may move between stages over time as systems mature, use cases expand, interoperability deepens, and regional or cross-border integration objectives evolve.

⁷ BCEAO and BEAC are counted as members in their own right, the four WAEMU countries are counted individually as AFI country members with direct participation, and CEMAC states are represented institutionally through BEAC.

TABLE 1: IPS DEVELOPMENT JOURNEY STAGES ACROSS AFI AFRICAN MEMBERS⁸⁹

NO ACTIVE PLANS	PLANNING & DESIGN	UNDER DEVELOPMENT	RECENTLY LAUNCHED	OPERATIONAL & OPTIMISING	ESTABLISHED & EXPANDING
No active implementation is currently underway	Early-stage strategy, feasibility assessment and design activities	IPS under procurement, implementation, pilot or testing phases	Newly implemented IPS focused on onboarding and scaling usage	Operational IPS focused on adoption, ecosystem participation and service expansion	Mature domestic IPS with focus on interoperability, innovation and cross-border connectivity
 AFI MEMBERS Seychelles	 AFI MEMBERS Botswana, DR Congo, Mauritania, Sao Tome and Principe, Sudan	 AFI MEMBERS Comoros, Namibia	 AFI MEMBERS Burundi (BurundiPay), Liberia (Pay Na-Na), Mozambique (METIX), and Guinea (NimbaPay)	 AFI MEMBERS The Gambia (Gamswitch), Lesotho, Madagascar, South Africa, Tunisia, Uganda, (Cote d'Ivoire, Niger, Senegal, Togo)	 AFI MEMBERS Egypt, Ghana, Mauritius, Morocco, Kenya, Nigeria, Rwanda, Tanzania, Zambia, Zimbabwe, Angola, Eswatini, Malawi, Mozambique, Sierra Leone, Somalia

The IPS development journey is not necessarily linear. Countries may pursue different pathways depending on resources, market structure, policy priorities, institutional capacity, regional integration opportunities, and the availability of technology and implementation partners. Furthermore, IPS are **significantly expanding their reach across** AFI African countries. In late 2025 and 2026, four new domestic IPS went live in Mozambique, Liberia, Burundi, and Guinea, representing a significant step toward accessible, instant payments and more integrated national financial ecosystems (see box 2).

BOX 2: METHODOLOGY



MOZAMBIQUE

In March 2026, the Banco de Moçambique launched METIX, a central bank-led instant payment platform operated by the Interbank Society of Mozambique (SIMO). Built on SIMO's existing infrastructure, METIX adds instant bank-to-bank transfers to a system where wallet-to-wallet and wallet-to-bank transfers already existed.¹⁰ The system operates 24/7, 365 days a year, via internet banking, mobile applications, and USSD, without requiring internet connectivity or mobile data. Individual initiated interbank transfers are free of charge, while businesses are subject to institutional tariffs, supporting digitalisation, efficiency, and financial inclusion in Mozambique's payment system.¹¹

⁸ IPS were classified as Established and Expanding or Operational and Optimising based on the 2025 SIIPS Inclusivity Spectrum (available [here](#)). IPS rated Mature or Progressed were categorised as Established and Expanding, while those rated Basic or Not Ranked were categorised as Operational and Optimising.

⁹ Live via BCEAO's PI-SPI

¹⁰ Stakeholder Interviews, 2026

¹¹ Banco de Moçambique, 2026. Available [here](#)

BOX 2: RECENT INSTANT PAYMENT SYSTEM LAUNCHES



LIBERIA

In 2025, the Central Bank of Liberia launched the Inclusive Instant Payment System known as PayNaNa. Powered by Mojaloop and implemented in collaboration with the Mojaloop Foundation, ThitsaWorks, and the AfricaNenda Foundation, the platform enables interoperable real-time transfers across banks, mobile money operators, and other financial service providers, connecting Lonestar Cell MTN and Orange Money Liberia.¹² The system currently supports P2P transfers and G2P payments, with a full production version, funded by the World Bank and programme-managed by Genesis Analytics, now underway to extend the platform's use case coverage. By linking bank accounts and mobile wallets on a single infrastructure, the system aims to reduce payment fragmentation, accelerate digital transactions, and support the country's transition toward a more inclusive and cashless financial ecosystem.¹³



BURUNDI

The Banque de la République du Burundi launched the national instant payment system called BurundiPay in April 2026, with support from the Project to Support the Foundations of the Digital Economy (PAFEN) to modernise the country's financial sector. Built on ISO 20022, the platform enables real-time payments and fund transfers 24 hours a day, seven days a week from bank accounts and mobile wallets, while connecting commercial banks, microfinance institutions, and payment service providers within a single interoperable network. To ensure broad accessibility, the system works on both smartphones and basic mobile phones via USSD, making it usable even in a context of low internet penetration and extending financial services to underserved and rural populations.

BurundiPay also complements existing infrastructure such as ACH, RTGS, and the national payment switch, reinforcing the country's payments architecture while supporting policy goals to reduce reliance on cash and expand financial inclusion.¹⁴



GUINEA

The Central Bank of the Republic of Guinea (BCRG) launched NimbaPay in July 2026, implemented by Guinéenne de Monétique (GuiM) with strategic and technical support from the AfricaNenda Foundation. Built on the Mojaloop Foundation's open-source platform, NimbaPay enables instant, secure, and interoperable payments between banks, electronic money institutions, and microfinance institutions, allowing individuals and businesses to transfer money seamlessly regardless of where they hold their account. Upcoming phases will extend the platform to payments to public administrations and cross-border transactions, supporting Guinea's wider digital transformation ambitions under its Simandou 2040 programme.¹⁵

¹² Mojaloop Foundation, 2025. Available [here](#)

¹³ Central Bank of Liberia, 2025. Available [here](#)

¹⁴ Banque de la République du Burundi, 2026. Available [here](#); Ecofin Agency, 2026. Available [here](#)

¹⁵ AfricaNenda Foundation. Available [here](#)

REGIONAL INSTANT PAYMENT SYSTEMS LIVE ACROSS AFI AFRICAN MEMBERS

Beyond the domestic systems operating across AFI African member countries, four regional IPS are currently active as of August 2026, covering different parts of the continent (see table below). GIMACPAY supports the Economic and Monetary Community of Central Africa (CEMAC), PI-SPI operates across the WAEMU, TCIB is implemented within the Southern African Development Community (SADC), and PAPSS provides a pan-African cross-border payment infrastructure under the African Continental Free Trade Area (AfCFTA), with participation expanding across countries.

At the same time, three regional IPS are in development within the Common Market for Eastern and Southern Africa (COMESA) region, East African Community (EAC), and the Economic Community of West African States (ECOWAS), pointing to continued expansion of cross-border regional payment integration. Increasingly, the evolution of IPS in Africa extends beyond domestic interoperability objectives, with countries positioning themselves within broader regional, continental and emerging global payment ecosystems.

Beyond the continent, several African countries are already participating in or exploring connectivity with external payment infrastructures and settlement networks. Examples include participation in Buna, the

TABLE 2. REGIONAL AND CROSS-BORDER INSTANT PAYMENT SYSTEMS

ESTABLISHED & EXPANDING	OPERATIONAL & OPTIMISING	UNDER DEVELOPMENT
GIMACPAY  REGION/SCOPE CEMAC (Central Africa) PARTICIPATING COUNTRIES¹⁶ Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon, Republic of Congo	PI-SPI (Plateforme Interopérable du Système de Paiement Instantané)  REGION/SCOPE West Africa (WAEMU) PARTICIPATING COUNTRIES Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo	DRPP (Digital Retail Payments Platform)  REGION/SCOPE Eastern & Southern Africa (COMESA) PARTICIPATING COUNTRIES Pilot: Kenya, Egypt, Zambia, Rwanda, Malawi and Uganda (planned expansion to COMESA members)
PAPSS (Pan-African Payment and Settlement System)  REGION/SCOPE Continental-wide (AfCFTA) PARTICIPATING COUNTRIES Djibouti, The Gambia, Ghana, Guinea, Kenya, Liberia, Malawi, Nigeria, Rwanda, Sierra Leone, Uganda, Zambia, and Zimbabwe. Upcoming: Algeria, Burundi, Comoros, Egypt, Libya, Morocco, Somalia and Tunisia.¹⁷	TCIB (Transactions Cleared on an Immediate Basis)  REGION/SCOPE Southern Africa (SADC) PARTICIPATING COUNTRIES South Africa, Namibia, Zambia, Zimbabwe, Lesotho, Eswatini, Botswana (and broader expansion planned)	Regional IPS  REGION/SCOPE East Africa (EAC) PARTICIPATING COUNTRIES Pilot: Tanzania, Rwanda (planned expansion to EAC region)
Buna (Arab Monetary Fund)  REGION/SCOPE Arab region (cross-regional) PARTICIPATING COUNTRIES Egypt, Morocco, Tunisia (plus broader Arab region participants)	7 REGIONAL SYSTEMS 3 ESTABLISHED & EXPANDING 2 OPERATIONAL & OPTIMISING 2 UNDER DEVELOPMENT, WITH PILOTS	EPSS (ECOWAS Payments and Settlement System)  REGION/SCOPE West Africa (ECOWAS) PARTICIPATING COUNTRIES Ghana, Nigeria, Sierra Leone, The Gambia, Guinea (and broader ECOWAS rollout planned)

¹⁶ AFI member countries participating in regional IPS are highlighted in bold

¹⁷ Pan-African Payment and Settlement System (PAPSS), April 2026. Available [here](#)

cross-border payment platform of the Arab Monetary Fund connecting North African and Arab markets, as well as emerging collaborations involving the Pan-African Payment and Settlement System (PAPSS), the China Interbank Payment System (CIPS), and private-sector initiatives aimed at strengthening Africa-Asia payment corridors.

Partnerships involving institutions such as Afreximbank, Standard Bank, Ecobank Group and YeePay illustrate growing interest in expanding payment interoperability beyond Africa's borders to support trade, remittances and economic integration.

These developments suggest that African IPS strategies are increasingly being shaped not only by domestic payment modernisation priorities, but also by broader ambitions related to regional integration, continental trade under the AfCFTA, and participation in an increasingly interconnected global payments landscape.

African members of the AFI network are advancing toward integrated, interoperable payment systems, with instant payment infrastructure rapidly becoming a core component of national digital financial systems. Most members now operate domestic IPS and increasingly rely on regional platforms, enabling real-time transactions that reduce dependence on the US dollar for regional trade, lower costs, speed settlements, enhance transparency, and promote financial inclusion, regional trade, and economic resilience.

These developments underscore that IPS implementation is no longer solely a technology or infrastructure decision. Increasingly, AFI members are making strategic choices regarding ecosystem participation, interoperability models, governance arrangements, regional integration pathways and long-term sustainability. As countries continue to modernise their payment systems, understanding the broader forces shaping IPS development; including technological, institutional, commercial and geopolitical dynamics, becomes increasingly important.

The following chapter explores these drivers of change and the emerging trends influencing the future evolution of IPS across Africa.

EMERGING IPS DEVELOPMENT PATHWAYS IN AFRICA

Across Africa, IPS implementation is occurring through several distinct pathways. These pathways influence implementation speed, ecosystem structure, sustainability considerations and future interoperability choices. Common pathways observed among AFI members include:

TABLE 3. IPS DEVELOPMENT PATHWAYS

PATHWAY	DESCRIPTION
Central Bank-Led	Central bank drives design, governance and implementation
Industry-Led	Financial industry or payment operators lead implementation
Open-Source	Solutions based on platforms such as Mojaloop
Vendor-Led	Commercial technology providers drive implementation
Regional Platform Integration	Countries access IPS systems through regional infrastructures
Hybrid Models	Combination of more than one pathway, i.e., vendor led with open-source, or domestic and regional approaches

Recognising these pathways is important because governance and ownership structures, technology choices, funding arrangements and ecosystem actors often differ significantly between models.

STRATEGIC CONSIDERATIONS FOR POLICYMAKERS

The rapid expansion of IPS across Africa raises several strategic questions for policymakers:

- Where does our country currently sit within the African IPS landscape?
- Is our current IPS model aligned with our long-term digital financial infrastructure objectives?
- What level of domestic, regional and continental integration should our payment ecosystem pursue?
- What capabilities, partnerships and policy choices will be required to advance our country's IPS development journey?
- How can national IPS investments support broader goals related to financial inclusion, regional trade and digital transformation?

KEY POLICY TAKEAWAYS

1

31 of AFI's 39 African member institutions have live IPS as of August 2026, with seven more developing systems; the collective centre of gravity has moved to scaling, interlinking, and sustaining infrastructure rather than establishing it.

2

Regional platforms, WAEMU's PI-SPI, CEMAC's GIMACPAY, SADC's TCIB, and PAPSS, extend IPS reach across borders and should be planned into the design of domestic systems from the outset.

3

IPS pathways across members diverge widely by market size, institutional capacity, and policy priorities; benchmarking informs but does not resolve strategy, and the questions of national positioning, alignment, integration ambition, and capability readiness must be answered domestically.

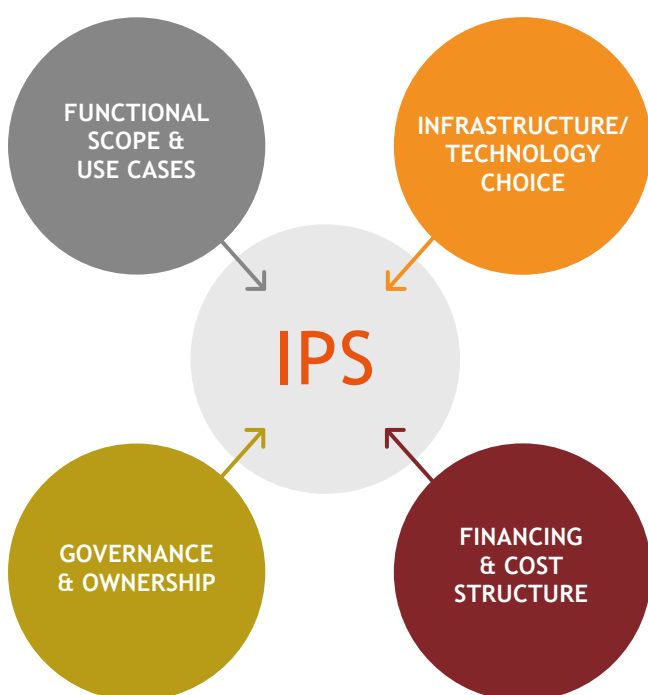
3

DRIVERS OF CHANGE AND IPS DESIGN CHOICES: A DECISION FRAMEWORK FOR POLICYMAKERS

The design of an IPS reflects a set of deliberate policy and institutional choices that shape how the system is governed, who can participate, how it functions, and how it is financed.

In practice, countries take different approaches across four key dimensions: governance and ownership, functional scope and use cases, infrastructure and technology, and financing and pricing structures (see figure 1). These choices are influenced by regulatory frameworks, market structures, and financial inclusion priorities, and they play a central role in determining how effectively the system supports interoperability, expands access, and meets the needs of a diverse range of users.

FIGURE 1. IPS DESIGN DIMENSIONS



These design choices carry long term implications for system performance, adoption, and sustainability. They also introduce important trade-offs between control and flexibility, speed of implementation and future adaptability, as well as cost recovery and affordability for end users. Understanding these choices, and the trade-offs each involves, is the prerequisite for building systems that are resilient, inclusive, and sustainable over time.

3.1 DRIVERS OF CHANGE

The rapid expansion of IPS across Africa is being shaped by a combination of policy priorities, market developments, technological innovation, and broader economic and geopolitical trends. While countries face different starting points and institutional realities, a number of common drivers are influencing how IPS are designed, implemented, governed, and scaled.

1

First, **financial inclusion** remains a primary driver of IPS development across many AFI member countries. Policymakers increasingly view interoperable instant payment infrastructure as a foundational enabler of affordable, accessible, and inclusive digital financial services capable of reaching underserved individuals, businesses, and communities.

2

Second, **regional trade and economic integration** are creating growing demand for interoperable payment systems that facilitate faster, cheaper, and more transparent cross-border transactions. Initiatives such as the African Continental Free Trade Area (AfCFTA), PAPSS, and regional payment integration programmes are encouraging countries to consider not only domestic interoperability, but also how national infrastructures connect to wider regional and continental ecosystems.

3

Third, **the emergence of Digital Public Infrastructure (DPI)** is reshaping expectations around payment system design. Increasingly, IPS are being considered alongside digital identity, data exchange, and digital government platforms as part of broader national digital transformation strategies.

4

Fourth, **sustainability considerations** are becoming increasingly important. As countries move beyond initial implementation, attention is shifting toward long-term operational viability, cost recovery, institutional capacity, and reducing dependence on external funding or technical assistance.

5

Fifth, **sovereignty and strategic autonomy** are becoming more prominent considerations in IPS decision-making. Central banks are increasingly evaluating the implications of technology ownership, vendor dependency, data governance, operational control, and long-term flexibility when selecting infrastructure and implementation models.

6

Finally, **advances in technology, including open-source platforms, cloud infrastructure, API-based architectures, artificial intelligence, and emerging forms of digital public infrastructure**, are expanding the range of options available to policymakers while simultaneously introducing new choices and trade-offs.

Together, these drivers which rarely operate independently are reshaping how countries approach IPS development. They are often advanced, funded, enabled, or influenced by a diverse ecosystem of public, private, regional, and international actors whose interests and incentives can shape IPS outcomes in different ways.

The sections that follow examine the key dimensions through which these strategic considerations are translated into practical design and implementation decisions.

3.2 THE DIMENSIONS OF IPS DESIGN

3.2.1 GOVERNANCE AND OWNERSHIP

Governance and ownership determine **who controls the IPS, who sets and enforces scheme rules, and whose interests shape the system's evolution over time**. The central design question is not which model is superior in the abstract, but which trade-off a central bank is willing to accept. Models that vest primary authority in the central bank preserve policy control and inclusion objectives but tend to create operational capacity constraints and can slow decision-making as the system scales. Models that distribute authority across commercial participants gain operational agility and private sector investment, but risk subordinating inclusion to revenue priorities as commercial interests consolidate.

In practice, **most African IPS sit between these poles: the central bank retains regulatory authority while a separate entity, publicly or privately or jointly owned, handles operations**. Clearly defining roles and accountability at the outset is essential to the effectiveness of these hybrid arrangements;¹⁸ where this is missing, mandates overlap and instructions conflict.¹⁹

The choice of legal form reinforces this dynamic. Systems operated within the central bank benefit from strong policy alignment and streamlined oversight but may face constraints in procurement, staffing, innovation, and commercial flexibility. Separately incorporated entities can offer greater operational agility and technical specialisation at the cost of creating a principal-agent relationship between the central bank and the operator that requires active management.

A further design consideration is whether to separate scheme governance, which covers rule-setting and strategic direction, from operations, which covers technical execution. This separation can strengthen clarity and accountability but adds a coordination layer that requires sufficient institutional capacity to manage effectively. The Gambia's National Payment Systems Advisory Committee illustrates how a structured engagement mechanism can support this coordination across a multi-stakeholder environment (see box 3).

¹⁸ World Bank, 2025. Available [here](#)

¹⁹ Stakeholder Interviews, 2026

BOX 3: THE GAMBIA'S NATIONAL PAYMENT SYSTEMS ADVISORY COMMITTEE (NPSAC)



To strengthen payment system governance, The Gambia established the **National Payment Systems Advisory Committee (NPSAC)** in 2026. The committee brings together representatives from the Central Bank of The Gambia, Gamswitch, the Gambia Revenue Authority, relevant government ministries, the Information Technology Association of The Gambia, and consumer protection organisations, supported by a broader group including the Gambia Bankers' Association, the Chamber of Commerce, the Financial Intelligence Unit, Gambia Information Technology Agency (GICTA), Public Utilities Regulatory Authority (PURA), and other ecosystem participants.

Through structured stakeholder engagement, the National Payment Systems Advisory Committee supports coordinated decision-making on policy direction, interoperability, risk management, and consumer protection. Its core aim is to ensure that key payment system decisions remain grounded in the public interest. This illustrates how governance mechanisms, beyond technical infrastructure, play a critical role in aligning diverse stakeholders and shaping system outcomes.²⁰

STRATEGIC STAKEHOLDER CONSIDERATIONS

Governance arrangements are rarely shaped by central banks alone. Depending on the country's context, governance structures may be influenced by commercial banks, payment system operators, development finance institutions, technical assistance providers, regional economic communities, and technology partners. While these actors often contribute expertise, funding, or implementation support, they may also hold differing interests regarding ownership, control, participation, commercial sustainability, and policy priorities. As a result, governance design often reflects the interaction between national policy objectives and the incentives of the broader ecosystem supporting implementation.

3.2.2 FUNCTIONAL SCOPE AND USE CASES

Functional scope and use cases define what an IPS is designed to enable. This includes the types of transactions it supports, the categories of institutions and users that can initiate and receive payments, and the extent to which the system supports use cases beyond basic person-to-person (P2P) transfers.

These design choices are not merely technical considerations; they directly influence how effectively an IPS advances financial inclusion, ecosystem participation, and broader economic objectives. The functional scope of an IPS shapes who benefits from the system, how widely it is adopted, and the extent to which it becomes embedded in everyday financial and commercial activity.

Systems that initially limit participation to commercial banks and prioritise only person-to-person transfers may improve convenience for existing banked users but often have a narrow inclusion impact in markets where significant portions of the population rely on mobile money or other non-bank financial services.

In contrast, systems that incorporate non-bank providers and support broader use cases such as merchant payments, government payments, bill payments, or cross-border transactions from the outset are often better positioned to drive wider adoption, deepen usage, and strengthen the role of instant payments within the real economy. The sequencing and prioritisation of use cases therefore reflect broader strategic and

²⁰ Institute for Inclusive Digital Africa, 2026. Available [here](#)

policy choices, with jurisdictions balancing early adoption objectives against longer-term goals for interoperability, ecosystem integration, and inclusive digital economic development.

PARTICIPATION MODELS

Participation models determine who can connect to the system, under what conditions, and at what cost. IPS can be categorised by the institutions they accommodate: cross-domain systems enable full interoperability across banks, mobile money operators, microfinance institutions, non-bank financial institutions, and fintechs within a single integrated infrastructure; bank-only systems restrict access to licensed deposit-taking institutions; and mobile money systems limit participation to mobile money providers.

Allowing non-bank participation is critical to reaching underserved populations, since mobile money operators, MFIs and fintechs typically hold the agent networks and customer relationships that extend furthest into rural and peri-urban areas. Beyond scheme rule eligibility, the practical terms of participation, including settlement collateral requirements, sponsorship and reconciliation dynamics, technical

integration standards, and liability frameworks, determine whether non-bank inclusion is real or merely nominal. Systems that admit non-banks in principle but impose integration costs or collateral obligations that smaller institutions cannot meet achieve the appearance of inclusion without its substance.

USE CASES

Use cases are central to an IPS's adoption, maturity, and economic impact, and their prioritisation is equally important, with governance structures playing a key role in shaping how these use cases are sequenced and implemented. Across AFI African IPS deployments, systems typically launch with a limited set of use cases, most commonly person-to-person (P2P) transfers, to drive early adoption. Person to merchant (P2M) payments are then introduced to support scale, followed by additional use cases such as government and cross-border payments over time (see table 4).

Overall, these examples show how central banks and industry stakeholders balance early adoption with long term objectives, allowing IPS to evolve from basic transfer systems into foundational infrastructure for broader digital economic activity.

TABLE 4. IPS DEVELOPMENT PATHWAYS

USER TYPE		FEATURES
P2P i. MMI (W2W) ii. (W2A/A2W)	Individual customer and sole trader	- Send and receive money instantly - Wallet-to-wallet and wallet-to-account transfers - Pre-approved and recurring authorised payments
	Individual customer to business or institution	- Bill payments - Utilities and subscription payments - School fees, healthcare, insurance, and service payments - Direct debit and recurring payments
P2M	Individual customer to merchant	- Merchant payment - QR code payments - Retail and e-commerce purchases - In-store and digital commerce transactions
B2P	Business to person	- Pre-authorised business (bulk) payments - Salary and payroll payments - Supplier and gig economy disbursements - Refunds and insurance claims

B2B	Business to business	• Supplier payments, invoice settlement, and commercial transfers
G2P	Government agencies to person	• Government pension, grants, salaries, vendor payments • Emergency relief, social benefits and subsidy payments
G2B	Government to business	• Procurement and vendor payments, grants, reimbursements and other commercial disbursements
P2G	Individual customer to government agency	• Pay taxes, fees, penalties, licenses, permits, and public or utility services payments
Cash-in at merchant	Individual customer cash-in at merchant or agent	• Merchant payment • QR code payments • Retail and e-commerce purchases • In-store and digital commerce transactions
Cash-out at merchant	Individual customer cash-out at merchant or agent	• Cash-out providing mobile number (short form alias) • Cash-out in scanning merchant QR code
ATM withdrawal	Individual customer withdrawal at ATM	• Cardless ATM withdrawals • Individual withdrawal from ATM using short form alias QR code or OTP
Cross-border payments	Individuals or businesses sending or receiving funds internationally	• International remittances • Regional and cross-border transfers • Cross-border merchant and trade-related payments

Wider adoption of instant payments in Africa is supported by expanding P2M, G2P, and P2G use cases. While P2P transfers remain foundational across nearly all systems, growing P2M payments are enabling everyday commerce through broader merchant acceptance and consumer engagement.

The Indian experience with UPI provides a compelling illustration of this trend: P2M transactions grew significantly faster than P2P, driven by the National Payments Corporation of India (NPCI)'s introduction of a dedicated Peer-to-Peer Merchant (P2PM) category that brought informal micro-merchants onto UPI under simplified onboarding and capped monthly inward limits.²¹

99% In the low-value bucket (below ₹500), P2M volumes surged from 2.92 billion in CY-2019 to 91.13 billion²² in CY-2024, recording a five-year CAGR of 99%, reflecting widespread use for small retail purchases and bill payments.

²¹ National Payments Corporation of India (NPCI), Circular NPCI/UPI/OC-70/2019-20, 2019.

²² Figures converted from the original Indian numbering convention (crore) to international units for consistency: 1 crore = 10 million.

Similar momentum is visible in medium and high-value transactions, signalling rising merchant and consumer trust in using UPI for routine and higher-value commercial transactions.²³

Government disbursements are also becoming more prominent across IPS in AFI African member countries. Eight countries out of 25 African countries including Egypt, Ghana, Kenya, Morocco, Nigeria, Tanzania, Tunisia and Uganda enable G2P use cases, facilitating instant disbursements such as salaries, pensions and social transfers.²⁴ Similarly, nine countries, the same as above plus South Africa, support P2G payments for taxes, fees and utilities, further embedding instant payments into government service delivery.

P2G and G2P use cases are not only central to adoption and long-term IPS sustainability, but are also meaningful revenue streams for IPS operators, earning much higher fees compared to P2P or P2M. G2P drives large-scale activation and liquidity into digital accounts, while P2G reinforces habitual, recurring usage. By embedding instant payments into essential public financial flows, IPS transitioned from optional transfer mechanisms to core digital infrastructure, accelerating adoption and strengthening long-term ecosystem sustainability.

EXPANDED USE CASES AND VALUE-ADDED SERVICES

Beyond the core use cases outlined above, many IPS are introducing and increasingly supporting additional functionalities and overlay services that enhance transaction efficiency, broaden participation, and deepen ecosystem maturity. These capabilities support wider adoption by enabling every-day transactions, improving convenience and user experience (see table 5).

STRATEGIC STAKEHOLDER CONSIDERATIONS

The scope and sequencing of IPS use cases are often influenced by a diverse set of stakeholders. Governments may prioritise G2P and P2G payments to improve public service delivery, commercial institutions may advocate for use cases that support transaction growth and revenue generation, while development partners and financial inclusion organisations frequently encourage broader participation and low-value transaction capabilities. The resulting use case portfolio therefore reflects not only technical feasibility, but also the priorities and incentives of the institutions shaping the ecosystem.

TABLE 5. EXPANDED USE CASES

EXPANDED USE CASE	DESCRIPTION
Account Verification	Validates recipient details in real-time before payment, reducing errors and fraud.
Bulk Payments	Enables multiple instant payments from a single upload, improving efficiency for salaries, transfers, and vendor payments.
Proxy Addressing	Allows payments using simple identifiers (e.g., phone, email, ID) instead of account numbers, improving ease of use.
Virtual Accounts / Collection Accounts	Enables the creation of dedicated or temporary account identifiers for specific users, payments, or purposes, improving collections, reconciliation, traceability, and support for digital commerce, P2M, and G2P or institutional payment flows.
Request-to-Pay	Let payees request payments that payers can approve instantly, supporting bills and recurring transactions.
Hybrid Models	Combination of more than one pathway, i.e., vendor led with open-source, or domestic and regional approaches

²³ Reserve Bank of India, 2024. Available [here](#)

²⁴ AfricaNenda Foundation, 2025. Available [here](#)

3.2.3 INFRASTRUCTURE/TECHNOLOGY CHOICE

The selection of IPS technology software is one of the most pivotal strategic decisions facing central banks, industry led schemes, and public private arrangements. This dimension also encompasses the settlement and liquidity mechanics underpinning the switch, including the choice between real-time and deferred net settlement models, and the institutional setup used to connect to central bank settlement infrastructure, since these determine both the wholesale rails the technology platform must interface with and the liquidity management burden placed on participants.²⁵ Beyond shaping implementation costs and deployment timelines, the chosen model determines cost structures, governance structures, regulatory flexibility, cybersecurity accountability, and the extent of long-term national control over critical payment infrastructure.

These decisions create lasting path dependencies. Technology choices made at the build stage typically persist for a decade or more, locking systems into specific vendors, standards, and operating models that constrain flexibility with what is operationally and financially feasible over time.

Three implementation models are commonly observed:

1 | OPEN-SOURCE MODEL

The open-source model is based on software distributed under an open license, allowing full access to the source code without licensing fees. The IPS operator deploys and governs its own customised instance. An example of an open-source IPS software is Mojaloop, an open-source real-time payment switch designed to enable interoperable digital financial

BOX 4: LIBERIA'S OPEN-SOURCE APPROACH



Liberia's national IPS, PayNaNA, demonstrates what the open-source model can deliver when the conditions for its success are deliberately built rather than assumed.²⁶ Acting on a presidential mandate to launch an IPS by Liberia's Independence Day, and with proprietary licensing alone estimated at USD 2 to 3 million, the Central Bank of Liberia selected Mojaloop and deployed it on cloud infrastructure to maximise speed of participant connectivity. The system went live on time and has maintained 100% uptime since launch, at a fraction of the cost a licensed vendor would have required.

The cost advantage is the most visible benefit but not the most significant one. By owning the infrastructure rather than licensing it, the CBL controls every decision about what the system does, how it evolves, and who can access it, without reference to a foreign vendor's roadmap, pricing, or service queue. Marcus Davis, Deputy Director of the Payment Systems Department, noted that even with unlimited time and resources, the sovereignty and operational performance of the open-source model would weigh heavily against returning to a proprietary alternative.

This sovereignty has not come without ongoing risks to manage. The CBL identified three: data sovereignty, over-dependence on the system integrator, and "over-customisation" that deviates too far from the core codebase to apply future community-issued updates.

Open-source therefore creates a distinctly different relationship with the broader technology ecosystem. Rather than depending on a single vendor for maintenance and enhancement, the CBL has built a layered support model: an internal technical team trained by the system integrator, ThitsaWorks, to take on integration of new participants and new use cases; and a cohort of local Liberian technology companies developed through the Mojaloop community's accelerator programme to provide ongoing in-country support. The system integrator is a launch partner, not a permanent dependency. Sustainability follows the same logic: with no licensing costs, the CBL keeps transaction prices low and pursues volume through government salary payments, mobile wallet tax collection, and regulatory mandates for digital payments at fuel stations and ports, building a self-sustaining revenue base without extracting it from end users.

²⁶ Stakeholder interviews, 2026

services across banks, mobile money providers, fintechs, and government programmes. Mojaloop has been adopted in several AFI countries including Liberia's PayNaNa, The Gambia's BANTABA2.0, and Rwanda's eKash (see box 4).

2

LICENSED VENDOR MODEL

The licensed vendor model involves procuring a commercial instant payment platform under a perpetual software license agreement. The vendor retains intellectual property ownership, while the central bank or national operator acquires the right to deploy and operate the system domestically such as Malawi's NatSwitch (see box 5).

BOX 5: LICENSED SOFTWARE BPC BANKING TECHNOLOGIES (BPC) AND MALAWI'S NATSWITCH



Malawi's financial system was cash-dominated and fragmented, with parallel systems (Malawi Interbank Transfer and Settlement System (MITASS), Automated Clearing House (ACH), Automated Teller Machine (ATM)/Point of Sale (POS) networks, and mobile money) limiting interoperability and the effectiveness of digital payments. Key constraints included batch-based interbank transfers, fragmented switching arrangements, limited bank-mobile money integration, weak governance in earlier initiatives (e.g., MALSWITCH), and unharmonised participation and pricing frameworks. To address these challenges, the Reserve Bank of Malawi led the establishment of NatSwitch as a participant-owned, interoperable retail switch under Reserve Bank oversight, supported by regulatory reforms, mandatory participation, unified scheme rules, and a cost-recovery model. Real-time capability was introduced through Instant Electronic Funds Transfers (IEFT) in 2022, enabling 24/7 retail payments and improving interoperability.

NatSwitch operates on licensed SmartVista software from BPC, providing real-time clearing and centralised switching with final settlement through MITASS. Combining participant-led domestic governance with vendor-supported technology and blended financing, the system has seen strong adoption driven by digital financial services uptake and improved interoperability.

Malawi's experience shows that the licensed model reliably delivers on its core promise: faster deployment, operational certainty, and SLA-backed vendor accountability that reduces implementation risk for central banks with constrained internal capacity. The structural cost becomes visible over time. Core architecture and product roadmap decisions remain under vendor control, meaning that upgrades occur on the vendor's schedule, customisations outside the original contract require paid change requests, and annual support fees represent a recurring obligation regardless of transaction volume performance. The central bank's negotiating leverage in contract renegotiations weakens progressively as integration deepens and switching costs rise. This model is most appropriate where rapid deployment and operational certainty are the primary constraints, and where the central bank has the contractual sophistication to negotiate exit provisions, source code escrow arrangements, and performance benchmarks before deployment rather than after.

²⁷ Reserve Bank of Malawi, Payment System Reports. Available [here](#)

²⁸ AfricaNenda, 2023. Available [here](#); World Bank, 2025. Available [here](#)

²⁹ Reserve Bank of Malawi, Payment System Reports. Available [here](#)

BOX 6: EGYPT'S INSTANT PAYMENT NETWORK - THE CASE FOR PROPRIETARY IN-HOUSE BUILD



The Central Bank of Egypt's Instant Payment Network (IPN) and its consumer front-end, InstaPay, show that a sovereign in-house IPS build can reach national scale without ceding control to external vendors.³⁰ Faced with fragmented legacy rails and unwieldy account numbers, the central bank benchmarked global alternatives, ran a structured SWOT analysis, and concluded that building in-house was the only option that preserved payment sovereignty. All components were developed locally and deployed on-soil rather than in the cloud, eliminating the risk that a vendor could dictate delivery timelines or interrupt operations.

The economics matched the strategic case. The Egypt Bank Company (EBC), the national switch operator, built the software with its own engineers at roughly one-tenth the estimated cost of licensing from an external vendor, funded entirely from EBC's existing revenue streams. That funding model allowed the network to launch without user fees and stay free for its first two and a half years, which drove aggressive adoption. Delivery philosophy reinforced the result: the team went live at around 80% of target functionality and iterated the architecture continuously to absorb volume surges. The network has since scaled to nearly 19 million users and 2.3 billion transactions.

The proprietary build now positions Egypt as a technology donor, not only a technology consumer. Many central banks in the region cannot afford IPS platforms, and those that can often face sovereignty risks when they rely on foreign vendors. EBC's codebase, hardened at Egyptian scale, offers a credible alternative: a homegrown system that peer jurisdictions can adopt without surrendering control of their core payment rails. What began as a domestic modernisation effort could become a regional export proposition.

3 | PROPRIETARY IN-HOUSE BUILD MODEL

The proprietary in-house model involves designing, developing, and operating the IPS entirely within the central bank or a designated national payment operator, with the institution owning the source code and intellectual property in full. The benefits of this model, and prerequisites for success, are illustrated through Egypt IPN's experience (see box 6).

To support decision making at the policy level, the three infrastructure models described above are compared around two core dimensions - financial and implementation implications and governance, flexibility and sovereignty implications.

Together, these dimensions clarify the fundamental trade-offs that central banks must evaluate when determining the most appropriate infrastructure model.

³⁰ Stakeholder interviews, 2026

TABLE 6. FINANCIAL AND IMPLEMENTATION COMPARISON OF IPS INFRASTRUCTURE MODELS

VARIABLE	OPEN-SOURCE	LICENSED SOFTWARE	PROPRIETARY BUILD
Upfront Cost (CapEx)³¹	Medium. No license fee, but requires investment in integration and hardware. CapEx is estimated at USD 2,415,500.	High. Significant one-time perpetual license fee plus hardware costs. CapEx is estimated at USD 5,651,500.	Medium. Funds the entire multi-year software development effort from scratch. CapEx is estimated at USD 2,225,044.
Ongoing Cost (OpEx)³²	Medium. Primarily staff costs. Optional support contracts. No license fees. OpEx is estimated at USD 336,048.	Medium-High. Recurring annual maintenance fees (15-20% of license) plus staff costs. Unpredictable change requests (approximately USD 80 000 per change request). OpEx is estimated at USD 445,848.	Medium. Driven entirely by the payroll for a large in-house technical team. OpEx is estimated at USD 169,848.
Total Lifecycle Cost³³	Medium. Lower operating costs, as major expenses are incurred at project initiation.	High. High annual CapEx and Opex, driven by annual fees and volume linked costs.	Low-Medium. Requires upfront investment to design and develop the system from scratch, recurring Opex potentially low, but dependent on internal structures and staff costs.
Commercial Terms	Favorable. No license fees or revenue share. Costs are for implementation and optional ongoing support contracts.	Fixed. Involves an upfront perpetual license fee plus a mandatory, recurring annual maintenance fee.	Internal. Operator retains all revenue with no vendor royalties and self-funds all development and maintenance.
Cost at Scale	Favorable. Costs do not automatically scale with transaction volume.	Predictable but constant. Annual maintenance fee is a fixed cost regardless of volume.	Most Favorable. After the initial build cost, per-transaction costs become very low.
Implementation Speed³⁴	Medium. Typically 9-15 months for customisation and launch.	Fast. A proven platform allows for a more streamlined 6-12 month deployment.	Slowest. A full greenfield build requires 18-60 months before go-live.

³¹ A full breakdown of CapEx can be found in the Appendix.

³² A full breakdown of OpEx can be found in the Appendix.

³³ Total Lifecycle cost calculations can be found in the Appendix.

³⁴ Implementation speed here refers to the time to build and deploy the platform under each technology or infrastructure choice, not the rollout of individual use cases.

TABLE 7: GOVERNANCE, SOVEREIGNTY, AND OPERATIONAL CONTROL COMPARISON

VARIABLE	OPEN-SOURCE	LICENSED SOFTWARE	PROPRIETARY BUILD
Governance & Control	Full. Control over system deployment and roadmap, with community input available as a supporting resource.	Shared. Day-to-day operations managed by the operator and core product roadmap controlled by the vendor.	Absolute. Control over all features, policies, and timelines.
Customisation	Unlimited. Full access to source code enables modification of any component to meet system requirements.	Medium. Core modifications require paid change requests and are subject to vendor-defined timelines	Unlimited. The system is designed and developed to fully align with national requirements.
Software Ownership	Full. Ownership of the customised codebase.	Limited. Usage rights are granted under license, while intellectual property remains with the vendor.	Full. Ownership of intellectual property and source code.
Vendor Lock-in & Exit Risk	Minimal. Exit costs are relatively low, with risks primarily related to knowledge transfer.	High. Exit is technically complex and financially costly, creating significant long-term dependency on the vendor.	None. Full independence from third-party vendors.
Talent Requirement	High. Requires strong in-house or partner technical capabilities, including development and DevOps expertise.	Medium. Requires a skilled team of system administrators to operate and maintain the system.	Very High. Requires a large, permanent, and multidisciplinary team with advanced technical expertise.

Across all three models, the core strategic trade-off reflects speed, cost, sovereignty, and institutional capacity. These **trade-offs include:**

- Open-source systems offer flexibility, sovereignty, and lower licensing costs but require strong technical capacity and governance.
- Licensed systems provide speed and reliability but introduce vendor lock-in and higher long-term costs.
- Proprietary builds deliver full control and independence but demand substantial investment, long timelines, and sustained technical expertise.

In addition to the three models discussed above, **sovereign-to-sovereign partnerships** are emerging as a new approach to developing national payment infrastructure, enabling governments and central banks to adopt and adapt digital public infrastructure (DPI). Given the nascent nature of this model and the limited information available in the public domain, it is not included in the comparative assessment above. However, the available insights and key trade-offs are outlined below.

4 | SOVEREIGN-TO-SOVEREIGN PARTNERSHIPS (THE CASE WITH NIPL)

In addition to open-source, licensed vendor, and proprietary in-house approaches, sovereign-to-sovereign partnerships are emerging as a distinct model for developing national payment infrastructure. Unlike traditional technology procurement arrangements, these partnerships typically extend beyond the deployment of payment technology and are often embedded within broader objectives related to digital public infrastructure (DPI), digital transformation, capacity building, economic cooperation, and strategic international partnerships.

Under this model, countries may adopt, adapt, or replicate proven digital infrastructure developed by another jurisdiction, potentially accelerating implementation timelines, reducing development costs, and benefiting from operational lessons learned at scale. At the same time, these arrangements introduce additional considerations that extend beyond technology selection alone. Policymakers may need to assess implications relating to technology transfer, domestic capability development, governance autonomy, long-term operational dependency, standards alignment, data governance, and the extent to which national priorities remain central to future system evolution.

As sovereign-to-sovereign technology partnerships become more common, they are increasingly being viewed not only as infrastructure deployment mechanisms, but also as instruments of digital cooperation, technology diplomacy, and ecosystem expansion. While such partnerships can provide significant benefits, their long-term success depends on ensuring that technology adoption is accompanied by meaningful localisation, institutional capacity development, and sufficient national ownership to support long-term sustainability and strategic autonomy.

India's NPCI International Payments Limited (NIPL) provides one of the most prominent examples of this emerging model. Through both interoperability arrangements and infrastructure partnerships, NIPL is expanding the reach of India's digital public infrastructure beyond its borders. Multiple African countries have enabled UPI merchant acceptance to facilitate payments by Indian travellers and users of RuPay cards. In parallel, India has signed Memoranda of Understanding with 23 countries including several African jurisdictions, including Sierra Leone, Tanzania, Kenya, Ethiopia, The Gambia, and Lesotho, to share elements

of the India Stack framework.³⁵ These partnerships extend beyond payment interoperability and create opportunities for adopting broader digital public infrastructure components, including digital identity, data exchange, and digital service delivery platforms.

While India currently provides one of the most visible examples of this model, sovereign-to-sovereign technology partnerships should not be viewed as being limited to a single country, technology platform, or implementation approach. As more jurisdictions develop mature digital public infrastructure and payment technologies, opportunities may emerge for the transfer, adaptation, or export of other sovereign-built solutions. For example, countries that have successfully developed proprietary national payment infrastructures may, over time, offer their technologies, operational expertise, and implementation experience to peer jurisdictions. This suggests that sovereign-to-sovereign collaboration may evolve into a broader ecosystem of technology exchange and digital cooperation, providing policymakers with a wider range of options beyond traditional vendor procurement models.

Namibia represents the first full-scale deployment of UPI infrastructure as the foundation for a national IPS and provides an early example of how sovereign-to-sovereign technology partnerships can be implemented in practice (see box 7).

³⁵ Government of India, Press Information Bureau, 2025. Available [here](#)

BOX 7: NAMIBIA AND INDIA - SOVEREIGN-TO-SOVEREIGN TECHNOLOGY PARTNERSHIP



Namibia is the first country in the world to adopt the full UPI technology stack developed by India's NIPL as the foundation for a national IPS.³⁶ The decision followed international benchmarking and a formal procurement process, with the UPI-based solution selected on the basis of its proven performance at scale, interoperability across banks and non-bank payment providers, and cost-effectiveness relative to proprietary alternatives. For a small economy with a fixed central bank budget and a clear mandate to connect banks and e-money providers on a shared, low-cost platform, the model offered a credible path to deployment that neither a proprietary licensed platform nor an in-house build could match on equivalent terms.

The partnership is being implemented by Instant Payment Namibia (IPN), a subsidiary established by the Bank of Namibia to operate the IPS at arm's length from the regulator. The platform has been adapted to local conditions, incorporating use cases not present in the original Indian context, including e-money cash-out at ATMs, G2P payment disbursements, and connectivity across Namibia's geographically dispersed population. To protect affordability, the Bank of Namibia has funded the core platform investment directly, preventing integration costs from being passed to end users. Sustainability measures under active development include transaction tax waivers and subsidised switching fees, being pursued in coordination with the Ministry of Finance.

Long-term dependency risk is managed through three contractual protections: source code ownership, which ensures the Bank is not permanently tied to NIPL for maintenance and enhancement decisions; a structured skills transfer programme, with daily training sessions between the Namibian technical team and NIPL already underway during user acceptance testing; and a five-year service level agreement that provides a defined safety net while internal capacity is built. IPN considers the primary risk of this model to be geopolitical rather than technical: the strategic direction of a foreign government's payment infrastructure could diverge from Namibia's domestic priorities over time. Source code ownership is the principal mitigation, but its adequacy will only be fully tested as the partnership matures.

As the first full-stack implementation of this model globally, Namibia's experience will be closely watched. Sovereign-to-sovereign technology adoption can accelerate deployment and reduce costs relative to proprietary alternatives, but it requires deliberate investment in localisation, institutional capacity, and ownership structures to deliver genuine long-term sovereignty rather than dependency in a different form.

³⁶ NPCI International Payments Limited (NIPL), 2024. Available [here](#)

BOX 8: UNDERSTANDING SOVEREIGNTY IN INSTANT PAYMENT SYSTEMS

The growing emphasis on sovereignty in payment system development reflects a broader shift in how countries view digital financial infrastructure. Historically, IPS decisions were often evaluated primarily on cost, functionality, and implementation timelines. Increasingly, policymakers are also considering questions of control, resilience, long-term autonomy, and strategic flexibility.

Sovereignty in the context of IPS is multidimensional and extends beyond technology ownership alone. It may include:

- **Technology sovereignty** - the ability to control, modify, maintain, and evolve the underlying payment infrastructure without excessive reliance on external parties.
- **Data sovereignty** - the ability to determine how payment data is stored, processed, accessed, and governed in accordance with national laws and policy objectives.
- **Operational sovereignty** - the ability to operate and maintain critical payment infrastructure independently and ensure continuity under changing commercial, technical, or geopolitical conditions.
- **Governance sovereignty** - the ability to retain decision-making authority over system rules, participation requirements, pricing frameworks, and future development priorities.
- **Financial sovereignty** - the ability to sustain and expand payment infrastructure without excessive dependence on external funding or commercial interests.

Sovereignty should not be viewed as a binary outcome. Countries may achieve high levels of sovereignty in some dimensions while remaining dependent in others. The appropriate balance will vary depending on national priorities, institutional capacity, market structure, and broader economic objectives.

STRATEGIC STAKEHOLDER CONSIDERATIONS

Technology choices are increasingly shaped by a growing ecosystem of actors operating at domestic, regional, and global levels. These include commercial vendors, open-source communities, system integrators, development partners, regional institutions, and sovereign technology providers. Each actor brings distinct objectives, capabilities, pricing models, licensing arrangements, commercial partnerships, and incentive structures, reflecting priorities that range from commercial returns and market expansion to financial inclusion, digital public infrastructure development, and strategic international partnerships. Understanding these motivations is becoming increasingly important as technology choices can create long-term dependencies, influence future interoperability options, and shape the extent of national control over critical payment infrastructure.

The choice of IPS technology model in AFI member countries is ultimately a strategic decision that must balance different dimensions of sovereignty alongside fiscal capacity, implementation timelines, and ecosystem needs. A fuller comparison with proprietary licensed, open-source, and in-house build models will be possible once the system has been operational long enough to assess total cost of ownership, governance performance, and the practical extent of domestic technical self-sufficiency.

STRATEGIC CONSIDERATIONS FOR POLICYMAKERS

- What level of technology sovereignty is appropriate for our national context?
- What dependencies could today's technology choices create over the next decade?
- How easily can the system support future use cases and interoperability requirements?
- What capabilities must be developed internally to reduce long-term reliance on external providers?
- How should technology decisions balance speed of deployment, cost, flexibility, and control?

3.2.4 FINANCING AND COST STRUCTURE

Financing and Cost Structure addresses how the IPS will fund the total lifecycle cost calculated above. This includes the sources of capital for development and operations, as well as the fee structures that determine who pays for transactions and how much. These choices shape whether the system can sustain low-cost access for underserved users while remaining financially viable, particularly as initial subsidies or development partner funding taper off.

An effective pricing model must balance two core objectives: driving widespread adoption, which typically favours low end user fees, and ensuring sustainability while maintaining incentives for PSP participation and innovation. This balance becomes more difficult as systems move from early stage, below cost pricing to a mature commercial model, where misalignment can create funding gaps and pressure to raise fees, potentially undermining affordability and slowing adoption.

Funding needs also evolve over time. The build phase is typically supported by different sources than steady state operations, with development funding covering system design, build or procurement, initial infrastructure, participant integration, and the operational runway before transaction revenues begin to contribute meaningfully to costs. The range of funding models available is detailed below.



CENTRAL BANK OR GOVERNMENT APPROPRIATION

In this model, the central bank funds the build from its own budget or receives a government appropriation for the purpose. This preserves full ownership and eliminates the conditionality that accompanies external funding. In practice, this model is rare, as IPS build costs are typically exceed what most African central bank budgets can absorb without crowding out other priorities. Where it does occur, typically in larger economies with well-capitalised central banks, it produces systems with the clearest governance and the fewest externally imposed design constraints. The trade-off is that without external accountability from funders, the design process is more susceptible to internal political pressures and the absence of external technical expertise.



DEVELOPMENT PARTNER GRANTS

Grant funding from multilateral development banks, bilateral donors, and specialist financial inclusion funders, including the Gates Foundation, the World Bank's PSDG, UNCDF, GIZ, FCDO, and others, is the most common development funding source for African IPS. Grants require no repayment and carry no interest cost, making them the most financially attractive source in principle. In practice, grant funding typically comes with programme objectives, reporting requirements, and implementation frameworks that reflect the funder's institutional priorities and may not always align perfectly with the operator's long-run design preferences. Where a single development partner provides the majority of development funding, the weight of that relationship in shaping design decisions can be significant, underscoring the importance of central banks maintaining a clear and independently developed policy mandate before entering funding discussions.



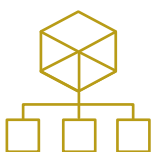
DEVELOPMENT PARTNER CONCESSIONAL LOANS

Concessional loans from the World Bank's IDA window, the African Development Bank, or bilateral development finance institutions carry below-market interest rates and long repayment periods, making them more affordable than commercial debt while preserving the government or central bank's ownership position. They typically carry less prescriptive conditionality than grants on operational design, though they may include policy reform conditions at the country level. The repayment obligation creates a financial discipline that grant funding does not, which can be beneficial for ensuring the operator develops a credible path to cost recovery. The risk is that loan repayment obligations that were manageable at design stage become burdensome if transaction volume growth is slower than projected, creating a fiscal pressure on the central bank that directly conflicts with maintaining low fees for financial inclusion purposes.



PARTICIPANT CONTRIBUTIONS

In industry-led or Public-private Partnership (PPP) governance models, commercial participants - typically commercial banks - contribute to development funding in exchange for governance rights, preferred access terms, or defined revenue sharing arrangements. This model aligns participant incentives with system success and reduces dependence on external funding, but it concentrates development funding power among participants with commercial interests that may not align with the policy mandate. The tension between investor return expectations and policy objectives is present from day one in participant-funded models and typically requires explicit governance mechanisms to manage.



BLENDED MODELS

In practice, most IPS are funded through a combination of the funding models discussed above. The complexity of managing multiple funders with partially conflicting conditions, different reporting requirements, and different disbursement timelines is substantial and is frequently underestimated in project planning.

The risk in blended models is that the funding structure drives the design process: decisions are made based on what each funder will finance rather than what the system needs, producing a design that reflects the intersection of funder interests rather than a coherent set of operator-driven design choices.

Once live, the system must cover its ongoing costs through operational cost recovery. The pricing approach must also reflect the projected time horizon for cost recovery, breakeven and long-term sustainability. Two key questions should be answered when designing the pricing structure: when fees should be introduced and how fees should be structured to encourage adoption and long-term sustainability.

Pricing in an IPS generally operates across two layers:

1. **Scheme-level fees:** Charges levied by the IPS operator on direct participants (banks, mobile money operators, and other PSPs) to recover operating costs. These typically include joining or membership fees, and in some systems annual participation charges, sometimes tiered by volume to reward scale.
2. **End-user fees:** Charges that PSPs pass on to their own customers, whether consumer fees on the sender side in P2P or merchant discount rates in P2M. Where end-user fees are levied, they are typically distributed across the value chain under a revenue-sharing agreement that allocates a portion to the operator (to cover scheme-level costs), the sending institution (to cover customer-facing costs of initiating the transaction), and the receiving institution (to compensate for account crediting, liquidity, and reconciliation). The specific split is a design choice and varies widely across systems; in zero-rated use cases there is no end-user fee to distribute, and scheme sustainability rests entirely on cross-subsidy or public funding.

Pricing approaches for IPS can take many forms. The box below illustrates the pricing approaches of two mature IPS in India and Malaysia.

BOX 9: ALTERNATIVE IPS PRICING APPROACHES



INDIA - UPI

UPI is operated by NPCI, a not-for-profit organisation established as an initiative of the Reserve Bank of India (RBI) and the Indian Banks' Association, and jointly owned by major banks.³⁷ UPI pricing is designed to support financial inclusion, with zero merchant discount rate (MDR) on most transactions since 2020, although limited fee structures (e.g., up to -0.30% in certain UPI frameworks) exist for specific use cases.³⁸

Pricing approach:

- Bank account-to-bank account UPI transactions, which account for over 99% of UPI volume, remain free for both customers and merchants.
- Since April 2023, NPCI has applied an interchange fee of 0.5% to 1.1% to Prepaid Payment Instrument (wallet) merchant transactions above ₹2,000, borne by the merchant and varying by merchant category.³⁹
- MDR applies to RuPay credit card transactions on UPI above ₹2,000, with revenue shared between issuer, acquirer and NPCI.⁴⁰
- The Government of India compensates acquiring banks through annual incentive schemes (₹1,500 crore for FY2024-25) to offset the cost of zero-Merchant Discount Rate (MDR) small-merchant transactions.⁴¹

KEY CONSIDERATIONS

The model has driven rapid and widespread UPI adoption, advancing digitisation and reducing cash dependence. However, banks and PSPs bear onboarding and infrastructure costs without direct revenue on the bulk of transactions, government subsidies remain necessary to sustain the model long term, and commercial incentives for innovation remain constrained. Proposals to introduce broader MDR have surfaced repeatedly in policy discussions, though the Ministry of Finance reaffirmed its commitment to zero MDR on bank-to-bank UPI in mid-2025. Countries replicating a near-zero pricing approach should plan fiscal support mechanisms and cost recovery transitions explicitly from the design stage, rather than treating them as post-launch adjustments.



MALAYSIA - PAYMENTS NETWORK MALAYSIA SDN BHD (PAYNET)

Malaysia's Real-time Retail Payments Platform (RPP) is operated by PayNet, a public-private entity where Bank Negara Malaysia (BNM) holds slightly over 35% of shares as the largest shareholder alongside 11 commercial banks. BNM acts as both regulator and co-owner, and PayNet funds its operations through a cost-plus pricing model to support financial inclusion and the orderly development of the economy.⁴²

Pricing approach:

- PayNet charges participant banks a switching fee, while transactions for consumers are typically free of charge.

³⁷ National Payments Corporation of India (NPCI), 2026. Available [here](#)

³⁸ Press Information Bureau, Government of India, 2025. Available [here](#)

³⁹ Inc42, 2023. Available [here](#)

⁴⁰ Inc42, 2022. Available [here](#)

⁴¹ Press Information Bureau, Government of India, 2025. Available [here](#)

⁴² Stakeholder interviews, 2026

- Banks separately charge merchants a merchant discount rate (MDR) for merchant acquiring services, as a distinct layer on top of the switching fee.
- All fee components, including the switching fee and MDR, are regulated by BNM to ensure cost-reflective pricing and prevent overcharging or predatory pricing.
- B40 merchants (the bottom 40% of the economy by income) receive a full MDR waiver, enabling zero-cost digital payment acceptance for the most vulnerable segment of the merchant base.⁴³

KEY CONSIDERATIONS

Malaysia's pricing approach, anchored in central bank regulation across all fee layers, from switching fees to MDR, with zero-cost pricing at the consumer and merchant level, has driven broad adoption including among small and vulnerable merchants. However, prolonged fee waivers create market expectations that are difficult to reverse, as Malaysia's 2023 experience demonstrated. Countries should design adoption incentives and cost recovery pathways together from the outset, with clear timelines for transitioning away from subsidised pricing.

STRATEGIC STAKEHOLDER CONSIDERATIONS

Financing structures often reveal the strongest influence of external actors within IPS development. Governments, development finance institutions, philanthropic organisations, bilateral donors, commercial participants, and technology providers may all contribute resources that enable implementation. While these funding arrangements can accelerate deployment and reduce upfront financial barriers, they may also influence priorities, implementation sequencing, governance expectations, technology choices, or sustainability models. Policymakers therefore need to consider not only the availability of funding, but also the longer-term implications that different financing relationships may create.

STRATEGIC CONSIDERATIONS FOR POLICYMAKERS

- How sustainable is the IPS financing model if external funding declines or ends?
- Does the current pricing approach support both adoption and long-term viability?
- What funding and governance arrangements best preserve national priorities and operational independence?
- How should costs and benefits be distributed across participants, users, and public institutions?
- What transition pathway exists from implementation funding to self-sustaining operations?

Before considering how these design dimensions interact, it is important to recognise that IPS decisions are rarely made in isolation. Governance arrangements influence participation models and use case priorities; technology choices affect cost structures, operational flexibility, and future interoperability, while financing arrangements can shape both implementation pathways and long-term sustainability.

These decisions are further influenced by a broader ecosystem of public and private stakeholders whose interests, incentives, capabilities, and resources may affect the choices available to policymakers. Understanding these relationships is therefore critical to designing IPS that remain resilient, inclusive, and adaptable over time.⁴³

⁴³ Stakeholder interviews, 2026

3.3. INTERDEPENDENCIES BETWEEN IPS DESIGN CHOICES

The four IPS Design dimensions discussed are not made in sequence and have several interdependencies. Decisions made on one dimension constrain, enable or directly determine what is possible on the others. For example, a technology platform selected under donor funding conditions shapes what use cases the system can support at maturity.

These interdependencies have two practical consequences. **First, interdependencies mean that evaluating any single dimension in isolation produces an incomplete picture:** the adequacy of a governance structure cannot be assessed without understanding its financing implications, and the viability of a financing model cannot be assessed without understanding the use case economics it must support.

Second, they mean that design choices made early in the lifecycle - often under time pressure, with incomplete information, and subject to external funding conditions - generate constraints that become visible only years later. These interdependencies are highlighted in the [table 8](#).

TABLE 8. IPS DESIGN CHOICE INTERDEPENDENCIES

INTERDEPENDENCY	IMPLICATION
Technology choice <> Functional scope	The technology/infrastructure selected determines what the system can do over the long-run, not just at launch. For example, messaging standards and API architecture determine which transaction types are technically possible in future, and which third-party overlay services can be built on top of the IPS rails. The build model shapes the operator's capacity to extend functional scope over time. A system built on a proprietary vendor platform can only be extended in ways the vendor supports and at the price the vendor charges for customisation (this cost can be as high as USD 80,000). A system built on an open-source platform can theoretically be extended by the operator's own team, but only if the internal capacity and skills exists, which introduces a talent dimension as a binding constraint. This relationship also runs in the reverse direction. Functional scope ambitions should shape the technology selection criteria. There is a risk that technology selection criteria focuses on launch requirements, with future use cases not adequately specified. Multiple IPS operators on the continent have opted for extending new use cases using Mojaloop, due to the introduction of new use cases on the original proprietary systems being too costly or time consuming.
Technology choice <> Financing and cost structure	The technology/infrastructure model determines the capital cost profile of the system. Initial capital outlay and recurring expenses are shaped by the technology selection. The hosting model (on-premise vs cloud) also affects the capital investment required for hardware and data centre infrastructure. At the same time, financing can also shape technology choices, as funding constraints/preferences or cost considerations (initial build and the long term operating expense considerations) often shape the choice of build model.
Governance <> Technology choice	Governance and rule-setting authority determines who makes technology decisions and who approves and manages vendor relationships. The sequence in which these decisions are made matters: a governance structure decided after the technology vendor has been selected will tend to reflect the vendor's preferences, while one agreed before vendor selection preserves the central bank's ability to set the terms of that relationship. Central bank capacity gaps can further constrain this authority in practice, creating reliance on external advisers for technology decisions that governance frameworks nominally reserve for the central bank.

Governance <> Technology choice

At the same time, the technology choice shapes the governance arrangements needed to oversee it. The model selected determines cost structures, regulatory flexibility, cybersecurity accountability, and the extent of long-term national control over the system. These decisions crystallise into contractual and technical constraints that are costly to reverse, so the relevant question for a central bank is not whether technology dependency can be avoided, but whether it is structured to remain manageable and reversible over time.

Governance <> financing and cost structure

Governance and rule-setting authority determines who has authority to set, amend and enforce fee decisions, and therefore determines whose commercial interests shape the fee structure and the long term commercial viability of the system. Neither model is inherently superior - each involves trade-offs between policy control, operational agility, and commercial sustainability that central banks must weigh against their specific institutional context and mandate.

Governance design can also be shaped by the preferences of development partners and donors, who may advocate for particular governance structures as a condition of funding or technical assistance. This influence can be constructive where it introduces accountability mechanisms or best practice standards that strengthen the system. It can be problematic where it produces governance arrangements that reflect funder institutional preferences rather than the operator's long-run needs, or where conditions attached to funding constrain the central bank's ability to adapt governance as the system evolves. The appropriate balance is one where external input informs governance design without displacing the central bank's or system owner's authority to make final decisions that reflect national policy priorities and operational requirements.

Governance <> Functional scope

Governance determines whose interests shape the use case portfolio and the participation model. A governance structure dominated by commercial banks will design participation criteria and prioritise use cases of commercial interests, while a governance structure with strong central bank control and a clear inclusion mandate will prioritise mass adoption and low-value use cases, such as P2P and G2P.

The dual role of central banks as both regulator and operator creates a specific governance-scope interdependency that deserves separate attention. When the central bank operates the IPS, it supervises both the system and the commercial participants whose integration and compliance determine whether the system's full scope is realised in practice. This dual role creates a tension that needs to be carefully managed: the central bank as operator has a commercial interest in participant integration and transaction volume that may make it reluctant to use its regulatory authority to enforce compliance standards that could disrupt participant relationships.

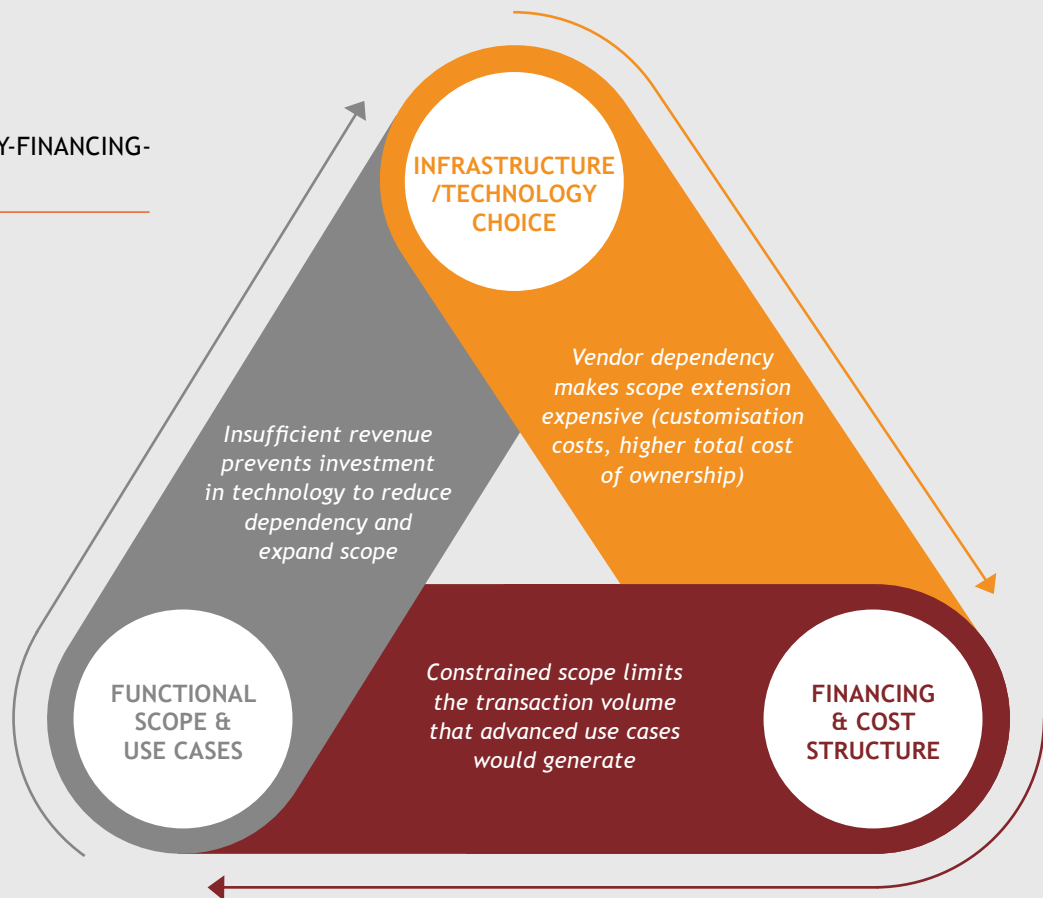
Financing <> Functional scope

The commercial model determines which use cases the system can afford to activate and sustain, as the unit economics of different use cases vary. This is also dependent on the technology/infrastructure model chosen.

The reverse influence - scope shaping financing - operates through volume and revenue projections. A use case portfolio that is commercially attractive generates transaction volume that supports cost recovery; a use case portfolio that is dominated by low-margin inclusion use cases cannot generate adequate revenue without subsidy. The financing model must therefore be designed in direct response to the use case portfolio and its commercial economics.

The pairwise relationships described above may interact in ways that create effects larger than any individual interdependency would suggest. An example of this is the technology-financing-scope triangle (see figure 2).

FIGURE 2.
THE TECHNOLOGY-FINANCING-
SCOPE TRIANGLE



Technology choices that create vendor dependency constrain the operator's ability to extend functional scope affordably - the vendor charges for customisation that an open-source operator could implement internally. Constrained scope extension reduces the transaction volume that advanced use cases would generate. Reduced volume means the fee revenue that would have supported the technology investment required for scope extension is not available, creating a financing constraint that reinforces the scope constraint. The operator is caught in a triangle where technology dependency limits scope, limited scope constrains revenue, and constrained revenue prevents the technology investment that would break the dependency.

Country experience illustrates both the risks of this cycle and the strategies operators have used to navigate it. Liberia offers a useful reference point. The Central Bank of Liberia deployed a switch in 2016 that was subsequently decommissioned, with high integration and maintenance costs and lengthy delays in resolving technical issues emerging as key challenges.

These lessons directly informed the decision to adopt Mojaloop's open-source infrastructure for the 2025 IPS deployment, where digital sovereignty, cost efficiency and speed to market were the primary considerations.⁴⁴

More broadly, high licensing fees, foreign currency payments, and vendor delays are leading countries with existing switches to build Mojaloop in parallel rather than replacing incumbent infrastructure outright. Rwanda exemplifies this, deploying Mojaloop for merchant payments because the cost was lower than its existing vendor's quote while keeping the old switch running for peer-to-peer transfers. The peer-to-peer use case was then gradually migrated across, and the old switch eventually decommissioned.⁴⁵

However, early design decisions are not irreversible, and systems can undergo fundamental redesign of their technology infrastructure, governance arrangements, and commercial models where operational or policy

⁴⁴ Stakeholder Interviews, 2026

⁴⁵ Stakeholder Interviews, 2026

requirements demand it. However, revision at later lifecycle stages is generally more complex and costly than making well-considered decisions at the outset. Therefore, where the original platform choice has created vendor dependency, constrained functional evolution, or compromised data sovereignty, a **software ownership assessment** can be commissioned to evaluate alternatives and define a migration pathway. This is a legitimate tool, but migrating a live payment system to a new platform involves rebuilding participant integrations, managing parallel system operation during transition, and renegotiating vendor contracts.

Governance and ownership revisions are similarly possible. The South African Reserve Bank's acquisition of 50% ownership in PayInc demonstrates that central banks can assume a more direct governance role at a later stage where the original arrangement proves inadequate. The practical implication is that design processes should be structured to minimise the need for costly revision.

While the interdependencies described above shape how IPS design choices interact, they do not operate in a static environment. Across Africa, a number of emerging policy, market, institutional, and technological forces are reshaping the assumptions that underpin governance models, use case priorities, technology choices, and financing approaches. Understanding how these drivers influence IPS design decisions is becoming increasingly important as countries seek to balance inclusion, sustainability, resilience, sovereignty, and future readiness. The following section examines how these evolving forces are influencing IPS development across the continent and altering the trade-offs policymakers must navigate.

3.4. HOW EMERGING DRIVERS ARE RESHAPING IPS DESIGN CHOICES

The design choices discussed in the preceding sections are shaped by a broader set of evolving policy, economic, technological, and institutional dynamics. Across Africa, these forces are influencing how central banks, governments, operators, and ecosystem participants approach IPS development. They affect not only what countries seek to achieve through IPS, but also the governance models they adopt, the use cases they prioritise, the technologies they select, and the financing approaches they pursue. Together, these drivers are redefining what is feasible, affordable, sustainable, and strategically desirable within national payment ecosystems.

Six key drivers are particularly influential in shaping IPS development across the continent: **ambition and public value** objectives, **financial sustainability and long-term viability**, **political economy and regional integration** considerations, **cybersecurity and operational resilience** requirements, **talent and institutional capacity** constraints, and the need to **future-proof infrastructure** against evolving technologies frontier and market demands. Understanding how these drivers influence IPS design choices is essential for policymakers seeking to build payment systems that are inclusive, resilient, scalable, and aligned with national development priorities.

1 AMBITION AND PUBLIC VALUE

IPS development in Africa is increasingly framed not as a payments modernisation project but as a **social and economic policy intervention**. The shift from narrow payment efficiency goals to broader public value objectives, covering financial inclusion, competition, affordability, and digital sovereignty, is the defining feature of the current generation of IPS initiatives, and it is reshaping design choices across all four dimensions. The Maya Declaration commitments tracked by AFI provide the clearest quantitative evidence of this shift: across the network, financial inclusion is no longer an aspiration attached to IPS development but a measurable governance obligation that central banks are held accountable for delivering (see box 10).

BOX 10: THE MAYA DECLARATION AND THE FINANCIAL INCLUSION MANDATE DRIVING IPS DESIGN



The Maya Declaration, adopted in 2011, is the first global and measurable set of financial inclusion commitments made by developing country policymakers. It translates the political aspiration of financial inclusion into specific, time-bound targets that central banks publicly commit to and report against, making it the most direct available indicator of how seriously financial inclusion objectives are being institutionalised across the AFI network.

The declaration's reach and depth have grown substantially. Of the 79 countries that have made commitments to date, Sub-Saharan African members account for the largest regional bloc, with 28 countries represented, followed by 18 from Latin America and the Caribbean, 12 from Asia, and seven each from the Pacific, Arab, and Eastern Europe and Central Asia regions. Sub-Saharan African members have not only contributed the largest number of participating countries but have also set the highest volume of declared targets of any region, reflecting the degree to which financial inclusion has become a central governance priority rather than a peripheral one.⁴⁶

The 2025 data illustrates the pace at which African central banks are translating commitment into action. Across the African region, 60 new Maya Declaration commitments were made during the year and 239 targets were completed. Of these, 52 completed targets and a further 54 currently in progress relate specifically to digital financial services, confirming that IPS and related digital infrastructure are one of the primary instruments through which African central banks are pursuing their inclusion mandates.⁴⁷

For IPS design, the Maya Declaration's significance is structural rather than symbolic. **When a central bank governor has made a public, measurable commitment to bring a defined share of the adult population into the formal financial system by a specific date, the IPS ceases to be a technical project managed by the payments department and becomes a delivery vehicle for a governance obligation that sits at the board level.**

On **GOVERNANCE**, the expansion of public value objectives has drawn central banks deeper into operational roles that they originally sought to avoid.

The pattern that emerges across multiple countries is consistent: where private sector progress on interoperability stalls, the central bank is eventually compelled to act as operator of last resort. In Namibia, a 2017 position paper had urged the industry to prepare for e-money interoperability by 2025. When that deadline passed without meaningful progress, the Bank of Namibia concluded that a central bank-driven entity was necessary to act as a catalyst for national objectives. The imperative was not merely institutional: Cabinet had tasked the regulator with driving down the cost of financial services in response to what the IPN team described as a “crisis” of public unhappiness.

The Instant Payment Namibia subsidiary was structured as a non-profit to create what its team described as “Chinese walls,” separating the Bank’s role as regulator from its role as operator and avoiding the perception of being both “player and referee.” In Mozambique, the Bank holds a 51% stake in SIMO, giving it a decisive but as yet unused “golden vote” in governance disputes. In Liberia, the dominant mobile money operator, holding 60 to 80 percent of the market, resisted interconnection with its smaller competitor throughout. Bilateral integration could not be agreed, and once the Central Bank deployed the national platform, participation was secured only through directives and fines. In each case, the expansion of public value ambition produced a more direct institutional role than the governance model originally envisaged.

⁴⁶ Maya Declaration Progress Report, 2025. Available [here](#)

⁴⁷ Ibid

On **FUNCTIONAL SCOPE**, public value ambitions are translating into use case choices that deliberately prioritise reach over near-term revenue.

Mozambique's decision to offer all individually initiated bank-to-bank transfers on METIX free of charge reflects a deliberate strategic calculation: at launch, Mozambique had approximately six million bank accounts against over 24 million mobile accounts, and free bank-to-bank transfers were designed to incentivise migration into the formal banking system, on the expectation that increased account ownership would drive demand for loans, savings, and other higher-margin products over time. The IPN team in Namibia confirmed that Government-to-Person payments were being prioritised in the early rollout phase precisely because this use case reaches marginalised beneficiaries without the commercial complexity of other use cases. Liberia is pursuing mandatory digital payments for fuel purchases and digital-only government services at ports, using regulatory levers to drive the transaction volumes that system sustainability requires. Use case choices are, in this sense, a policy instrument as much as a commercial decision.

On **TECHNOLOGY**, sovereignty has become an explicit selection criterion alongside cost and functionality.

The Mojaloop Foundation observed that central banks increasingly view technology through a “geopolitical and strategic lens,” prioritising control over critical national infrastructure, which is driving growing interest in both open-source models and government-to-government technology arrangements. On financing, the Bank of Namibia made a conscious decision to fund the initial platform investment itself rather than recovering costs from participants, specifically to prevent integration costs from being passed on to consumers. The Namibia IPN team also engaged the Ministry of Finance to explore tax waivers on transactions and to subsidise switching fees as mechanisms to maintain a low-cost ecosystem, treating affordability as an ongoing policy objective rather than a one-time pricing decision.

2 SUSTAINABILITY

Financial and operational sustainability is the most persistent tension in IPS development across Africa. Systems are being designed and launched under conditions where the volume needed for cost recovery is not yet present, the pricing models are contested, and the operational capacity to run the system is still being assembled.

On **FUNCTIONAL SCOPE**, the temptation to restrict IPS participation to higher-volume or higher-value use cases to improve unit economics is real, but it conflicts directly with the inclusion objectives

that most African central banks articulate as their primary motivation. Mozambique's cross-subsidy logic offers a pragmatic resolution: SIMO's ability to offer free bank-to-bank transfers under METIX rests on the broader fee income it earns as the national switch for cards, wallets, and other payment services. The free individual transaction is not a revenue sacrifice but a service cross-subsidised by commercial revenues that run alongside it. This model requires the operator to have diversified revenue from the outset, which in turn shapes both the ownership model and the participation framework before a single transaction has been processed. Sustainability requires looking at the ecosystem broadly, ensuring many players are connected across banks and non-banks, and that the architecture supports overlay services, including request-to-pay, alias lookups, and QR codes, that generate the volume and revenue which make inclusion-oriented use cases financially viable over time.⁴⁸

On **TECHNOLOGY**, lifecycle management is an underappreciated sustainability risk that manifests differently across all three technology models.

Open-source systems require ongoing investment in code management, testing, and upgrades. The Central Bank of Liberia identified over-customisation as a specific risk in its Mojaloop deployment, noting that deviating too far from the core codebase makes future upgrades more complex and costly, and that its internal team actively monitors customisation levels to preserve upgradeability. The Bank of Namibia's five-year Service Level Agreement with NIPL is an explicit safety net against the moment when the internal team must assume full codebase responsibility, with daily training sessions between Namibian developers and the NIPL team already underway during the user acceptance

⁴⁸ Stakeholder interviews, 2026.

testing phase. Tazama, which submitted nearly 200 grant applications per year to maintain its open-source fraud management platform, illustrates the structural challenge of sustaining open-source infrastructure beyond its initial donor-funded phase; its three-pronged sustainability model, combining expansion into new verticals through the Linux Foundation, a growing membership base, and continuous fundraising, reflects how much deliberate effort self-sufficiency requires.

The most acute sustainability risk operates at the **FINANCING** level. The Mojaloop Foundation noted that roughly half of current deployments involve international funding, and that its long-term goal is to reduce implementation costs so that countries can fund systems independently and avoid the restrictions that donor financing attaches. The Gates Foundation's decision to conclude IPS financial inclusion support in 2030 makes this goal a deadline as much as an ambition. The Central Bank of Seychelles illustrated the other end of the sustainability spectrum: a small island economy weighing membership costs and annual maintenance obligations across multiple regional schemes against transaction volumes that may not justify the investment. **Its experience underscores that sustainability is not a uniform challenge; it is a function of market size, revenue model, and the degree to which the operator can generate enough transaction volume to cover its cost base without subsidy.**

The Central Bank of Liberia's experience illustrates what can happen when financial and operational sustainability are treated as downstream concerns. In 2016, it decommissioned a proprietary switch whose costs (integration with each Digital Financial Service Provider (DFSP), change management, maintenance and support) combined with support delays arising from time-zone differences with the vendor made continued operation unviable. When Liberia returned to the market with its Mojaloop deployment in 2025, that earlier experience directly shaped the advice its team now offers peer central banks.

“The most critical recommendation is to prioritise the business model and pricing conversation very early in the process, as this can become a complicated showstopper if participants view the system as a business rather than digital public infrastructure.”

Marcus Davis, Deputy Director of the Payment System Department, Central Bank of Liberia

3

POLITICAL ECONOMY AND REGIONAL INTEGRATION

IPS development does not happen in a political vacuum. The decisions that central banks make about technology partners, governance models, and participation rules are shaped by regional ambitions, sovereign sensitivities, geopolitical relationships, and the institutional dynamics of cross-border coordination. As African IPS systems mature, the question of how they connect to each other, and on whose terms, is becoming as consequential as how they are built.

The **GOVERNANCE** implication is one of regulatory alignment across jurisdictions that have historically designed payment systems in isolation.

The Mojaloop Foundation identified this as a material obstacle to regional interoperability, noting that cross-border initiatives face complications from a lack of alignment between various regional central banking bodies, making it difficult to determine the appropriate points of engagement. The result is that national systems which are technically capable of cross-border connectivity remain cut off from regional corridors because the governance architecture above them has not resolved which institution is responsible for what. Regional schemes including PAPSS, TCIB within the Common Monetary Area, GIMACPAY in the CEMAC region, and COMESA's digital retail payments platform all require participating central banks to cede a degree of design autonomy in exchange for regional connectivity, and the pace of that concession is being negotiated institution by institution rather than through a unified framework.

On **FUNCTIONAL SCOPE**, regional integration is expanding the demand for use cases that require cross-border API capability and corridor-level interoperability.

The Mojaloop Foundation observed that adopting similar open-source standards facilitates easier interaction between neighbouring countries and simplifies the management of regional transactions, and that a unified platform increases speed-to-market for global and regional fintech providers, which can integrate across multiple countries more efficiently when those countries share the same underlying technology. Namibia's Phase 2 roadmap illustrates how regional integration ambitions are shaping domestic design choices in practice: the IPN team confirmed that cross-border transactions starting with India as

a proof of concept, followed by TCIB integration with South Africa, Lesotho, and Eswatini, and connections to Project Nexus, are all active implementation commitments rather than speculative future states. Mozambique is engaged in SADC's TCIB workstream. For the Central Bank of Seychelles, SADC is the most active regional engagement, but it cited sustainability and membership costs as constraints on broader regional participation, noting the difficulty of assessing the value of multiple scheme memberships when transaction volumes with regional partners remain low.

The sharpest political economy tension operates on the **TECHNOLOGY** dimension. **Sovereignty concerns are driving a preference for domestic hosting and national build models even in cases where regional solutions would demonstrably be more cost-efficient.** This is not irrational: control over critical national infrastructure carries real value that cannot be fully expressed in cost-benefit terms. But it produces outcomes that are collectively suboptimal, as countries make parallel investments in infrastructure that a regional approach could have provided at lower cost per country. The emergence of sovereign-to-sovereign technology partnerships with NIPL adds a further dimension to this tension. Namibia's deployment of the UPI-based stack means that the strategic evolution of a core national infrastructure is now partially determined by decisions made in New Delhi. The Bank of Namibia has mitigated this through source code ownership, skills transfer, and contractual provisions for continued vendor engagement.

4

CYBERSECURITY AND OPERATIONAL RESILIENCE

Fraud is the primary operational risk of IPS, and increasingly a compliance one. By design, IPS transactions settle in real-time, which means the window to detect and prevent fraudulent payments is measured in milliseconds rather than hours or even days as is the case for card transactions. As African IPS deployments move from pilot to scale, the gap between transaction processing capability and fraud management infrastructure is becoming a first-order risk to both end-user trust and system integrity.

The **GOVERNANCE** implication is this: **fraud management has historically been treated as a commercial cost rather than a regulatory obligation, and that distinction is no longer sustainable in an instant payment environment.**

Tazama's foundational research, commissioned by the Gates Foundation and delivered with Deloitte, documented 233 fraud and money laundering typologies affecting instant payment ecosystems before a single line of the platform's code was written, establishing empirically that the fraud risk surface of IPS is wide, varied, and not adequately addressed by extending existing AML and CFT frameworks. Justus Ortlepp of the Linux Foundation observed that fraud has historically lacked the regulatory motivation that has driven AML compliance since the late 1990s: where a bank that fails to comply with AML obligations risks its licence, a bank that fails to prevent fraud typically faces no equivalent sanction because customers who authorise payments, even under deception, are in many jurisdictions considered to have assumed the risk themselves. That regulatory gap is beginning to close, at both the global and national level. The Financial Action Task Force's June 2025 revision of Recommendation 16 requires financial institutions worldwide to introduce tools that protect against fraud and error, extending requirements that previously applied only to cross-border wire transfers to domestic transfers as well, for implementation by the end of 2030.⁴⁹ Australia, Canada, the UK, and Indonesia are driving regulations to protect consumers, and the UK's shared liability framework, under which banks bear a portion of fraud losses regardless of customer authorisation, fundamentally changes the commercial case for fraud investment. PayNet Malaysia reached the same

⁴⁹ Financial Action Task Force, 2025. Available [here](#)

conclusion from operational experience: the National Fraud Portal and National Scam Response Centre emerged from the recognition that “instant payments means instant fraud,” and that managing fraud at the switch level as a utility, rather than leaving it to individual participants, was both more effective and more efficient. The portal was eventually donated to the Malaysian government, with the police taking over its operation and scaling it nationally.

On **FUNCTIONAL SCOPE**, resilience requirements are creating friction with the ambition to expand use cases rapidly.

Tazama’s team noted that fraud management is consistently treated as a secondary implementation priority, activated after go-live rather than concurrently with it, and that the cost of retrofitting fraud infrastructure after a significant fraud incident is substantially higher than concurrent implementation. The data residency dimension adds further complexity: privacy and data protection legislation in several African markets restricts cross-institutional data sharing in ways that directly impair fraud detection. The Philippines is currently implementing an anti-scam act to bridge the gap between bank secrecy obligations and the need to share data on bad actors across institutions. Kenya’s data protection laws, South Africa’s POPIA, and equivalent frameworks across the continent mean that the information-sharing arrangements that effective fraud prevention requires may require legislative amendments rather than just operational agreements between participating banks.

The **INFRASTRUCTURE** dimension is increasingly shaped by this same data residency challenge. Data protection legislation that restricts financial transaction data from being hosted outside the country limits cloud hosting options and can require investment in on-premise infrastructure that adds to both capital cost and operational complexity. On **FINANCING**, resilience investment, covering redundancy, disaster recovery, cyber tooling, and ongoing security testing, is a growing cost line that is almost universally underfunded in current IPS budgets. **The practical risk is that systems achieving financial sustainability on the basis of lean operating models are doing so by deferring resilience investment that will eventually be unavoidable.**

5

TALENT AND INSTITUTIONAL CAPACITY

Across most African markets, the availability of local technical talent to build, operate, and regulate IPS is a binding constraint on design ambition. What is technically possible is constrained by what is operationally feasible, and this driver shapes every other dimension of IPS design in ways that feasibility assessments consistently underestimate.

On **GOVERNANCE**, capacity gaps in central banks are limiting the effectiveness of regulatory oversight in ways that have direct implications for system integrity.

The Mojaloop Foundation made this point precisely: an oversight function that cannot independently assess the technical claims of operators and vendors is structurally compromised as a regulator. Building internal capacity is therefore not only an operational imperative but a governance one. The Foundation’s approach addresses this by training local hub operators and system integrators, creating a base of trusted local advisers who are accountable to the central bank rather than to a foreign vendor. As its team described it, the goal is to shift the central bank’s frame from “whose throat do I choke” to “who do I call to fix it,” with the answer being a local team under national control rather than a foreign vendor on a different time zone.

On **FUNCTIONAL SCOPE**, the gap between what has been enabled and what can be adequately supervised is already significant in several African markets.

Tazama’s experience across its African deployments confirmed that launching use cases before fraud monitoring infrastructure is operational creates exposure that becomes visible only when incidents occur. The World Bank reinforced this point, noting that central banks are “often unable to supervise the use cases they have already enabled.” The speed of use case rollout is ultimately constrained not by technical feasibility but by the regulatory capacity to govern what has been activated, and systems that expand faster than their oversight capability can follow create reputational and consumer protection risks that are difficult to recover from.

On **TECHNOLOGY**, talent availability is one of the most decisive inputs to the technology selection decision, and one of the most frequently underweighted.

Open-source systems require engineering depth to implement, customise, and maintain. The Central Bank of Liberia responded by hiring a full technical team with varied skill sets, participating in Mojaloop's accelerator programme to develop in-country support capability, and actively monitoring over-customisation risk to preserve its ability to apply community-issued updates. The Bank of Namibia embedded a contractual skills transfer programme with NIPL, with daily training sessions currently underway and a five-year SLA as a safety net, explicitly to ensure that a post-support-period software bug would not leave the Bank without the capacity to maintain its own infrastructure. Tazama noted that Kenya's government contracts mandate skills transfer to local resources as a standard procurement condition, demonstrating that capacity development can be structured contractually from the outset rather than treated as a post-implementation aspiration.

On **FINANCING**, the human capital required to operate a 24/7 payment system is substantial and recurring.

The World Bank was direct on this point: building internal capacity for open-source deployment "takes time and money, requiring a medium- and long-term plan," and that the financial resources needed to hire sufficient people with engineering and payments backgrounds are often unavailable to central banks operating under tight budget constraints. Tazama's assessment of what internal capacity a system operator actually needs to sustain a fraud management platform, covering system administrators, hardware specialists, fraud investigators for alert triage, separate teams for money laundering and fraud investigation, and data analysts or scientists with AI and machine learning experience, illustrates how far the human capital requirement extends beyond what most IPS business cases model. Where institutions are too small to sustain this capacity internally, Tazama observed that a managed service model, in which a central version of the system evaluates transactions for multiple institutions for a fee, is likely to be the practical solution; this is the model being explored in the Philippines, where some institutions lack the scale to justify internal capability.

6 FUTURE-PROOFING CONSIDERATIONS

The IPS technology frontier is advancing rapidly toward open finance, programmable payments, AI-assisted financial services, and interoperable API ecosystems. Central banks and operators that do not build with this trajectory in mind risk architecting themselves into obsolescence within a decade. The decisions made today on system architecture, data governance, and API design will determine whether tomorrow's IPS can support the next generation of financial services or will require costly redesign to do so.

On **GOVERNANCE**, the models that have served IPS deployment well may not be adequate for an open finance environment.

PayNet Malaysia's trajectory illustrates what a mature operator eventually confronts: its move toward digital payment sovereignty, reducing dependence on ACI Worldwide by acquiring source code ownership and building internal capacity to run its own infrastructure, was explicitly triggered by Basel Core Banking Principles guidance on avoiding single vendor reliance and by the recognition that vendor dependency would constrain PayNet's ability to respond to open finance requirements on its own terms. As Azleena Idris put it, payments are becoming part of digital public infrastructure, and within that framing the ability to build your own stack is key to ensuring you are not "subservient to any vendor." The governance models that will serve an open finance environment must accommodate new actor groups, including third-party service providers accessing payment rails, new risk types, and new accountability arrangements that current scheme rules and licensing frameworks do not contemplate.

On **FUNCTIONAL SCOPE**, PayNet's experience with QR code interoperability offers a useful illustration of how future use cases develop in practice.

The National QR standard emerged from the recognition that the merchant discount rate on cards was prohibitive for small merchants and that a static QR code required no expensive terminal. When adoption remained fragmented across competing wallet providers, the central bank mandated interoperability, and PayNet implemented it. Open banking is following a similar trajectory: initial voluntary encouragement produced slow progress from reluctant banks, leading the regulator to direct PayNet to mediate, then ultimately to issue a mandate with a defined compliance deadline.

The lesson is that the functional scope of future IPS is already partly visible in the logic of current adoption patterns, and that designing governance and infrastructure with that future scope in mind is materially less expensive than redesigning it retrospectively.

Functional scope is not only about which use cases a system supports, but who can access them. Despite growing smartphone adoption, feature phones remain an important access channel across Sub-Saharan Africa, meaning that systems designed exclusively for app-based access risk excluding significant segments of the population. Mozambique's METIX addresses this challenge directly by operating through USSD alongside banking and mobile app channels, ensuring that internet connectivity and mobile data are not prerequisites for participation. Whether that reach extends equally across population groups is often harder to determine. Transaction-level data across most African IPSs remains insufficiently sex-disaggregated to assess usage patterns and outcomes reliably, prompting initiatives such as AFI's guidance on strengthening the collection and use of sex-disaggregated financial inclusion data.

On **TECHNOLOGY**, API-first design is the prerequisite for future-proofing, not an optional enhancement.

PayNet was explicit about the contractual disciplines required to protect future optionality: avoid not being able to access your source code; avoid being locked in by licence provisions; insist on clear and robust Service Level Agreements with consequences for failure; establish common interconnection standards from the outset. Systems built on closed or proprietary architectures will require costly redesign to support open finance connectivity, third-party integration, and the data portability that cross-border interoperability requires. The Mojaloop Foundation observed that adopting similar open-source standards across countries facilitates cross-border integration and increases speed-to-market for global fintech providers, because those providers can integrate once and deploy across multiple countries rather than building bespoke connections to each national system.

IPS architecture also needs to account for how it will interact with growing Central Bank Digital Currency (CBDC) activity across the continent. Connecting a CBDC to an IPS, whether retail or wholesale, requires shared technical components such as bridges and address-resolution services, and the CBDC must remain distinct from other money in the system rather than

just another balance within it. AFI members are pursuing diverse CBDC pathways. Nigeria is steering its retail eNaira toward government payments and cross-border settlement. Ghana is continuing to develop and test its eCedi, Morocco and Egypt are testing a joint cross-border corridor, and South Africa has ruled out a retail CBDC in favour of a wholesale model. The consideration for AFI members is that interoperability between CBDCs and IPSs depends on technical arrangements such as common standards, shared services, and API-based connectivity. Decisions taken today on system architecture and interoperability frameworks will therefore shape how easily CBDCs and IPSs can interact in the future.

On **FINANCING**, the emergence of value-added services built on IPS rails creates new revenue streams but also introduces pricing complexity and competitive dynamics that current financing models are not designed to manage.

PayNet's experience is instructive: it evolved from a cost-plus switching fee model toward a broader commercial architecture as its use case portfolio expanded, and it had to manage the tension between regulated pricing for core infrastructure and commercial pricing for overlay services. The public infrastructure logic that underpins zero-fee pricing for individual transactions, and that has been instrumental in driving adoption in systems like METIX and UPI, is significantly harder to sustain when the same rails are enabling commercial services that generate substantial value for private providers. Operators that have not resolved this tension in their scheme rules and pricing frameworks before commercial services scale will face it as a political and governance crisis rather than a design choice.

These drivers do not act on systems in the abstract: they act on the actors who design, build, finance, and use them, shaping what each stakeholder wants from the IPS ecosystem and what mechanisms they have to act on that interest.

The **table 9** summarises the Design Drivers discussed, and their effect on IPS Design Choices.

TABLE 9. EFFECT OF DESIGN DRIVERS ON IPS DESIGN CHOICES

DESIGN DRIVER	GOVERNANCE AND OWNERSHIP	FUNCTIONAL SCOPE AND USE CASES	INFRASTRUCTURE AND TECHNOLOGY	FINANCING AND COST STRUCTURE
Ambition and Public Value	Central banks expanding into operational roles as private sector fails to deliver interoperability voluntarily; subsidiary and majority-ownership models emerging to manage dual-role tension while preserving regulatory neutrality.	Use case choices prioritising reach over near-term revenue; G2P and zero-fee individual transactions deployed as policy instruments rather than commercial decisions.	Sovereignty becoming an explicit technology selection criterion alongside cost and functionality; growing interest in open-source and government-to-government models driven by geopolitical framing of infrastructure control.	Central banks absorbing platform investment to prevent costs being passed to users; active engagement with government on tax waivers and switching fee subsidies to maintain affordability.
Sustainability	Governance structures must outlast initial political impetus and donor engagement; accountability for operational costs and a credible path to financial viability must be embedded from the outset, not deferred.	Temptation to restrict access to higher-margin use cases conflicts with inclusion mandate; cross-subsidy logic requires diversified operator revenue from the outset, not as a later commercial development.	Technology lifecycle management is an underappreciated risk across all three models; over-customisation of open-source and escalating licensing costs in proprietary systems both require active and deliberate management.	Donor funding cliff, including the Gates Foundation's 2030 commitment to conclude IPS support, requires credible domestic revenue models; zero-fee pricing for individuals must be cross-subsidised by commercial transaction fees on other rails.
Political Economy and Regional Integration	Cross-border alignment requires central banks to cede design autonomy to regional governance bodies whose mandates and membership often conflict; absence of clear engagement points compounds coordination delays.	Regional integration expanding demand for cross-border use cases; remittances and trade payments require domestic IPS architected for corridor-level connectivity from the outset, not retrofitted at the maturity stage.	Sovereignty concerns driving preference for domestic hosting even where regional solutions are more efficient; geopolitical relationships, including bilateral technology partnerships with India, now an explicit input to technology selection.	Regional scheme membership carries recurring cost obligations that small economies with low cross-border transaction volumes struggle to justify; sustainability of multiple memberships requires assessment against realistic volume projections.
Cyber-security and Operational Resilience	New formal resilience attestation obligations emerging globally; central banks require	Resilience requirements creating friction with rapid use case expansion; fraud management	Data residency laws constraining cloud hosting options and complicating cross-institutional data	Resilience investment, covering redundancy, disaster recovery, cyber tooling, and security testing,

internal technical capacity to independently assess operator security claims rather than accepting vendor declarations.

should be treated as a launch-critical co-requisite, not a post-go-live addition, given that retrofitting after a major fraud incident costs more than concurrent implementation.

sharing for fraud detection; shared platform deployments across multiple countries create systemic vulnerability risk if a zero-day exploit affects a common codebase.

is consistently underfunded in IPS budgets; deferral creates invisible exposure that materialises as incident response cost when breaches occur.

Talent and Institutional Capacity

Oversight capacity gaps limiting regulatory effectiveness; dependence on commercially interested external advisers structurally compromises governance; local capacity building must be treated as a governance requirement, not an operational afterthought.

Functional scope constrained by supervisory capacity; systems are already enabling use cases that central banks cannot adequately monitor, and the gap widens with each new activation.

Technology model selection decisively shaped by available talent; open-source sovereignty benefits are unrealisable without the engineering depth to exercise them; skills transfer must be contractualised at procurement, not negotiated post-deployment.

Human capital for 24/7 system operation, covering engineers, fraud investigators, data analysts, and regulatory supervisors, is a substantial recurring cost that IPS business cases systematically underestimate.

Future Proofing

Current governance models not designed for open finance; third-party access, data sharing, and AI-assisted services require new accountability frameworks and new actor categories that current scheme rules do not accommodate.

IPS mandate scope must be resolved before maturity; central banks must decide whether to be a transaction rail, a platform operator, or an ecosystem regulator before commercial services scale on the same infrastructure. Functional scope also extends to who the system can reach, with offline and low-bandwidth access required to serve feature-phone users, and gender-disaggregated transaction data required to confirm that reach is equitable, not just technically comprehensive.

API-first design is a non-negotiable prerequisite for future interoperability; source code access, no licence lock-in, robust SLAs with consequences, and common interconnection standards must be contractualised before deployment, not after. That same interoperability extends to CBDC connectivity, retail or wholesale, requiring shared technical components such as bridges and address-resolution services to be designed in from the outset rather than added later.

Value-added services create new revenue streams but also new pricing complexity; public infrastructure logic that underpins zero-fee adoption pricing is harder to sustain as commercial overlay services scale on the same rails, and the tension must be resolved in scheme rules before it becomes a governance crisis.

While these drivers influence IPS design choices, they are rarely advanced by a single institution acting alone. Governments, central banks, technology providers, development partners, regional organisations, industry participants, and international institutions all play a role in shaping how these drivers translate into practical decisions. Understanding the interests, incentives, and influence of these actors is therefore essential to understanding IPS outcomes.

KEY POLICY TAKEAWAYS

1

IPS design turns on four interlocking dimensions (governance and ownership, functional scope and use cases, infrastructure and technology, and financing and cost structure). Trade-offs are best resolved deliberately at inception; interdependencies mean decisions in one dimension constrain the others, and correcting misalignments after go-live is materially harder and costlier than getting them right at the design stage.

2

Six drivers are reshaping these design choices: ambition and public value, financial sustainability, political economy and regional integration, cybersecurity and operational resilience, talent and institutional capacity, and future-proofing. Cybersecurity in particular has moved from commercial cost to compliance obligation: the FATF's June 2025 revision of Recommendation 16 requires fraud and error protection for domestic transfers by end-2030.

3

Talent and institutional capacity, not technology choice, is the most consistently binding constraint on IPS design quality across African markets, and is the area where structured peer exchange, capacity-building, and technical support carry the highest marginal return. Sustainability is a parallel constraint: with the Gates Foundation's 2030 exit and parallel funder cycles concluding, credible domestic revenue models must be designed in from the outset.

4

Technology model choice is where the abstract trade-offs become concrete. Open-source, licensed software, and proprietary build each carry distinct capital and operating cost profiles, sovereignty implications, and vendor dependency risks. Matching the model to institutional capacity, market conditions, and long-term ambition is more consequential than any single technology decision that follows.

4 THE STRATEGIC LANDSCAPE OF ACTORS SHAPING IPS DEVELOPMENT IN AFRICA

IPS design is not determined by technical analysis alone. It is shaped through mandates, funding decisions, technology choices, market behaviour, regulatory authority and implementation capacity exercised by actors with different interests, incentives and levels of influence.

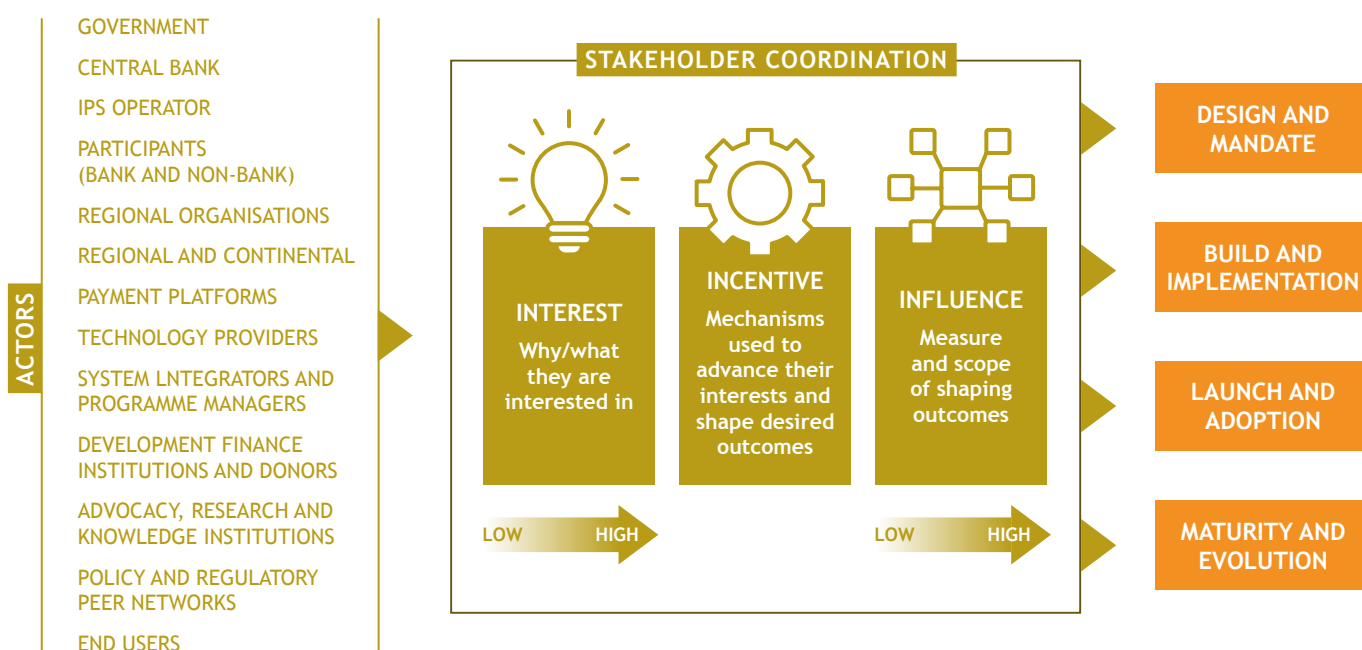
Understanding who those actors are, what they stand to gain or lose, and how their influence shifts as systems mature is essential for any central bank seeking to design governance that holds together under pressure. These decisions are made by a complex, multi-stakeholder ecosystem that requires effective coordination among participants, supported by clear governance and defined roles.⁵⁰

Stakeholder **INTERESTS** define what different actors seek to achieve within the IPS ecosystem - access, revenue, control, influence, policy objectives, interoperability, market expansion or public value outcomes.

INCENTIVES are the mechanisms, instruments, or approaches deliberately employed by actors to advance those interests and shape desired outcomes - funding, technical assistance, technology provision, capacity building, policy coordination, regulatory authority, standards setting, market participation, or implementation support.

Stakeholder incentives translate into **INFLUENCE** through their ability to shape key system decisions and outcomes, including design, governance, participation, pricing, and adoption. The instrument through which incentive is acted upon, can be classified into four groups: *technical* influence shapes architecture and implementation decisions. *Financial* influence reflects funding leverage and associated conditions that can steer design choices. *Policy* influence drives agenda-setting, standards, and regulatory direction, while *market* influence operates through network effects and adoption dynamics. Together, these can introduce dependency risks, where funding conditions, technical requirements, or external support shape decisions and create reliance on specific providers.

FIGURE 3. STAKEHOLDER COORDINATION AMONG ACTORS IN THE IPS ECOSYSTEM



⁵⁰ Bank for International Settlements, Committee on Payments and Market Infrastructures (CPMI), 2016. Available [here](#); World Bank, 2021. Available [here](#)

TABLE 10: STRATEGIC ACTOR MAPPING ACROSS THE IPS ECOSYSTEM

ACTOR CATEGORY	PRIMARY INTEREST	INCENTIVE MECHANISM	PRIMARY INFLUENCE CHANNEL	HIGHEST INFLUENCE STAGE	POTENTIAL DEPENDENCY RISK
Government	Public service delivery, economic growth, financial inclusion, political accountability	Policy mandates, public sector digitisation, G2P/ P2G programmes	Policy	Design & Mandate	Political cycles affecting continuity
Central Bank	Safe, efficient, inclusive, interoperable payment systems	Regulatory mandate, financial stability, public trust	Policy & Technical	Entire lifecycle	Capacity constraints; dual-role tensions
IPS Operator	Operational sustainability, adoption, transaction growth	Cost recovery, system utilisation, performance KPIs	Technical	Build > Maturity	Pressure to prioritise profitability over inclusion
Participants: Banks	Customer retention, transaction revenue, market position	Commercial returns, competitive positioning	Market	Build > Adoption	Resistance to interoperability or non-bank access
Participants: Non-bank PSPs, Fintechs & MNOs	Access to infrastructure, customer acquisition, ecosystem participation	Revenue growth, service expansion	Market	Adoption > Maturity	Dependence on access rules controlled by others
Regional Organisations (SADC, COMESA, ECOWAS, AU)	Regional integration and interoperability	Regional mandates and member commitments	Policy	Design > Maturity	Weak enforcement authority
Regional & Continental Payment Platforms (PAPSS, TCIB, GIMACPAY, PI-SPI)	Cross-border payment connectivity and scheme participation	Network expansion and transaction growth	Technical & Policy	Adoption > Maturity	Dependence on domestic readiness and regulatory alignment
Sovereign Technology Partners (e.g. NIPL)	Technology cooperation, DPI expansion, ecosystem growth	Bilateral cooperation, technology transfer, strategic partnerships	Technical & Strategic	Design > Build	
Commercial Technology Providers	Deployment, licensing, maintenance, upgrades	Commercial revenue	Technical & Financial	Build > Maturity	Vendor lock-in and lifecycle cost escalation

Open-Source Technology Providers	Ecosystem growth, interoperability, replicability	Adoption and community expansion	Technical	Design > Build	Reliance on local capacity and sustainable support models
System Integrators & Programme Managers	Successful delivery and implementation	Project revenue and delivery performance	Technical	Build & Implementation	Knowledge concentration and implementation dependency
Development Finance Institutions & Donors	Financial inclusion, digital infrastructure development, economic integration	Grants, concessional finance, technical assistance	Financial & Policy	Design > Build	Funding dependency and programme-driven priorities
Advocacy, Research & Knowledge Institutions	Policy reform, capacity building, ecosystem development	Institutional mandates and thought leadership	Policy	Design > Maturity	Limited implementation accountability
Policy and Regulatory Peer Networks (e.g., AFI)	Policy leadership, peer learning, regulatory capacity development	Member-driven collaboration and knowledge exchange	Policy	Design > Maturity	Reliance on member uptake and engagement
Consumers	Affordable, accessible, trusted payment services	Convenience, cost savings, utility	Market	Adoption > Maturity	Low influence at design stage
Merchants	Efficient acceptance and lower payment costs	Revenue growth and operational efficiency	Market	Adoption > Maturity	Fragmented representation
Government Agencies (as Users)	Efficient collection and disbursement of payments	Service delivery and fiscal efficiency	Policy & Market	Adoption > Maturity	Reliance on integration with public systems

Not all actors influence IPS outcomes in the same way. Some exercise influence through policy authority, others through funding, technology provision, implementation support, market power, or network effects. Their influence also changes throughout the IPS lifecycle, creating periods where particular actors have disproportionate ability to shape design choices, implementation pathways, and long-term system evolution. Understanding these dynamics is critical for policymakers seeking to preserve national priorities while leveraging external expertise and support.

4.1. ACTOR GROUPS AND THEIR ROLES

The IPS ecosystem is shaped by multi-stakeholder actors, each contributing a complementary function that influences the design, implementation, and scaling of IPS, including convening actors that enable peer learning, coordination, and knowledge exchange.

GOVERNMENT

Government involvement in IPS development is episodic rather than continuous. It tends to be most decisive at two moments: initiation, when a political mandate catalyses action that the financial sector has failed to take voluntarily, and crisis, when public discontent with payment costs or exclusion forces intervention. The analytical tension is that governments provide the mandate but rarely the execution capacity, which means their influence is front-loaded and then fades, while the consequences of the design choices they catalysed persist for decades.

The strategic implication for central banks is that political sponsorship can accelerate IPS development, but it may also introduce shifts in priorities as governments change or fiscal conditions evolve. Embedding IPS objectives within long-term national development and digital transformation strategies can help sustain momentum beyond individual political cycles.

CENTRAL BANK

Central banks play a central role in IPS ecosystems due to their mandate over national payment systems. In the context of IPS development, their involvement is commonly reflected in four institutional roles: regulator, overseer, catalyst, and in some cases operator or co-owner of payment infrastructure.⁵¹

1

REGULATOR: establishes the legal and regulatory framework governing payment systems and payment service providers, including licensing requirements, operational standards and access rules.

2

OVERSEER: promotes safe and efficient payments by monitoring and assessing payment systems and, where necessary, inducing changes to address operational or systemic risks.

3

CATALYST: convenes financial institutions and payment providers to support the development of shared infrastructure, interoperability standards and national payment strategies.

4

OPERATOR OR CO-OWNER: in some countries, central banks directly operate payment infrastructure or participate as owners in national payment system operators to ensure interoperability, resilience and effective governance of critical payment systems.

In such cases, central banks assume a dual role, with overlapping responsibilities that make the structure of their involvement important for maintaining regulatory neutrality and effective system development (see box 11).

BOX 11: MANAGING THE CENTRAL BANK'S DUAL ROLE IN IPS

Central banks often perform a dual role in IPS acting as regulator/overseer and catalyst, and in some cases also as operator or co-owner of payment infrastructure. This reflects practical realities in many markets, where central banks step in to coordinate stakeholders, address fragmentation, or advance national payment objectives.

This dual role raises the question of how to support IPS development while maintaining regulatory neutrality and a level playing field. In practice, countries manage this through different institutional mechanisms:

- **Subsidiary model:** IPS operations are housed in a separate legal entity, creating clear boundaries between regulatory and operational roles. This allows central banks to advance interoperability and inclusion objectives while preserving regulatory independence. For example, in Namibia, a dedicated Instant Payment Namibia (IPN) subsidiary was established to create “Chinese walls” between roles, avoiding the perception of being both “player and referee,” while operating under the same regulatory framework as other participants.⁵²
- **Industry/shared model:** Operations are undertaken by an industry-owned or jointly owned entity, while the central bank remains the regulator and catalyst, enabling private sector participation while preserving neutrality.

⁵¹ Bank for International Settlements, Committee on Payments and Market Infrastructures (CPMI), 2016. Available [here](#)

⁵² Stakeholder Interviews, 2026

- **Integrated model:** Central bank directly operates the IPS alongside its regulatory role, as seen with Pix. This has enabled rapid rollout, strong enforcement of interoperability, and direct control over pricing and access, including low- or zero-cost transfers, supported by sufficient institutional capacity and internal governance.

Overall, the choice of model reflects market structure, private sector readiness, and policy priorities: the subsidiary model supports catalytic intervention with separation, the industry model relies on coordinated private sector leadership, and the integrated model enables centralised control over design, access, and pricing.

The central bank's influence derives not only from its regulatory mandate, but also from its ability to coordinate competing interests across the ecosystem. As IPS mature, the challenge increasingly shifts from infrastructure deployment to balancing inclusion objectives, market incentives, innovation, competition, and long-term sustainability. The effectiveness of this coordinating role often determines whether IPS evolve as public infrastructure or fragment into competing commercial ecosystems.

IPS OPERATORS

The operator's incentives are shaped decisively by its ownership structure, and this is where the governance design choices made at the mandate stage have their most lasting practical consequences. An industry-owned operator will prioritise transaction volume, cost recovery, and commercial scalability; a central bank-led operator will anchor on policy mandates for inclusion and affordability; a public-private entity will attempt to balance both and frequently satisfy neither fully.

The analytical tension that emerges at the maturity stage is that all three models face pressure to restrict low-value, low-volume participation in favour of higher-margin corridors, directly undermining the inclusion objectives that justified the system. This pressure is structural, not a governance failure, and it must be anticipated in scheme rules from the outset rather than addressed after commercial interests have consolidated.

For policymakers, the critical question is not whether operators pursue commercial sustainability, but how governance arrangements ensure that commercial incentives remain aligned with public policy objectives throughout the system lifecycle.

PARTICIPANTS (Bank and Non-bank)

Participants are simultaneously the system's most essential partners and its most influential implementation stakeholders. Banks provide settlement infrastructure, regulatory compliance, and the customer relationships through which most users access the IPS, but they also carry the strongest commercial incentive to delay, dilute, or design around interoperability mandates that threaten their closed-loop advantages. Non-bank participants, including fintechs and mobile money operators, depend on IPS access for their commercial viability but have limited leverage to secure it without regulatory support.

Both Namibia and Liberia found that voluntary participation frameworks stalled adoption until formal regulatory directives reclassified IPS integration as a mandatory compliance obligation. The consistent lesson is that participant buy-in is a governance outcome achieved through mandate and incentive design, not a precondition for launching the process.

The implication for central banks is that participation outcomes are rarely determined by consultation alone. Successful IPS programmes typically combine clear regulatory expectations with incentives that make participation commercially viable for both incumbents and new entrants.

REGIONAL ORGANISATIONS AND REGIONAL AND CONTINENTAL PAYMENT PLATFORMS

Regional bodies such as SADC, COMESA, ECOWAS, and the African Union carry high interest in IPS outcomes but persistently low practical influence over domestic design decisions. Their leverage is primarily normative: they set standards, convene alignment, and create the political expectation of cross-border interoperability that domestic systems must eventually satisfy.

The analytical tension is one of sequencing. Regional integration ambitions routinely outpace domestic IPS readiness, creating pressure on central banks to design for cross-border connectivity before their domestic systems are stable enough to bear it. Seychelles illustrates the inverse problem: its SADC membership creates a clear regional integration imperative but limited domestic transaction volumes make the cost of building the infrastructure required to participate commercially difficult to justify.

Although regional organisations often have limited direct authority over domestic implementation decisions, their influence is increasing as countries pursue cross-border interoperability and regional payment integration. This is most visible in the platforms that give these ambitions concrete form, from the continental PAPSS to regional systems such as GIMACPAY, PI-SPI, TCIB and Buna, none operated by the bodies directly but each embedding standards and participation rules domestic systems must eventually meet. Over time, regional initiatives may shape technical standards, settlement arrangements, governance requirements, and participation expectations in ways that progressively influence domestic IPS evolution.

TECHNOLOGY PROVIDERS: SOVEREIGN, COMMERCIAL AND OPEN-SOURCE

The technology selection decision is where the IPS lifecycle's longest-lasting dependencies are created, and where the gap between what is decided and what is fully understood is widest. The three available models each convert one risk into another: proprietary vendors offer operational certainty and SLA accountability at the cost of escalating licence fees and customisation constraints; open-source platforms reduce upfront licensing costs but transfer dependency from vendor to system integrator, replicating lock-in in a different form; sovereign-to-sovereign partnerships offer proven architecture and bilateral relationship benefits but introduce geopolitical exposure whose implications are still being tested, most visibly in Namibia's pioneer deployment of NPCI International's UPI-based stack. PayNet Malaysia's public commitment to reducing its ACI Worldwide dependency by acquiring source code and building internal capacity illustrates what a mature operator eventually recognises: the relevant question is not which model avoids dependency, but which model makes dependency manageable and reversible.

The strategic question is therefore not whether dependency can be eliminated, but how dependency is governed, diversified, and reduced over time through capacity development, knowledge transfer, source code access, and effective contractual arrangements.

SYSTEM INTEGRATORS AND PROGRAMME MANAGERS

While technology providers supply the underlying platforms and infrastructure, system integrators and programme managers play a critical role in translating policy objectives and technical designs into operational systems. These actors are responsible for configuring technology solutions, integrating participants and third-party systems, coordinating implementation activities, managing project delivery, and supporting testing, migration, and operational readiness.

Their influence is often greatest during the design, build, and implementation phases of the IPS lifecycle, where technical decisions must be translated into practical implementation choices. In many cases, system integrators serve as the primary interface between central banks, operators, technology providers, financial institutions, and development partners. As a result, they frequently accumulate significant institutional knowledge regarding system architecture, implementation constraints, participant readiness, and operational risks.

System integrators may also influence implementation outcomes through recommendations on system architecture, deployment approaches, integration priorities, sequencing of use cases, vendor selection, and operational models. While these recommendations are typically intended to improve delivery efficiency and reduce implementation risks, they can also shape long-term technology dependencies, operational practices, and future upgrade pathways.

The influence of system integrators tends to be strongest where domestic implementation experience is limited or where large-scale transformation programmes require specialised technical expertise. Conversely, their influence generally diminishes as local capabilities mature and responsibility transitions to operators and ecosystem participants.

For policymakers, the key consideration is ensuring that implementation support is accompanied by meaningful knowledge transfer, documentation, local capacity development, and institutional ownership. Without deliberate efforts to internalise implementation knowledge, countries may remain dependent on external expertise for future upgrades, integrations, operational support, and strategic decision-making. The long-term objective should therefore be to leverage system integrators as capability enablers rather than permanent capability substitutes.

ADVOCACY GROUPS, DEVELOPMENT PARTNERS, DONORS AND FUNDERS

The structural feature that distinguishes development partners and donors from all other actors in the IPS ecosystem is that their influence is highest precisely when the most consequential and hardest-to-reverse design decisions are being made, and lowest by the time those decisions have played out. Funding conditionality, procurement frameworks, and preferred vendor relationships actively shape technology shortlists, governance structures, and participation models during the design and build stages, often before formal procurement has begun.

The Mojaloop Foundation has documented how institutional inertia in development banks toward familiar proprietary vendors can disadvantage open-source options even where the World Bank's own lending instruments are explicitly technology-neutral. The more acute risk, signalled by the Gates Foundation's commitment to concluding IPS financial inclusion support by 2030, is that systems built around philanthropic financing have a defined horizon after which self-sustainability is not optional. Central banks that have not modelled the post-donor financing transition as a governance milestone, rather than a future problem, will be most exposed when that horizon arrives.

The influence of development partners is often indirect but systemic. Rather than determining specific design decisions, they shape the information, financing, technical options, and implementation pathways available to decision-makers. Their influence therefore extends beyond individual projects and can affect broader ecosystem trajectories, particularly where domestic technical or financial capacity remains limited.

ADVOCACY, RESEARCH AND KNOWLEDGE INSTITUTIONS

Advocacy, research and knowledge institutions occupy a distinct position in the IPS ecosystem. Unlike development partners and donors, they do not typically control financing or procurement decisions. Unlike technology providers or system integrators, they do not shape architecture or deliver implementation. Their influence operates through the production and diffusion of analysis, evidence, standards, and frameworks that shape the information environment within which policymakers make design decisions.

Institutions such as the AfricaNenda Foundation, CGAP, the BIS, and academic and policy research centres contribute landscape assessments, interoperability standards work, comparative analysis of IPS models, and regulatory guidance that central banks draw on when designing and reviewing payment systems. Their reach is widest at the design stage, where the framing of policy options and the evidence base for particular approaches can materially influence which choices enter the decision-making process. As IPS mature, their influence shifts toward monitoring, evaluation, and the production of lessons that inform subsequent generations of system design across markets.

POLICY AND REGULATORY PEER NETWORKS E.G. ALLIANCE FOR FINANCIAL INCLUSION

AFI is a policy leadership alliance of member central banks and financial regulators. Its leverage in the IPS ecosystem is relational: its membership gives it access to the full range of IPS development experience across the continent. Stakeholders consulted for this study identified AFI's convening function, operationalised through working groups such as the Digital Financial Services Working Group and regional initiatives including the African Financial Inclusion Policy Initiative (AfPI)⁵³, as the most valuable mechanism for supporting central banks through IPS design and regulatory decisions, where the cost of repeating peer mistakes is high.

As more African central banks move systems into live production, this convening role becomes the channel through which implementation experience can be translated into collective positions on source code ownership, vendor dependency, regulatory harmonisation, and regional interoperability.

Unlike donors, technology providers, or operators, policy and regulatory peer networks influence IPS development primarily through knowledge diffusion and institutional learning. Their value lies in reducing information asymmetries, accelerating access to implementation experience, and helping policymakers identify both opportunities and risks before major design decisions become difficult to reverse.

⁵³ The Africa Financial Inclusion Policy Initiative (AfPI) is AFI's regional policy coordination platform that brings together African financial sector policymakers to advance financial inclusion through regulatory cooperation, peer learning, capacity building, and the implementation of policies that support inclusive and sustainable economic development across the continent.

END USERS: CONSUMERS, MERCHANTS, GOVERNMENT AGENCIES

End users are the actors with the least formal influence over IPS design and the most practical influence over IPS survival. Consumers, merchants, and government agencies do not shape architecture, scheme rules, or pricing during the design and build stages, yet their adoption behaviour at launch determines whether the system achieves the transaction volumes required for financial sustainability, and their trust in the system's security and fairness determines whether it retains political legitimacy over time.

The analytical tension is that systems designed without meaningful end user input routinely discover at the launch stage that use cases, pricing, and user experience assumptions were wrong, and that correcting them requires re-engaging the same commercial and regulatory processes that took years to complete the first time. G2P payments have

emerged across multiple African IPS deployments as the most reliable early anchor use case precisely because government agencies, unlike individual consumers, are captive users whose volume is guaranteed regardless of organic adoption dynamics.

The implication for policymakers is that adoption should not be treated as a post-implementation objective. User needs, trust, affordability, and accessibility considerations must be incorporated during design if systems are to achieve meaningful scale and sustainability.

Each actor group examined in this section offers a distinct opportunity to advance IPS objectives while carrying a risk that can undermine them. The table below draws these together, setting out for each actor its primary opportunity, its primary risk, and the key regulatory consideration for policymakers.

TABLE 11. STRATEGIC CONSIDERATIONS FOR POLICYMAKERS ACROSS ACTOR CATEGORIES

ACTOR CATEGORY	PRIMARY OPPORTUNITY	PRIMARY RISK	KEY REGULATORY CONSIDERATION
GOVERNMENT	Policy alignment and national prioritisation	Political shifts and changing priorities	Anchor IPS within long-term national strategies
CENTRAL BANK	Ecosystem coordination and policy leadership	Overextension of operational and regulatory roles	Maintain clarity of mandate and governance
IPS OPERATORS	Operational sustainability and innovation	Misalignment between commercial and public policy objectives	Ensure governance aligns incentives with policy goals
PARTICIPANTS (Bank and Non-bank)	Adoption, scale, and service innovation	Resistance to interoperability or access reforms	Balance participation incentives with regulatory expectations
REGIONAL ORGANISATIONS	Regional interoperability and integration	Misalignment between regional ambitions and domestic readiness	Align national roadmaps with regional commitments

REGIONAL & CONTINENTAL PAYMENT PLATFORMS	Expanded cross-border connectivity	Dependency on external settlement or participation frameworks	Preserve flexibility while pursuing interoperability
SOVEREIGN TECHNOLOGY PARTNERS	Accelerated deployment and technology transfer	Long-term standards or technology dependency	Prioritise localisation and capability development
COMMERCIAL TECHNOLOGY PROVIDERS	Proven solutions and implementation speed	Vendor lock-in and rising lifecycle costs	Strengthen contractual and governance safeguards
OPEN-SOURCE TECHNOLOGY PROVIDERS	Flexibility, adaptability, and sovereignty	Capacity constraints and support sustainability	Invest in local technical capabilities
SYSTEM INTEGRATORS & PROGRAMME MANAGERS	Access to specialised implementation expertise	Knowledge concentration and implementation dependency	Ensure structured knowledge transfer and local ownership
DEVELOPMENT PARTNERS & DONORS	Funding, technical assistance, and ecosystem development	Programme dependency and external priority setting	Plan early for sustainability and transition
ADVOCACY, RESEARCH & KNOWLEDGE INSTITUTIONS	Evidence generation and knowledge diffusion to inform policy and design choices.	Research influence disconnected from implementation accountability.	Engage research outputs critically; triangulate findings across multiple sources before anchoring design decisions
POLICY & REGULATORY PEER NETWORKS	Accelerated learning and peer exchange	Over-reliance on external experience without local adaptation	Tailor lessons to national contexts
END USERS	Adoption, trust, and network effects	Low uptake despite infrastructure investment	Prioritise user needs throughout the design process

4.2. STAKEHOLDER DYNAMICS ACROSS THE IPS LIFECYCLE

IPS evolve through four key stages: **design and mandate**, **build and implementation**, **launch and adoption**, and **maturity and evolution**.

Influence is not static across these stages, it shifts as the system develops, with different actors shaping outcomes at different points. While stakeholder interest remains consistently high throughout the lifecycle (see table below), influence transitions from public sector actors - such as governments, central banks, and development partners - during the design phase, to operators, participants, and end users as systems are implemented and scaled. The role of development partners typically declines over time.

FIGURE 4. THE STAGES OF THE IPS LIFECYCLE

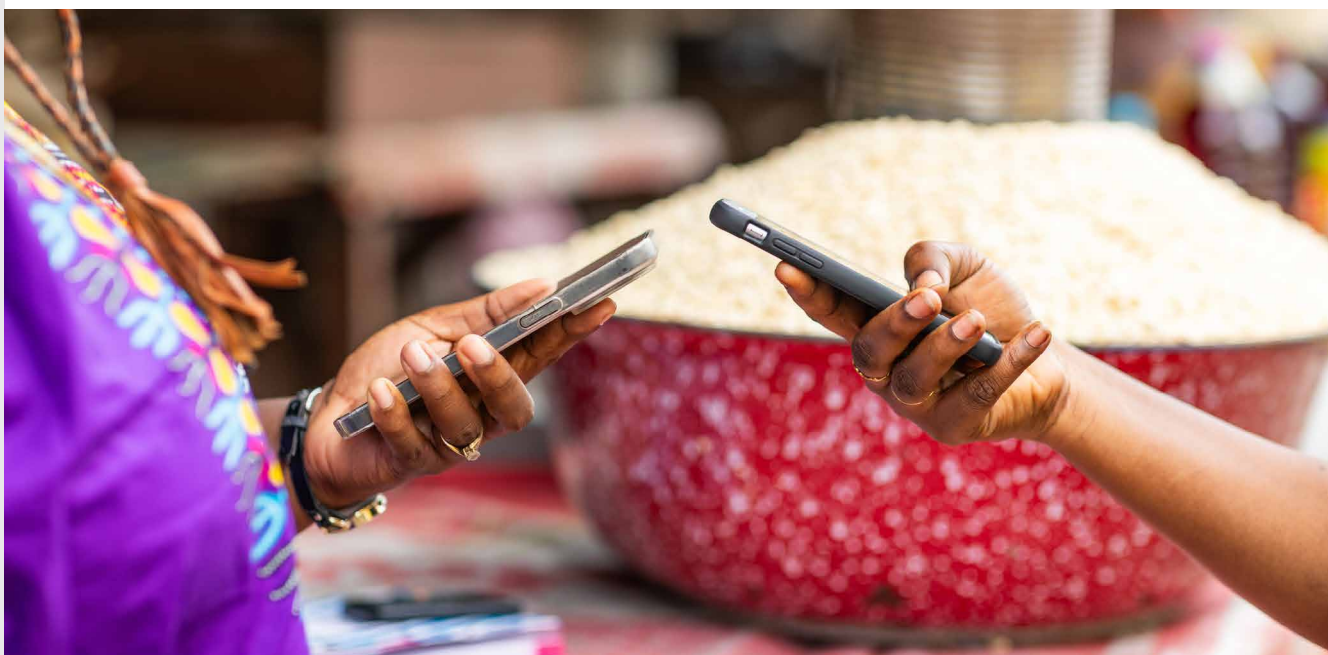
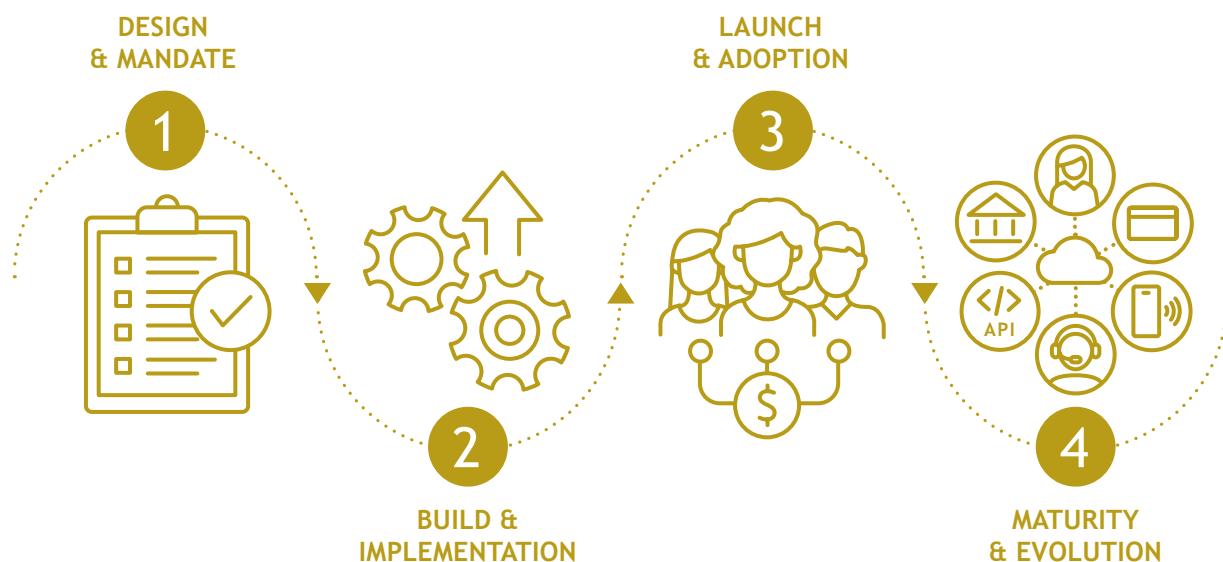


TABLE 12. STAKEHOLDER INTEREST AND INFLUENCE ACROSS THE IPS DEVELOPMENT LIFECYCLE

ACTOR	INFLUENCE TYPE	1 DESIGN & MANDATE		2 BUILD & IMPLEMENTATION		3 LAUNCH & ADOPTION		4 MATURITY & EVOLUTION	
		Interest	Influence	Interest	Influence	Interest	Influence	Interest	Influence
Government	Policy	High	High	Medium	Medium	High	Medium	High	Low
Central Bank	Policy; Technical (in CB-led systems)	High	High	High	High	High	Medium	High	Medium
IPS Operator	Technical	Medium	Low	High	High	High	High	High	High
Participants (Bank and Non-bank)	Market	High	Low-Medium	High	Medium	High	Medium-High	High	High
Regional Organisations	Policy	High	Low	High	Low	High	Low	High	Low
Regional and Continental Payment Platforms	Technical; Policy	Medium	Low	High	Medium	High	High	High	High
Technology Providers	Technical; Financial	High	Medium	High	High	High	High	High	High
System Integrators and Programme Managers	Technical	Low	Low	High	High	Medium	Medium	Low	Low
Advocacy, Research & Knowledge Institutions	Policy; Knowledge	High	Medium	Medium	Low	Medium	Low	Medium	Medium
Development Partners, Donors and Funders	Financial; Technical; Policy	High	High	High	High	Medium	Medium	Low	Low
Policy and Regulatory Peer Networks (e.g., AFI)	Policy; Knowledge; Capacity Building	High	Medium-High	High	Medium	High	Medium	High	Medium-High
End users	Market	Medium	Low	Medium	Low	High	High	High	High



STAGE 1 DESIGN & MANDATE

The design and mandate stage is the most consequential in the IPS lifecycle, because this is where fundamental choices are made that will constrain or enable every subsequent decision. The stage is typically initiated by the central bank or a Ministry, often in response to political pressure, technical opportunity, and external funding availability. Central banks often dominate: they define the policy mandate, select the governance model, choose technology partners, and determine participation criteria.

TABLE 13. KEY ACTIVITIES AND DESIGN CHOICES UNDERTAKEN AT THE DESIGN AND MANDATE STAGE

KEY ACTIVITIES AT THIS STAGE	KEY DESIGN CHOICES MADE AT THIS STAGE
- National payment systems assessment to identify gaps between the current payments ecosystem and the desired future state - Policy and regulatory reviews to determine whether existing legal frameworks can support an IPS or whether new legislation is required - Feasibility studies and business case development to assess viability and sustainability - Stakeholder consultations with financial institutions and broader industry actors - Drafting foundational strategic documents such as a national payments strategy and IPS mandate - Preparation of a request for proposal (RFP) for programme management or technical assistance terms of reference	- Governance model: who will own and control the IPS - Public policy objectives and associated success metrics - Participation model: which entities can participate, under what conditions, and with what obligations - Institutional home of the IPS: whether it will sit within the central bank or be managed by a separate operating entity - Build/procurement approach: whether to build a bespoke system, procure a vendor solution, or adopt open-source infrastructure

KEY DEPENDENCY RISKS

The key risk at this stage is that **decisions on technology architecture, governance structure, and pricing principles crystallise into contractual and technical constraints** that are costly to reverse later. Disproportionate influence can be exerted over the technology selection process by donors or development partners, shaping the technology shortlist through funding conditions and preferred vendor relationships before procurement has formally begun. Large incumbent banks may engage defensively, seeking to preserve closed-loop advantages and limit non-bank participation. Their influence at this stage is often underestimated: they shape design through consultation processes without bearing public accountability for outcomes. End users, the ultimate beneficiaries of the system, have negligible formal influence, though political pressure from government can proxy for their interests.

Countries that rush this stage to meet donor timelines or political deadlines tend to pay a heavy price in the build and maturity stages.



STAGE 2 BUILD AND IMPLEMENTATION

This is the stage where abstract design choices become concrete systems, and where the gap between what was decided at Stage 1 and what is technically and operationally feasible is confronted directly. It is also the stage where central banks most frequently lose practical influence over design outcomes to technology providers and system integrators, because the pace and specificity of implementation decisions exceeds the bandwidth of governance. The stage is characterised by two overlapping tracks: the technical track (building or procuring and configuring the platform, integrating with participant systems, building connectivity to existing payment infrastructure) and the institutional track (establishing the operator entity, hiring staff, designing scheme rules, building regulatory frameworks, onboarding participants). Both tracks run simultaneously.

TABLE 14. KEY ACTIVITIES AND DESIGN CHOICES UNDERTAKEN AT THE BUILD AND IMPLEMENTATION STAGE

KEY ACTIVITIES AT THIS STAGE	KEY DESIGN CHOICES MADE AT THIS STAGE
• Vendor selection and contract negotiation • Technical requirements documentation and system design • Participant integration • Scheme rule drafting • Regulatory framework finalisation, customer protection framework development • Testing and certification of participant connections • Staff recruitment and capacity building	• Use case and value added services prioritisation and activation sequencing (this choice is both commercial and political) • Technology vendor selection - the choice of vendor determines technical architecture, the system's functionalities and capabilities at launch and its product development/upgrade roadmap, degree of vendor dependency and the cost structure for the foreseeable future • Participation rules and onboarding criteria • Scheme rules and dispute resolution processes • Fee structure • Branding/marketing for the IPS

KEY DEPENDENCY RISKS

At this stage, central banks most frequently lose practical influence over design outcomes to technology providers and system integrators, because the pace and specificity of implementation decisions exceeds the bandwidth of governance. Central banks retain formal authority but become heavily dependent on vendor timelines, interpretations of requirements, and technical judgment.

Donors maintain influence through disbursement conditionality, often imposing procurement processes that conflict with the urgency of delivery. Participant banks surface as a coordination challenge: legacy core banking systems, reluctance to invest in integration, and disputes over testing timelines are among the most common causes of project delay. The absence of a regulatory mandate forces operators to negotiate commercially, which is slow. The presence of a mandate accelerates compliance but triggers resistance that must be managed carefully. The Bank of Namibia deployed an external governance framework designed with PwC, using co-creation approaches and dedicated work streams to surface risks at Steering Committee level and ensure that stakeholders not directly represented on main structures were still consulted.

Technology vendors hold high influence and high dependency risk throughout this stage across all three technology models. The decisions made here on vendor selection, contract terms, source code ownership, and skills transfer provisions determine the central bank's exit risk and operational autonomy for the system's entire operational life.



STAGE 3 LAUNCH AND ADOPTION

The launch and adoption stage is where the system confronts the market and where the adequacy of the design decisions made in earlier stages is tested against actual user behaviour. It is characterised by a platform paradox common to all network businesses: the system needs users to generate value, but users need the system to already have value before they adopt it. Managing this adoption challenge while simultaneously dealing with operational issues, scheme rule gaps, and participant behaviour that diverges from design assumptions is the central task to this stage.

TABLE 15. KEY ACTIVITIES AND DESIGN CHOICES UNDERTAKEN AT THE LAUNCH AND ADOPTION STAGE

KEY ACTIVITIES AT THIS STAGE	KEY DESIGN CHOICES MADE AT THIS STAGE
- Public launch and user onboarding campaigns - Use case activation - Merchant and agent network development - Government engagement for G2P payment integration - Monitoring of transaction volumes, failure rates, and user complaints - Scheme rule revision based on operational experience - Participant support and dispute management - Regulatory supervision of participant compliance with scheme rules	- Pricing adjustments and promotion strategy - Fraud and risk management responses - Participant compliance and enforcement

KEY DEPENDENCY RISKS

Operators and participants gain influence as they control the customer interface, pricing execution, and the speed of merchant onboarding that determines whether use cases activate at scale. End users acquire influence for the first time, indirectly through adoption rates and directly through the trust dynamics that fraud incidents or service failures can destroy rapidly. The Mojaloop Foundation observed that large market players who have built closed silos often require central bank enforcement through formal instructions or mandates to integrate at this stage, and that without such mandates, adoption stalls as critical players remain outside the system.

The sequencing of use cases at this stage carries lasting consequences. Several central banks, including Namibia and Liberia, prioritised G2P payments in early rollout phases because government agencies provide guaranteed volume that does not depend on organic consumer adoption. The Bank of Mozambique conducted a two-week pilot with bank employees to stabilise the system before public launch, reaching over 3,000 transactions on its first public day and 5,000 by day four, demonstrating that a controlled launch approach can produce strong early adoption momentum.

Donors begin to step back as disbursement closes, often before the system has reached operational self-sufficiency. This transition creates a vulnerability: systems that have depended on donor-funded technical assistance suddenly face operational demands - fraud management, participant onboarding, use case expansion - without the same level of support.



STAGE 4 MATURITY AND EVOLUTION

The maturity stage is reached when the system is operationally stable, transaction volumes are growing steadily, and the central questions have shifted from adoption to sustainability, governance quality, and strategic evolution. It is also the stage where the accumulated consequences of design decisions from earlier stages become most visible - problems that were manageable during rapid growth become structural constraints when growth moderates. In this stage, funding structures potentially change, and regional integration deepens.

By this stage, both Interswitch and PayNet Malaysia had identified the same core maturity challenge from their respective positions as technology provider and operator: **building an IPS is only half the work. The other half is building the products, customer propositions, and commercial logic that make the system deliver value at scale.** As Interswitch observed from its experience in a smaller emerging market, systems can be technically live for two or three years without achieving meaningful volume because the use case development, marketing, and customer education required to drive adoption were not adequately resourced after the technology provider completed its implementation and moved on.

TABLE 16. KEY ACTIVITIES UNDERTAKEN AT THE MATURITY AND EVOLUTION STAGE

KEY ACTIVITIES AT THIS STAGE

- Fee renegotiation and commercial model review
- Governance reform
- Scheme rule modernisation
- Open API and advanced use case development
- Cross-border connectivity discussions with regional bodies
- Technology platform upgrades
- Institutional capacity deepening

KEY DEPENDENCY RISKS

Technology providers and large participant banks have often accumulated structural power that is difficult for central banks to reverse without significant disruption. Systems built on proprietary technology face escalating vendor dependency and licensing costs as their leverage in renegotiation weakens. Open-source systems face the sustainability challenge of maintaining codebases without dedicated funding, and the fragmentation risk of divergent local customisation. Both face the challenge of keeping pace with a technology frontier (open finance, AI-enabled services, cross-border interoperability) that was not necessarily visible at the time of system design.

The IPS operator, if separate from the central bank, must demonstrate financial self-sustainability, which creates pressure to restrict low-value participation in favour of higher-volume corridors - a direct tension with financial inclusion mandates. End users acquire influence indirectly through trust and adoption rates; systems that fail to protect consumers from fraud or that impose opaque fee structures face reputational and political consequences that no other governance mechanism could produce. Regional organisations gain relevance as cross-border integration becomes a priority, introducing new governance complexity that the original domestic design may not have anticipated.

4.3 INFLUENCE PATHWAYS ACROSS THE IPS ECOSYSTEM

The influence of actors within the IPS ecosystem is rarely exercised through direct decision-making authority alone. Instead, IPS outcomes often emerge through interconnected networks of funding, technology provision, technical assistance, implementation support, regulatory guidance, knowledge exchange, and market participation. As a result, influence is frequently indirect, distributed across multiple actors, and exerted through a series of interconnected relationships rather than a single intervention.

Understanding these influence pathways is important because actors that appear to have limited direct involvement in IPS implementation may nevertheless shape outcomes through their relationships with other ecosystem participants. Similarly, actors with formal

decision-making authority may remain dependent on external expertise, funding, technology, or implementation support when making strategic choices.

Influence pathways also evolve across the IPS lifecycle. During the design stage, influence may be concentrated among policymakers, development partners, advisors, and technical experts. During implementation, influence often shifts toward technology providers, system integrators, operators, and participating institutions. As systems mature, market participants and end users increasingly shape future development priorities through adoption patterns, transaction volumes, and demand for new services.

For policymakers, mapping influence pathways can provide greater visibility into where strategic dependencies exist, which actors shape critical decisions, and how national priorities can be protected while leveraging external expertise and support.

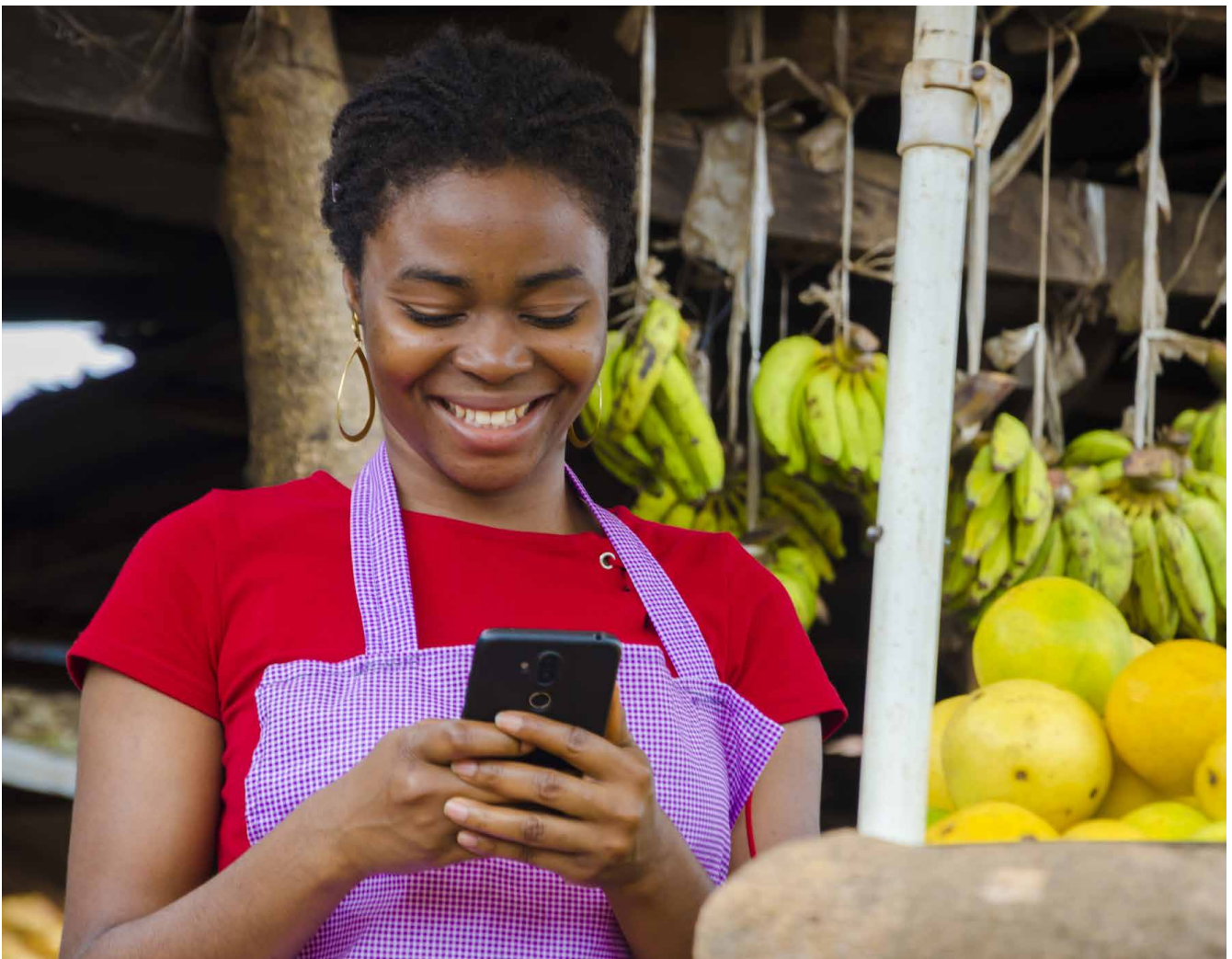


TABLE 17. INFLUENCE AND DEPENDENCY PATHWAYS SHAPING IPS OUTCOMES

ORIGINATING ACTOR	INFLUENCE MECHANISM	INTERMEDIARY ACTORS	POTENTIAL EFFECT ON IPS OUTCOMES
Government	National digital economy strategies	Central Bank, Operator	Governance priorities, use case priorities
Development Partners & Donors	Grants, technical assistance, diagnostics	Central Bank, AFI, Consultants, Integrators	Design choices, implementation pathways, capacity development
Technology Providers	Technology architecture, standards, upgrades	Operators, Integrators	Technology selection, future flexibility, interoperability
Sovereign Technology Partners	Technology transfer, DPI cooperation	Central Bank, Operator	Infrastructure model, standards alignment, capability development
Regional Organisations	Regional commitments, interoperability initiatives	Central Banks, Operators	Cross-border integration priorities
Policy & Regulatory Peer Networks (e.g. AFI)	Knowledge generation, sharing, peer learning	Policymakers, Regulators	Policy choices, risk awareness, implementation approaches and technical support
System Integrators	Implementation recommendations, technical execution	Operators, Technology Providers	Delivery timelines, system configuration, operational design
Banks & PSPs	Participation decisions, market adoption	Operators, End Users	Adoption rates, business model viability
End Users	Usage behaviour and service demand	PSPs, Operators, Policymakers	Product evolution, future use cases

BOX 12: INFLUENCE PATHWAYS IN PRACTICE

Influence within the IPS ecosystem is often indirect. For example, a development partner seeking to advance financial inclusion may support diagnostics, technology development, capacity building, implementation support, and knowledge-sharing initiatives across multiple organisations rather than directly influencing payment system decisions. These interventions can shape the information available to policymakers, the technology options under consideration, implementation capabilities, and the broader ecosystem within which decisions are made. This does not imply that outcomes are predetermined by external actors. Rather, it highlights that IPS decisions are often shaped by interconnected ecosystems of support, expertise, funding, and implementation capacity that extend beyond any single institution.

Not all influence within the IPS ecosystem is equal. Some actors operate through a single channel, such as technology provision or market participation, while others influence multiple layers of the ecosystem simultaneously through funding, technical assistance, capacity building, standards development, and implementation support. The greater the concentration of influence across multiple channels, the greater the potential for both ecosystem acceleration and dependency. Understanding where influence is concentrated is therefore an important consideration for policymakers seeking to balance external support with long-term institutional autonomy.

4.4. STRATEGIC IMPLICATIONS FOR POLICYMAKERS

The stakeholder dynamics described in this chapter do not resolve themselves as systems mature: they intensify. Three structural patterns emerge consistently enough across the country experiences examined in this study to warrant explicit attention as central banks move from design into implementation.

Incumbent market players will resist interoperability mandates. Large banks and dominant mobile money operators have invested deliberately in closed-loop systems that generate revenue precisely because users cannot transact outside them. When an IPS mandate threatens that model, delay and dilution are rational commercial responses. The evidence from Namibia and Liberia is unambiguous: voluntary participation frameworks failed in both markets, and adoption accelerated only after formal regulatory directives reclassified IPS participation as a mandatory compliance obligation. The cost of delay is not borne by the incumbents whose resistance caused it; it is borne by financially excluded populations waiting for interoperable infrastructure while the central bank pursues buy-in that will not voluntarily arrive.

Regional integration will be frustrated by governance gaps above the national level. Cross-border IPS connectivity requires coordinated governance across SADC, COMESA, ECOWAS, the CMA, and the African Union, but authoritative engagement points between these bodies do not consistently exist. Technically capable national systems remain stranded in regional isolation not because the domestic architecture is unready but because the governance infrastructure above it has not kept pace. Central banks should design for regional connectivity from the outset while sequencing the operational integration after domestic governance is stable and should actively advocate within regional forums for designated focal points with real authority to make and enforce alignment decisions.

Private sector appetite for co-investment will often be absent until viability is proven. Where central banks have designed PPP governance models and developed credible co-investment proposals, private reluctance is frequently rational caution rather than bad faith: institutions are being asked to commit capital to an unproven system. The Seychelles experience illustrates the consequence: a well-structured PPP proposal attracted no private co-investment, leaving the central bank as the default operator it had sought to avoid

becoming. The appropriate response is to sequence the transition: operate as anchor investor for a defined initial period, demonstrate viability through transaction volumes and operational performance, and offer equity to private participants from a position of proven commercial credibility.

Taken together, the driver pressures described in the preceding chapter and the stakeholder dynamics described here generate a set of predictable, structural risks that are not the result of individual failures in judgment but of forces that any IPS development process must navigate; anticipating them is more tractable than correcting them once they have become embedded.

KEY POLICY TAKEAWAYS

1

IPS outcomes reflect the interests, incentives, and influence of a broad ecosystem of actors (banks, mobile network operators, technology providers, payment operators, development partners, regional institutions, open-source communities, and sovereign technology partners). The policy task is not to avoid external partnerships or dependencies but to understand, manage, and periodically reassess them as systems mature and market conditions change.

2

Stakeholder dynamics shift across the IPS lifecycle; the actors dominant at design are rarely the actors dominant at operation. Effective governance anticipates these transitions and puts contractual, institutional, and capability arrangements in place before they are needed, particularly around vendor exit, source code access, service levels, and interoperability standards.

3

Development partners and sovereign technology partners exert influence beyond funding and technology into governance, financing, and future strategic options. Peer regulatory dialogue is precisely where members can recognise these dynamics early, compare how peers have managed similar dependencies, and develop shared positions on ownership, licensing, and transition planning.

4

Vendor and technology dependencies compound if unmanaged. Contractual protections at inception such as source code access, service-level agreements with meaningful consequences for failure, common interconnection standards, and clear exit provisions protect long-term flexibility. PayNet Malaysia's move toward digital payment sovereignty illustrates what a mature operator eventually needs to confront when these disciplines are not in place.

5 STRATEGIC CHOICES AND FUTURE PATHWAYS FOR AFRICAN POLICYMAKERS

The preceding chapters examined the evolution of IPS across Africa, the design choices shaping their development, and the ecosystem of actors influencing their outcomes.

Together, these findings highlight that IPS development is no longer primarily a question of infrastructure deployment, but increasingly one of strategic decision-making. As IPS ecosystems mature and become more interconnected, policymakers must navigate a growing set of trade-offs relating to sustainability, strategic autonomy, capability ownership, regional integration, innovation, and long-term resilience. This chapter synthesises these insights into a set of strategic tensions, choices, and future pathways that may help inform the next phase of IPS development across African markets.

5.1. THE EMERGING IPS TRANSITION IN AFRICA

Over the past decade, IPS have evolved from a relatively niche payment infrastructure initiative into a foundational component of Africa's digital financial ecosystem. Across the continent, central banks, governments, financial institutions, and payment service providers have invested in the development of domestic instant payment infrastructures to improve payment efficiency, expand access to formal financial services, strengthen interoperability, and support broader digital transformation objectives. As highlighted in Chapter 2, African countries are progressing along different IPS development journeys, reflecting variations in market structure, institutional capacity, policy priorities, and levels of ecosystem maturity.

While expanding access to instant payment infrastructure remains important, the strategic focus of IPS development is increasingly shifting. For many countries, the primary challenge is no longer whether to establish an IPS, but how to ensure that the system remains sustainable, resilient, adaptable, and capable

of supporting future economic and digital development objectives. As IPS ecosystems mature, policymakers are increasingly required to make decisions that extend beyond infrastructure deployment and into areas such as governance, long-term financing, institutional capability, technology strategy, interoperability, and ecosystem participation.

At the same time, IPS development is becoming more interconnected. As demonstrated in Chapters 3 and 4, national IPS decisions are increasingly influenced by a growing ecosystem of domestic, regional, continental, and global actors, including technology providers, development partners, system integrators, regional payment platforms, policy networks, and sovereign technology partners. These actors bring valuable expertise, funding, technology, and implementation support, but they also introduce new considerations relating to dependency, capability ownership, strategic autonomy, and long-term sustainability. As a result, IPS development is increasingly shaped not only by technical design choices, but also by broader strategic decisions regarding partnerships, governance, financing, and future positioning.

This evolution reflects a broader transition taking place across Africa's payment landscape. The first phase of IPS development focused primarily on infrastructure deployment, participant onboarding, and domestic interoperability. The emerging phase is characterised by a more complex set of policy questions relating to sustainability, strategic autonomy, regional integration, institutional capability, innovation, resilience, and future readiness. These considerations do not present binary choices or universally applicable solutions. Rather, they create a series of strategic tensions that policymakers must navigate in ways that reflect their national objectives, market conditions, institutional capabilities, and development priorities.

The strategic tensions identified throughout this report are not necessarily problems to be solved, but trade-offs to be managed. Different countries may reasonably adopt different approaches depending on their stage of development and policy ambitions. However, collectively they point toward a set of strategic choices that are increasingly shaping the future direction of IPS development across Africa. Table 16 summarises these tensions and their implications before the report examines the key strategic choices facing policymakers in the next section.

BOX 13: ECOSYSTEM CONVERGENCE, OPEN-SOURCE INNOVATION AND STRATEGIC STEWARDSHIP

The increasing adoption of shared technology platforms, open-source architectures, common standards, and regional payment infrastructures represents one of the most significant developments in Africa's IPS landscape. Initiatives such as Mojaloop, regional interoperability platforms, sovereign technology partnerships, and other emerging payment infrastructures have helped accelerate implementation, reduce costs, strengthen interoperability, promote knowledge sharing, and reduce duplication of effort across markets.

From a policy perspective, these developments are largely positive. Shared platforms can help countries deploy IPS more quickly, leverage proven implementation experience, access broader technical communities, and benefit from continuous ecosystem innovation. For many markets, such approaches may provide a practical pathway toward achieving national financial inclusion, digital transformation, and payment modernisation objectives.

However, as larger numbers of countries converge around common technology stacks, standards frameworks, governance models, technical communities, implementation partners, and funding ecosystems, a new strategic consideration emerges. The question is no longer simply whether a technology is open-source, proprietary, domestic, or externally sourced. Rather, policymakers must consider how ecosystem-wide convergence may influence future governance, capability ownership, cybersecurity resilience, technical expertise, standards evolution, and long-term strategic flexibility.

These considerations should not be interpreted as arguments against shared platforms or open-source approaches. Rather, they highlight the importance of active participation in the ecosystems upon which countries increasingly depend. As adoption scales, the sustainability and relevance of these platforms will increasingly depend on the extent to which users contribute to their evolution, governance, technical roadmap, standards development, and long-term strategic direction.

This presents an opportunity for collaborative engagement between open-source communities, technology ecosystems, and policy networks such as AFI. Through peer learning, technical exchanges, implementation communities, and structured engagement with platform governance processes, AFI members can help ensure that evolving IPS architectures continue to reflect the needs, priorities, and realities of African markets. In doing so, countries move beyond being users of shared infrastructure and become active contributors to the future direction, resilience, and sustainability of the ecosystems that increasingly support their payment systems.

TABLE 18: STRATEGIC TENSIONS, ECOSYSTEM IMPLICATIONS AND POLICY CONSIDERATIONS ACROSS IPS DESIGN DIMENSIONS

DESIGN DIMENSION	STRATEGIC TENSION	POTENTIAL IMPACT ON IPS ECOSYSTEM AND DECISION-MAKING	KEY POLICY CONSIDERATION
Governance & Ownership	Central bank control vs independent operation	Excessive operational involvement by central banks may create role conflicts and reduce market ownership, while insufficient oversight may weaken alignment with public policy objectives and systemic resilience.	Establish governance arrangements that preserve regulatory credibility while ensuring public policy objectives remain embedded in IPS development and operations.
	Broad stakeholder participation vs decision-making efficiency	Highly inclusive governance can strengthen ownership and adoption but may slow decision-making, implementation timelines, and responsiveness to emerging risks or opportunities.	Balance inclusiveness with effective decision-making by clearly defining governance structures, responsibilities, escalation pathways, and accountability mechanisms.
Infrastructure & Technology	Strategic autonomy vs external dependency	Dependence on external technology, expertise, funding, standards, or implementation support may accelerate deployment but can create long-term constraints on flexibility, upgrades, localisation, and future strategic choices.	Deliberately assess which dependencies are acceptable, temporary, or strategic, and develop pathways for capability transfer and long-term institutional ownership.
	Standardisation vs local customisation	Excessive customisation may increase costs, implementation complexity, and future upgrade challenges, while excessive standardisation may limit responsiveness to local market needs and policy objectives.	Adopt internationally recognised standards where appropriate while preserving flexibility to address national priorities and unique ecosystem requirements.
	Rapid deployment vs capability development	Prioritising implementation speed may accelerate delivery but can reduce opportunities for local capability development and increase long-term reliance on external providers.	Balance implementation timelines with deliberate investments in local technical, operational, and institutional capabilities.
	Shared infrastructure vs concentration risk	Shared platforms, common technology architectures, and ecosystem-wide standards can reduce implementation costs, accelerate interoperability, strengthen knowledge sharing, and improve portability across markets. However, increasing convergence around common technology stacks, governance arrangements, implementation ecosystems, or technical communities may also create concentration risks, common vulnerabilities, capability dependencies, and reduced flexibility if future strategic priorities diverge.	Incorporate resilience, redundancy, business continuity, and governance safeguards into infrastructure design and operational arrangements.

Financing & Sustainability	Financial inclusion and public value vs commercial sustainability	Low-cost or subsidised services can accelerate adoption and inclusion but may undermine long-term financial sustainability, investment incentives, and ecosystem participation if viable business models are absent.	Develop sustainable operating and pricing models that support both public policy objectives and long-term ecosystem viability.
	External funding support vs long-term sustainability	Donor and development partner support can accelerate implementation and innovation but may create transition challenges when funding, technical assistance, or programme support declines.	Plan for sustainability from the outset, including funding transitions, domestic resource mobilisation, and institutional capability development.
Regional Integration	National priorities vs regional and continental connectivity	Pursuing regional interoperability may unlock trade, mobility, and integration benefits but can require alignment with regional standards, timelines, and governance arrangements that may not always match domestic priorities.	Sequence regional integration ambitions in a manner consistent with domestic readiness, policy priorities, and ecosystem maturity.
Ecosystem Development	Control, stability and trust vs openness and innovation	Excessive control may limit innovation and participation, while excessive openness may introduce operational, consumer protection, integrity, and stability risks.	Promote proportionate participation frameworks that encourage innovation while maintaining trust, security, resilience, and effective oversight.

5.2. FIVE STRATEGIC CHOICES FACING POLICYMAKERS

The analysis presented throughout this report suggests that the future of IPS development in Africa will be shaped less by technology choices alone and more by a series of strategic decisions relating to governance, sustainability, capability, integration, and ecosystem development. While national circumstances differ considerably, a number of common choices are emerging across the continent. These choices do not present binary options or universally correct answers. Rather, they reflect trade-offs that policymakers must navigate in ways that align with national priorities, institutional capabilities, market conditions, and long-term development objectives.

STRATEGIC CHOICE 1

PUBLIC VALUE VS COMMERCIAL SUSTAINABILITY



CORE QUESTION: How should IPS balance financial inclusion and broader public policy objectives with long-term commercial sustainability?

Across Africa, IPS are increasingly viewed as critical public infrastructure supporting financial inclusion, digital transformation, government service delivery, economic participation, and broader development objectives. As highlighted throughout this report, many IPS initiatives were initially justified on the basis of their potential to reduce payment costs, expand access to financial services, improve interoperability, and strengthen participation in the formal economy. These public value objectives continue to underpin IPS investments across the continent.

At the same time, the long-term success of IPS depends on sustainable operating models capable of supporting system maintenance, technology upgrades, cybersecurity investments, operational resilience, innovation, and ecosystem growth.

Experience across several African markets demonstrates that achieving widespread adoption often requires deliberate efforts to reduce barriers to participation, including affordable pricing structures and incentives for ecosystem participants. However, where operating models remain heavily dependent on subsidies, donor support, or regulatory mandates without corresponding commercial incentives, questions regarding long-term sustainability inevitably emerge.

This creates a strategic tension for policymakers. **Systems designed primarily around public value objectives may struggle to generate sufficient resources to sustain future growth and innovation, while systems driven predominantly by commercial considerations may fail to achieve broader financial inclusion and development outcomes. The challenge is therefore not choosing between public value and sustainability but determining how both can be achieved simultaneously within the realities of each national context.**

Experience across African IPS implementations suggests that sustainable systems increasingly combine elements of both approaches. Public policy objectives provide the rationale and direction for investment, while commercially viable participation models create incentives for continued ecosystem engagement and innovation. The balance between these objectives may differ across countries, but long-term success increasingly depends on recognising that public value and sustainability are mutually reinforcing rather than competing goals.

STRATEGIC CONSIDERATION: As IPS ecosystems mature, policymakers may increasingly benefit from viewing sustainability not simply as a financial question, but as a broader consideration encompassing governance, participation incentives, operational resilience, innovation capacity, and long-term ecosystem viability.

STRATEGIC CHOICE 2

STRATEGIC AUTONOMY VS EXTERNAL DEPENDENCY



CORE QUESTION: What forms of dependency are acceptable, and how should they be managed over time?

IPS development rarely occurs in isolation. Across Africa, countries increasingly rely on a combination of external technology providers, development partners, system integrators, regional payment platforms, technical assistance programmes, and international standards to accelerate implementation and strengthen payment ecosystems. These partnerships often provide access to expertise, funding, proven technologies, implementation experience, and operational capabilities that may not yet exist domestically.

As demonstrated throughout Chapters 3 and 4, however, dependency extends beyond technology alone. It can emerge through funding arrangements, implementation support, governance structures, standards adoption, technical knowledge concentration, and ecosystem-wide reliance on specific providers or platforms. In many cases, these dependencies are not inherently problematic and may represent rational and efficient choices, particularly where countries seek to accelerate deployment, reduce costs, or leverage proven solutions.

The strategic challenge for policymakers is therefore not whether dependency exists, but whether it is understood, intentional, and aligned with long-term national objectives. Different countries will inevitably make different decisions depending on their institutional capabilities, market size, urgency of deployment, available resources, and policy ambitions. Moreover, acceptable levels of dependency may evolve over time as capabilities mature and strategic priorities change.

Experience across Africa suggests that successful IPS ecosystems often distinguish between dependencies that accelerate progress and those that constrain

future flexibility. The ability to influence governance arrangements, shape future system evolution, develop domestic expertise, and retain strategic decision-making authority may be as important as technology ownership itself.

STRATEGIC CONSIDERATION: Strategic autonomy should not be viewed as the absence of dependency, but rather as the ability to make informed choices, manage dependencies deliberately, and preserve sufficient flexibility to adapt as national priorities and ecosystem conditions evolve.

STRATEGIC CHOICE 3

NATIONAL PRIORITIES VS CONTINENTAL CONNECTIVITY



CORE QUESTION: How should domestic priorities be sequenced alongside regional and continental integration ambitions?

Across Africa, IPS development is increasingly linked to broader ambitions relating to financial inclusion, digital transformation, economic integration, trade facilitation, labour mobility, and regional development. Initiatives such as PAPSS, TCIB, PI-SPI, GIMACPAY, and emerging regional interoperability projects reflect growing recognition that payment systems can serve as enabling infrastructure for wider economic and social objectives.

For many policymakers, the challenge is not whether regional and continental integration should be pursued, but how it should be sequenced alongside domestic priorities. National payment systems remain fundamental to achieving inclusion objectives, supporting government payments, enabling domestic commerce, and strengthening local financial ecosystems. At the same time, participation in regional and continental payment frameworks may unlock opportunities for cross-border trade, remittances, investment flows, business expansion, and broader economic integration.

The tension arises when countries face competing demands on limited institutional, technical, and financial resources. Accelerating regional integration without sufficiently mature domestic foundations may create operational and governance challenges, while excessive focus on domestic optimisation may delay participation in wider economic opportunities and emerging continental initiatives.

Experience across Africa suggests that regional integration is most effective when built upon strong domestic foundations, clear governance arrangements, and interoperable standards. However, domestic readiness should not necessarily be viewed as a prerequisite for all forms of regional engagement. In some cases, participation in regional initiatives can itself act as a catalyst for domestic reform, capability development, and ecosystem modernisation.

STRATEGIC CONSIDERATION: Policymakers may increasingly benefit from viewing domestic development and regional integration as complementary objectives rather than competing priorities, while carefully sequencing investments and reforms in ways that reflect national readiness and broader development ambitions.

STRATEGIC CHOICE 4

FINANCING AND CAPABILITY OWNERSHIP



CORE QUESTION: How should countries leverage external resources while building sustainable domestic capabilities?

The development and operation of modern IPS requires significant financial, technical, operational, and institutional resources. Across Africa, many IPS initiatives have benefited from external funding, technical assistance, implementation support, and capacity-building programmes provided by development partners, technology providers, system integrators,

and regional institutions. These contributions have played an important role in accelerating deployment, reducing implementation risks, and expanding access to global expertise.

At the same time, Chapters 3 and 4 highlight that long-term sustainability depends not only on financial resources but also on the development of domestic capabilities. Technical knowledge, operational expertise, governance capacity, cybersecurity competencies, and ecosystem management capabilities increasingly represent strategic assets that influence the future resilience and adaptability of IPS ecosystems.

The strategic challenge for policymakers is therefore not whether external support should be utilised, but how it should contribute to long-term capability ownership. External expertise can accelerate implementation and provide valuable learning opportunities but may also create dependency if critical knowledge remains concentrated outside domestic institutions. Similarly, donor and partner support can help address immediate resource constraints while creating future transition challenges if sustainability considerations are not addressed early.

Experience across Africa suggests that the most durable outcomes emerge when implementation programmes deliberately integrate capability development into system design, deployment, operations, and governance arrangements. In this context, capability should be viewed not as a by-product of implementation but as a core component of IPS infrastructure itself.

STRATEGIC CONSIDERATION: Policymakers may increasingly benefit from treating talent, institutional capability, and knowledge transfer as strategic investments that are as important to long-term IPS success as technology infrastructure and financial resources.

STRATEGIC CHOICE 5**CONTROL, OPENNESS AND INNOVATION**

CORE QUESTION: How can policymakers maintain trust, security, and resilience while enabling innovation and ecosystem participation?

A defining characteristic of successful IPS ecosystems is their ability to support participation by a diverse range of actors, including banks, non-bank financial institutions, payment service providers, fintechs, merchants, government agencies, and consumers. Greater responsible openness can expand access, encourage innovation, strengthen fairness and competition, and accelerate the development of new use cases and services.

However, increasing openness may also introduce new complexities. Expanding participation can create operational, cybersecurity, consumer protection, fraud, integrity, and governance challenges that require effective oversight and risk management. As payment ecosystems become more interconnected and data-driven, policymakers must also consider the implications of emerging technologies, evolving business models, open finance frameworks, and increasing reliance on digital infrastructure.

The strategic tension therefore lies not between openness and control as mutually exclusive objectives, but in determining how openness should be governed. Excessive restrictions may limit innovation, reduce competition, and constrain ecosystem growth, while insufficient safeguards may undermine trust, resilience, and financial stability. The appropriate balance will differ across countries depending on market structure, regulatory maturity, risk appetite, and policy objectives.

Experience across Africa suggests that sustainable innovation is most likely to emerge within environments that combine clear governance, proportionate regulation, effective risk management, and transparent participation frameworks. Trust and

innovation should not be viewed as competing goals; rather, trust often provides the foundation upon which innovation can scale.

STRATEGIC CONSIDERATION: As IPS ecosystems evolve, policymakers may increasingly need to focus on designing governance and participation frameworks that enable innovation while preserving the trust, security, and resilience upon which long-term adoption depends.

5.3. FUTURE PATHWAYS FOR IPS DEVELOPMENT IN AFRICA

The strategic choices discussed in the preceding section suggest that the future evolution of IPS in Africa is unlikely to follow a single trajectory. Countries are starting from different positions, pursuing different policy objectives, and operating within distinct institutional, market, and regional contexts. As a result, the next phase of IPS development will likely be characterised by multiple, overlapping pathways rather than a uniform continental model.

These pathways should not be interpreted as prescriptions or sequential stages of development. Rather, they represent emerging directions already visible across African markets and increasingly shaping policy discussions, investment decisions, ecosystem partnerships, and regional initiatives. Understanding these pathways can help policymakers anticipate future opportunities, dependencies, and strategic considerations as IPS ecosystems continue to mature.

Across these pathways, IPS increasingly serve not only as payment infrastructure but also as enablers of broader financial inclusion, economic participation, digital transformation, government service delivery, trade facilitation, and regional integration objectives.

PATHWAY 1

DOMESTIC IPS OPTIMISATION AND DEEPENING

Countries in this pathway focus primarily on strengthening the performance, adoption, sustainability, and inclusiveness of domestic IPS ecosystems. Priorities may include expanding participation, increasing transaction volumes, improving interoperability, deepening government payment integration, strengthening merchant acceptance, and developing value-added services that enhance consumer and business utility.

For many countries, domestic optimisation remains the most immediate source of economic and financial inclusion benefits and provides the foundation upon which future regional and global connectivity can be built. As IPS ecosystems mature, attention is increasingly shifting from system deployment toward achieving meaningful usage, broader ecosystem participation, sustainable operating models, and stronger value propositions for consumers, businesses, and government agencies.

While regional and international integration opportunities continue to expand, experience across Africa suggests that the long-term success of these ambitions often depends on the strength, adoption, and resilience of domestic payment infrastructures.

STRATEGIC CONSIDERATION: The greatest value from IPS may not come from system deployment itself, but from sustained adoption, ecosystem participation, and the ability to support everyday economic activity at scale.

PATHWAY 2

REGIONAL AND CONTINENTAL CONNECTIVITY

A second pathway focuses on expanding interoperability beyond national borders through regional and continental payment infrastructures. Initiatives such as PAPSS, TCIB, GIMACPAY, PI-SPI, and emerging regional interoperability projects seek to reduce payment frictions, support trade, facilitate labour mobility, lower remittance costs, and strengthen economic integration.

As regional platforms mature and participation expands, policymakers will increasingly face decisions relating to standards harmonisation, governance alignment, settlement arrangements, liquidity management, and sequencing between domestic readiness and regional ambitions.

For many African countries, regional connectivity is not solely a payment objective. It increasingly supports broader ambitions relating to the African Continental Free Trade Area (AfCFTA), regional value chains, economic integration, investment flows, and the movement of people, goods, and services across borders.

Experience across Africa suggests that regional integration is most effective when built upon strong domestic foundations, interoperable standards, and clear governance arrangements. However, participation in regional initiatives can also serve as a catalyst for domestic reform, capability development, and ecosystem modernisation.

STRATEGIC CONSIDERATION: Domestic development and regional integration should increasingly be viewed as complementary objectives, with policymakers carefully sequencing investments and reforms according to national readiness and broader development priorities.

PATHWAY 3

IPS AS FOUNDATIONAL DIGITAL PUBLIC INFRASTRUCTURE

Increasingly, IPS are being positioned not only as payment systems but as one of the three foundational building blocks of digital public infrastructure (DPI), alongside digital identity systems and data exchange systems. Because these three components are designed to function as a connected foundation rather than in isolation, AFI members are encouraged to pair IPS investment with parallel progress on identity and data exchange infrastructure, rather than treating payment rails as a standalone system. In this pathway, payment rails become integrated with digital identity systems, data exchange frameworks, government service delivery platforms, open finance ecosystems, and other digital infrastructure initiatives.

This evolution expands the role of IPS beyond transaction processing and positions them as enabling infrastructure for broader economic, social, and digital transformation objectives. IPS can support more efficient government services, facilitate digital commerce, improve access to financial services, enable digital onboarding, and strengthen data-driven innovation.

As governments increasingly pursue integrated digital transformation agendas, IPS may become a critical layer supporting interactions between citizens, businesses, financial institutions, and public-sector agencies. This creates opportunities for greater efficiency and inclusion while also introducing new considerations relating to governance, interoperability, institutional coordination, cybersecurity, data management, and ecosystem stewardship.

The growing interest in sovereign-to-sovereign technology partnerships and digital public infrastructure cooperation further reinforces the strategic importance of IPS as part of a broader national digital ecosystem

STRATEGIC CONSIDERATION: As IPS become more deeply embedded within national digital ecosystems, policymakers may need to adopt increasingly coordinated approaches spanning payments, identity, data governance, cybersecurity, and public service delivery.

PATHWAY 4

GLOBAL CONNECTIVITY, STRATEGIC PARTNERSHIPS AND TECHNOLOGY DIPLOMACY

A fourth pathway involves increasing connectivity between African IPS ecosystems and global payment networks, technology partnerships, and cross-border interoperability initiatives. While still emerging, examples such as participation in cross-regional payment infrastructures, sovereign technology partnerships, and bilateral payment connectivity initiatives suggest that African IPS ecosystems are increasingly being positioned within broader international payment architectures.

These developments create opportunities to support trade, remittances, investment, tourism, technology transfer, and ecosystem development. At the same time, they signal a broader evolution in how payment infrastructures are being deployed globally. Increasingly, payment systems, digital public infrastructure, technical standards, and implementation models are becoming instruments of international cooperation, economic diplomacy, and strategic influence.

Examples such as India Stack partnerships, NIPL deployments, regional payment interoperability initiatives, and emerging international payment corridors illustrate how payment infrastructures are increasingly linked to wider economic, technological, and geopolitical relationships. Similar models may emerge from other jurisdictions as countries seek to export technology frameworks, standards, and digital infrastructure expertise.

For African policymakers, the strategic question is therefore not simply whether to participate in these initiatives, but how to do so in ways that maximise national benefit while preserving long-term flexibility, capability development, and strategic autonomy.

Strategic Consideration: Global partnerships can accelerate innovation, investment, and capability development, but they also require policymakers to actively manage questions of governance, standards alignment, ecosystem influence, and long-term strategic positioning.

TABLE 19. STRATEGIC DECISION PATHWAYS FOR IPS DEVELOPMENT

PATHWAY	PRIMARY OBJECTIVE	KEY OPPORTUNITIES	KEY CONSIDERATIONS
Domestic IPS Optimisation and Deepening	Strengthen national payment ecosystems	Financial inclusion, adoption, merchant acceptance, sustainability, efficiency	Governance, participation, long-term viability
Regional and Continental Connectivity	Expand cross-border interoperability and economic integration	Trade, remittances, labour mobility, regional commerce, AfCFTA objectives	Standards alignment, settlement arrangements, domestic readiness
IPS as Foundational Digital Public Infrastructure	Support broader digital transformation and service delivery	Digital identity integration, open finance, G2P digitisation, innovation	Governance, coordination, cybersecurity, data management
Global Connectivity, Strategic Partnerships and Technology Diplomacy	Position national IPS within global payment ecosystems	Technology transfer, investment, international interoperability, capability development	Strategic autonomy, dependency management, standards influence, long-term flexibility

These pathways are neither mutually exclusive nor universally applicable. Countries may pursue multiple pathways simultaneously or transition between them over time as priorities, capabilities, and ecosystem conditions evolve. The most appropriate pathway will depend on national circumstances, development objectives, institutional readiness, and strategic priorities.

The challenge for policymakers is therefore not selecting a single future model but positioning their IPS ecosystems in ways that preserve flexibility while enabling them to respond to emerging opportunities, evolving ecosystem demands, and the increasingly interconnected nature of digital payment infrastructures.

5.4 STRATEGIC CONSIDERATIONS FOR POLICYMAKERS

The analysis presented throughout this report suggests that the long-term success of IPS will depend not only on technology choices, but also on the governance, institutional, strategic, and ecosystem decisions that shape how these systems evolve over time. While no single model is appropriate for all countries, several considerations emerge consistently across the experiences, design choices, stakeholder dynamics, and future pathways examined throughout this study. These considerations are not intended as prescriptive recommendations, but rather as areas for reflection as policymakers navigate the next phase of IPS development.

GOVERNANCE AS STRATEGIC ARCHITECTURE

Resolve the governance question before anything else and be explicit about whose interests the chosen model is designed to protect.

Governance is the decision that shapes all subsequent decisions, and it is the one most often made by default rather than by design. The choice between a central bank-led, industry-led, or public-private partnership

model is not a technical question but a political one about where power should sit and whose interests prevail when commercial and public policy objectives conflict.

The evidence reviewed throughout this report suggests that governance arrangements often have a greater influence on long-term IPS outcomes than technology choices alone. Governance determines how decisions are made, how competing stakeholder interests are balanced, how accountability is maintained, and how systems evolve as market conditions change.

As IPS ecosystems become increasingly interconnected and involve a wider range of actors, governance should be viewed not simply as an operational requirement but as a form of critical and strategic architecture pillar. Governance frameworks influence participation incentives, innovation pathways, sustainability outcomes, and the ability to respond effectively to emerging risks and opportunities. While governance models differ significantly across countries, experience suggests that successful IPS ecosystems typically establish governance arrangements that remain aligned with public policy objectives while maintaining sufficient flexibility to adapt over time.

MANAGING STRATEGIC DEPENDENCIES

Before committing to any design choice, interrogate the long-term alignment, exit implications, dependency profile, control arrangements, and sovereignty implications of every actor relationship that will be material to the system.

The increasing involvement of technology providers, development partners, system integrators, regional infrastructures, and sovereign technology partnerships creates significant opportunities to accelerate IPS development. At the same time, these relationships may introduce dependencies that extend beyond technology and include funding, implementation support, standards, technical expertise, governance influence, and ecosystem coordination.

Every design commitment is also a relationship commitment, and the terms of that relationship determine whether the design choice delivers its intended benefits or generates the dependency risks documented repeatedly across the country experiences in this report. Before formalising any relationship with a technology vendor, system integrator, development partner, regional body, or major commercial

participant, central banks should apply five diagnostic questions: what is this actor's long-term interest and does it align with the system's public value objectives as it scales; what happens to the system if this actor exits; what technical, financial, or governance dependency does this relationship create; who controls transaction data, the core codebase, and infrastructure; and does this arrangement preserve operational, strategic, and data sovereignty on acceptable terms. These questions cost little to answer before commitments are made and are very expensive to answer retrospectively once the system is live and leverage has shifted to the counterparty.

The evidence reviewed in this report suggests that the key policy challenge is not the avoidance of dependency, but the ability to understand, manage, and periodically reassess its implications. Some dependencies may provide access to capabilities, innovation, and scale that would otherwise be difficult to achieve. Others may constrain future flexibility, limit institutional ownership, or influence future strategic choices. Effective dependency management therefore requires policymakers to look beyond immediate implementation needs and consider how relationships may evolve over time.

CAPABILITY AS A LONG-TERM INVESTMENT

Treat capacity building as a design requirement with its own budget line, timeline, and contractual accountability, not as an aspiration to be addressed after launch.

Technical infrastructure alone does not create sustainable IPS ecosystems. The long-term resilience and effectiveness of IPS increasingly depend on institutional capability, operational expertise, governance competence, cybersecurity readiness, data management capabilities, and the ability to oversee an increasingly complex ecosystem of participants and technologies.

Talent and institutional capacity are the most consistently binding constraint on IPS design quality across African markets, shaping what technology models are viable, what use cases can be safely activated, and how effectively regulatory oversight can be exercised, yet it is the input most frequently absent from IPS business cases. Central banks that have managed this constraint effectively have done three things: embedded skills transfer as a contractual

obligation in technology vendor and system integrator agreements before deployment; modelled the full human capital cost of operating a 24/7 payment system, covering engineers, fraud investigators, data analysts, and regulatory supervisors, as a recurring budget line rather than an overhead; and accepted that building capacity takes time, which means either delaying use case expansion until oversight capability can match it, or consciously accepting the risks that come from activating use cases the institution cannot yet adequately govern.

Across many African markets, external expertise has played an important role in accelerating implementation and reducing execution risks. However, experience suggests that sustainable outcomes are most likely when implementation programmes deliberately incorporate capability development, knowledge transfer, and institutional strengthening from the outset. In this context, capability should be viewed not as a supporting activity, but as a strategic investment that underpins future innovation, resilience, and operational independence.

SUSTAINABLE FINANCING AND PARTICIPATION INCENTIVES

Design the financing model before adopting a pricing model, not the other way around.

Across Africa, IPS are increasingly expected to deliver broad public value outcomes, including financial inclusion, affordability, interoperability, and economic participation. However, these objectives must ultimately be supported by financing models capable of sustaining system operations, upgrades, cybersecurity investments, innovation, participant support, and long-term ecosystem growth.

Experience across multiple IPS implementations suggests that pricing decisions alone do not determine sustainability.⁵⁴ Sustainable ecosystems depend on the alignment of incentives across operators, financial institutions, payment service providers, merchants,

governments, and end users.⁵⁵ In many markets, low-cost or zero-fee transactions have played an important role in accelerating adoption. However, the long-term viability of such approaches often depends on complementary revenue streams, cross-subsidisation models, value-added services, or other mechanisms that support cost recovery and continued investment.

The challenge for policymakers is therefore not simply determining how transactions should be priced but ensuring that the broader ecosystem contains sufficient incentives for participants to invest, innovate, and remain engaged over time. Sustainable financing should be viewed as an ecosystem design consideration rather than a pricing decision alone.

PLANNING FOR LONG-TERM SUSTAINABILITY

Plan the post-donor financing transition as a formal governance milestone, not a future problem.

The rapid expansion of IPS across Africa has benefited significantly from the support of development partners, philanthropic organisations, multilateral institutions, and technical assistance programmes. These contributions have accelerated implementation, reduced barriers to entry, and enabled many countries to pursue ambitious payment modernisation agendas.

As IPS ecosystems mature, however, attention increasingly shifts from implementation to long-term sustainability. This extends beyond financial sustainability and includes institutional ownership, capability retention, governance continuity, operational resilience, and the ability to evolve independently as external support changes over time.

For many countries, future sustainability considerations may become particularly important as current donor-supported programmes approach their natural conclusion⁵⁶. This does not necessarily imply a funding gap or reduction in support, but it does highlight the importance of planning for scenarios in which external financing, technical assistance, or implementation resources become less prominent over time.

⁵⁴ Zero-fee or near-zero-fee pricing for individual transactions reliably drives adoption but does not, in isolation, constitute a financing model that works. The central banks that have made zero-fee pricing sustainable have done so by designing a cross-subsidy architecture from the outset: an operator with diversified revenue streams across corporate transactions, government payments, and ancillary services that can absorb the cost of free individual transactions without depending on those transactions for cost recovery.

⁵⁵ The practical discipline is to model the break-even volume threshold against realistic rather than optimistic projections before committing to a pricing structure, and to identify the specific revenue streams that will sustain it at the volumes the market is likely to produce in the first three to five years. Where that cross-subsidy cannot be credibly modelled, either the pricing model must be adjusted, or the operator structure must be redesigned before launch.

⁵⁶ The philanthropic and multilateral financing that has underwritten IPS development across Africa has a defined horizon, made concrete by the Gates Foundation's commitment to concluding IPS financial inclusion support by 2030 and by the fixed programme cycles of most other major funders.

Experience across Africa suggests that sustainability is most effectively addressed when considered from the earliest stages of system design rather than after implementation is complete. The long-term resilience of IPS ecosystems will increasingly depend on whether countries can transition from implementation projects to enduring institutions capable of sustaining, governing, and evolving critical payment infrastructure over time.

Systems that have not achieved operational self-sufficiency before that horizon is reached face a structural financing gap with no obvious replacement, compounded by the governance vacuum left when the convening and technical assistance roles that development partners play during the design and build stages are not replaced. The mitigation is to treat the post-donor financing transition as a formal governance milestone from the first year of operation: defining a specific target date for self-financing, modelling the revenue and volume trajectory required to reach it, and building accountability for progress against that trajectory into the operator's board-level governance framework, so that the transition is managed on the central bank's terms rather than forced by a funding deadline.

DESIGNING FOR INTEROPERABILITY AND FUTURE FLEXIBILITY

The pace of technological change, expanding regional integration initiatives, emerging digital public infrastructure ecosystems, and evolving user expectations suggest that **IPS should increasingly be designed with future adaptability in mind**. Decisions relating to technology architecture, governance arrangements, standards adoption, participation models, and interoperability frameworks may have implications that extend well beyond initial deployment.

Future flexibility does not require anticipating every possible technological or market development. Rather, it involves creating systems capable of evolving as policy priorities, ecosystem needs, and technological opportunities change. In this regard, interoperability should be viewed not only as a technical objective, but also as a strategic capability that supports future innovation, integration, and ecosystem growth.

POSITIONING IPS WITHIN BROADER DEVELOPMENT OBJECTIVES

Across Africa, IPS are increasingly being recognised as more than payment infrastructure. They are becoming important enablers of financial inclusion, digital transformation, government service delivery, economic participation, regional integration, and broader development objectives.

This broader perspective suggests **that IPS strategies may be most effective when developed as part of wider national digital and economic development agendas rather than as standalone payments initiatives**. Aligning IPS investments with broader public policy objectives can help maximise public value, strengthen stakeholder alignment, improve sustainability, and increase the long-term relevance of payment infrastructures within evolving digital economies.

CONCLUDING REFLECTION

The evolution of IPS across Africa reflects a broader transformation in how payment systems are conceived, deployed, governed, and integrated within national development agendas. The next phase of development will likely be shaped less by questions of infrastructure deployment and more by strategic decisions relating to sustainability, capability ownership, ecosystem participation, regional integration, and long-term positioning.

As countries continue to pursue different pathways and priorities, the experiences examined throughout this report suggest that successful IPS ecosystems are unlikely to be defined by a single technology, governance model, or implementation approach. Rather, their success will depend on the ability of policymakers and stakeholders to navigate strategic trade-offs, adapt to evolving conditions, and ensure that payment infrastructures continue to serve the broader economic and societal objectives for which they were established.

KEY POLICY TAKEAWAYS

1

Five strategic choices recur across AFI members: public value against commercial sustainability; strategic autonomy against external support; domestic priorities against regional integration; near-term deployment against long-term capability; and ecosystem openness against resilience and effective governance. The greatest influence policymakers will ever have over their IPS is at the design stage.

2

Institutional capability (technical, operational, supervisory, and strategic) is emerging as the single most important determinant of long-term IPS success and should be treated as a core design requirement from the outset, not a post-implementation add-on. Financial sustainability is a parallel first-order concern: with donor cycles converging on 2030, credible domestic revenue models are non-negotiable.

3

IPS strategies are most effective when embedded in wider national digital and economic development agendas rather than pursued as standalone payments initiatives. AFI's convening role is central to helping members position IPS within these broader agendas, sequence peer learning around the four IPS lifecycle stages, and translate cross-country experience into practical policy guidance.

4

Four pathways describe how IPS development is unfolding across the continent: domestic IPS optimisation and deepening; regional and continental connectivity; IPS as foundational digital public infrastructure; and global connectivity through strategic partnerships. Members may occupy more than one pathway simultaneously and move between them as circumstances evolve, but each pathway carries distinct institutional, financing, and governance requirements.

6 EMERGING TRENDS, OPPORTUNITIES, AND POLICY CONSIDERATIONS FOR THE NEXT FIVE YEARS

The instant payments landscape across AFI African members is entering a new phase. Over the next five years, IPS development is expected to shift from establishing systems to interlinking, extending, and safeguarding them. Five trends shape that shift. Each is set out below with the opportunity it creates and the policy consideration it raises for central banks, regulators, and IPS operators. A short reflection and summary table close the chapter.

CROSS-BORDER INTERLINKING

Domestic interoperability across AFI African members is extending into cross-border interlinking. Building on established regional platforms, WAEMU's PI-SPI, CEMAC's GIMACPAY, and SADC's TCIB, with PAPSS providing the continental settlement layer under the AfCFTA, members are opening targeted corridors that settle in local currency and reduce reliance on the US dollar and correspondent banking. In February 2026, Onafriq and PAPSS launched Africa's first wallet-based outbound payments corridor between Nigeria and Ghana, linking Onafriq's mobile money reach of over one billion wallets with the PAPSS banking network. In parallel, Pesalink (Kenya) has partnered with PAPSS to enable instant local-currency payments into Kenyan banks and mobile money operators from PAPSS participants across the continent. Project Nexus, incubated by the BIS Innovation Hub and now advancing to live implementation under Nexus Global Payments, applies the same single-connection design to link domestic instant payment systems globally. For members, the practical outcome is faster, lower-cost, local-currency settlement for intra-African trade and remittances.⁵⁷

Furthermore, the regional-to-continental connection is accelerating: in July 2026, BEAC formally joined PAPSS, connecting the six CEMAC states to the continental network and taking PAPSS coverage to 28 African countries, more than 190 commercial banks and fintechs, and 16 switches, and BCEAO's pilot with PAPSS is scheduled to begin later in 2026, extending the same connection to WAEMU.⁵⁸

POLICY CONSIDERATION. Central banks and regulators can architect domestic IPS for corridor-level connectivity from the outset, adopt common messaging standards such as ISO 20022, and sequence regional ambition alongside domestic readiness. Aligning standards, settlement, and governance across borders remains an area where AFI, together with regional bodies such as BCEAO, BEAC, and SADC, is well placed to support coordination.

EXPANDING FUNCTIONAL SCOPE OF IPS

IPs are increasingly evolving beyond payment processing into broader open finance ecosystems. Nigeria's Payments System Vision 2028 identifies open banking, API-based connectivity, and digital financial innovation as strategic priorities, while the South African Reserve Bank's Payments Ecosystem Modernisation programme has similarly highlighted open banking as an important component of future payment system development. Together, these initiatives reflect a broader shift in which IPSs are increasingly viewed not only as payment rails but also as platforms that support data sharing, financial innovation, and wider ecosystem participation. This creates two significant opportunities. First, integrating government payment flows can deepen adoption and strengthen IPS sustainability through higher transaction volumes. Second, with appropriate consent and safeguards, the transaction data generated through IPS usage can support alternative credit assessment and expand access to finance for small and informal enterprises underserved by conventional credit markets.⁵⁹

POLICY CONSIDERATION. Central banks can decide how far the IPS mandate extends, from transaction rail to platform for open finance and AI-assisted services, and adopt API-first design so systems remain open as new services emerge. Positioning IPS as foundational digital public infrastructure is strengthened by close coordination between the central bank and the identity, data-protection, and tax authorities.

⁵⁸ PAPSS, 2026. Available [here](#)

⁵⁹ Central Bank of Nigeria, 2026. Available [here](#); South African Reserve Bank, 2026. Available [here](#)

⁵⁷ Onafriq, 2026. Available [here](#); BIS, 2025. Available [here](#)

PUBLIC-PRIVATE COLLABORATION

Central bank-led IPS deployments are increasingly emerging in countries with long-established bank-owned clearing and switching infrastructure, and members are formalising the two as complementary components of the national payment system. Namibia illustrates the pattern with two agreements involving NamClear, the bank-owned national clearing house. In July 2026, the Bank of Namibia joined its instant payment subsidiary (IPN) and NamClear in a Declaration of Intent to integrate their respective infrastructure ahead of IPN's launch, aligning the country's instant payment capability with the existing clearing system and its established link to the Namibia Interbank Settlement System (NISS).⁶⁰ NamClear signed a separate agreement with PayInc, the SADC Regional Clearing and Settlement System Operator, to join the Transactions Cleared on an Immediate Basis (TCIB) scheme, extending Namibian banks' access to near-instant cross-border payments across the Common Monetary Area.⁶¹

For members, this creates two significant opportunities. First, leveraging established bank-owned clearing infrastructure alongside a new central-bank IPS reduces duplication and shortens deployment timelines while giving the central bank scope to embed public-interest pricing and inclusion mandates from launch. Second, the same public-private model creates a route into cross-border schemes such as TCIB through established regional operators, expanding members' access to cross-border payments without needing to build bilateral corridors.

POLICY CONSIDERATION. Central banks introducing an IPS in a market with established bank-owned clearing infrastructure can settle the working relationship early, through a formal integration agreement that assigns mandates, scheme responsibilities, participation rules, and risk sharing between the entities before operational overlap emerges. The precise arrangement, from operational alignment to deeper ownership integration, can be matched to market conditions, private-sector appetite, and institutional capacity. Comparative evidence on how peers are structuring these public-private relationships, including cross-border extensions through regional operators, is an area where AFI can add practical value as more members reach this decision point.

⁶⁰ Tech Africa News, 2026. Available [here](#)

⁶¹ NamClear, 2026. Available [here](#)

ARTIFICIAL INTELLIGENCE IN FRAUD DEFENCE

Artificial intelligence is emerging on both sides of the payment. In defence, AI and machine learning enable real-time fraud monitoring suited to the speed of instant settlement; the open-source Tazama engine is being deployed across African systems, including through a managed shared-service model for institutions that lack the scale to run it alone. For attackers, AI is increasingly a core tool: the INTERPOL 2026 assessment found that 55 percent of cybercrimes reported across Africa in 2025 involved AI in some capacity, with deepfake incidents in Africa rising sevenfold between the second and fourth quarters of 2024, and now used to bypass Know-Your-Customer (KYC) checks, impersonate executives in payment-fraud attempts, and promote fraudulent investment schemes. Yet only 22 percent of African digital forensic units report working knowledge of AI-driven threats, and 92 percent of law-enforcement agencies cite a lack of technical expertise as the primary barrier to adopting AI tools.⁶² For IPS policymakers, this asymmetry defines the opportunity: adaptive, real-time fraud detection and, over time, AI-assisted services built on IPS rails, but only for members that close the capability gap.

POLICY CONSIDERATION. Central banks and IPS operators can build or access fraud-monitoring and supervisory technology capacity, including shared-service models where individual institutions lack scale, and reflect the accountability and liability of AI-assisted services in scheme rules. Strengthening KYC and account-verification standards to resist synthetic identities, and requiring participants to log and report AI-facilitated fraud attempts, are practical near-term measures. Few members can develop AI-defence capacity alone, making this a strong candidate for collective action through AFI and continental partners.

CBDcs, STABLECOINS, AND TOKENISATION

Nigeria has repositioned the eNaira from a retail wallet towards government disbursements and cross-border settlement⁶³, Ghana and Uganda are piloting CBDcs, and Morocco and Egypt are running a joint experiment on the cross-border transfer use case with World Bank support.⁶⁴ In parallel, dollar-denominated stablecoins are capturing cross-border flows for remittance and merchant settlement, driven by currency volatility

⁶² INTERPOL, 2026. Available [here](#)

⁶³ Central Bank of Nigeria, 2026. Available [here](#)

⁶⁴ Morocco World News, 2025. Available [here](#)

and FX scarcity. This creates competition for IPS for high-margin flows and forces payments regulators to decide three things: whether stablecoin issuers used in payments should be licensed and reserve-backed to guarantee par redemption; how AML/CFT rules extend to virtual asset transfers under FATF Recommendation 16; and whether stablecoins should interoperate with domestic IPS. The underlying concern is the singleness of money; tokenisation on a unified ledger offers a more constructive path than current stablecoin designs.

POLICY CONSIDERATION. Central banks can license and reserve-back stablecoin issuers used in payments, extend FATF Recommendation 16 to virtual asset transfers, and keep national IPS, CBDCs, and PAPSS as a competitive sovereign option. Coordination across AFI members reduces regulatory arbitrage as cross-border interlinking accelerates.

Table 20 summarises the five trends alongside the opportunity each creates and the strategic consideration each raises, providing a single reference for central banks, regulators, and IPS operators planning the next five years.

TABLE 20. EMERGING TRENDS, OPPORTUNITIES, AND STRATEGIC CONSIDERATIONS FOR THE NEXT FIVE YEARS

TREND	OPPORTUNITY	STRATEGIC CONSIDERATION
Cross-border interlinking	Faster, lower-cost, local-currency settlement supporting intra-African trade and remittances, reducing reliance on the US dollar and correspondent banking.	Architect domestic IPS for corridor-level connectivity from the outset, adopt common messaging standards such as ISO 20022, and sequence regional ambition alongside domestic readiness. AFI and regional central bank groupings are well placed to support cross-border standards and governance alignment.
Expanding functional scope	Government flows deepen IPS adoption and sustainability, while the consented IPS data trail can support alternative credit assessment and expand access to finance.	Decide how far the IPS mandate extends, from transaction rail to platform for open finance and AI-assisted services, and adopt API-first design. Coordination between the central bank and the identity, data-protection, and tax authorities strengthens IPS as foundational digital public infrastructure.
Public-private collaboration	Leveraging existing bank-owned clearing reduces duplication and shortens IPS deployment while embedding public-interest mandates from launch; the same model provides a route into regional cross-border schemes through established operators	Settle the working relationship early through a formal integration agreement assigning mandates, scheme responsibilities, participation rules, and risk sharing. The arrangement, from operational alignment to deeper ownership integration, should match market conditions, private-sector appetite, and institutional capacity. AFI can convene comparative evidence including cross-border extensions.
AI in fraud defence	Adaptive, real-time fraud detection and, over time, AI-assisted services built on IPS rails, for members that close the AI capability gap.	Build or access fraud-monitoring and supervisory technology, including shared-service models. Strengthen KYC against synthetic identities, and reflect AI accountability and liability in scheme rules. A strong candidate for collective action through AFI and continental partners.
CBDCs, stablecoins, and tokenisation	Programmability and lower-cost cross-border transfer, particularly where formal payment coverage remains thin, provided monetary sovereignty and the singleness of money are preserved.	License and reserve-back stablecoin issuers used in payments to guarantee par redemption, extend FATF Recommendation 16 to virtual asset transfers, and keep national IPS, CBDCs, and PAPSS as a competitive sovereign option. Coordination across AFI members reduces regulatory arbitrage as interlinking accelerates

POLICY REFLECTION

Taken together, these five trends share a common structural feature: the next stage of IPS development turns on decisions that cannot be made in isolation. Corridor connectivity standards, scheme-level fraud liability, shared-service AI capacity, and stablecoin treatment carry design choices whose value compounds when peer members align and diminishes when they diverge. AFI's Digital Financial Services Working Group and the African Financial Inclusion Policy Initiative, alongside continental partners and regional central bank groupings, provide critical platforms for regional collaboration, peer learning, and policy coordination to help members respond collectively to these emerging trends.

KEY POLICY TAKEAWAYS


1

Cross-border interlinking has moved from ambition to implementation, with PAPSS expanding regional connectivity and Project Nexus advancing global interoperability.


2

Central bank-operated IPS can coexist with bank-owned clearing infrastructure through formal integration, enabling a phased transition to regional interoperability.


3

Stablecoins are becoming increasingly relevant to cross-border payments, requiring clear regulatory frameworks and interoperability strategies alongside CBDC development.


4

Shared AI services offer a scalable approach to fraud detection and synthetic identity risk management, creating opportunities for regional collaboration.

APPENDIX

SCENARIO-BASED IPS DESIGN REFERENCE FRAMEWORK

This appendix provides an illustrative reference framework to support context-specific IPS design decisions. It complements the strategic considerations presented in Chapter 5 by translating key design dimensions into practical scenarios that may be relevant to different country contexts. The scenarios are not mutually exclusive, nor should they be interpreted as prescriptive recommendations. Rather, they provide a structured starting point for policymakers and implementation teams undertaking detailed design, implementation, or review exercises.

TABLE 24. SCENARIO-BASED IPS DESIGN REFERENCE FRAMEWORK

IPS DESIGN DIMENSION	IPS DESIGN CHOICE	SCENARIOS THAT WARRANT THIS CHOICE
Governance and Ownership	Central bank-led (CB owns and operates the IPS)	The private sector lacks appetite or capacity to co-invest. The market has a history of incumbent banks blocking interoperability. A political mandate demands rapid action and there is no time to establish a separate entity. The country is small and the transaction base cannot sustain a commercially viable standalone operator. The central bank has, or is willing to build, the operational capacity to run a 24/7 system.
	Industry-led (private sector operator, CB as regulator only)	The private sector has demonstrated appetite and capacity to invest. Large incumbent banks or a consortium of participants are willing to co-fund the system. The market has sufficient transaction volume to make a commercially self-sustaining operator viable. The central bank has the regulatory capacity to enforce scheme rules and mandate participation without needing operational control.
	Public-private partnership (CB plus commercial participants as co-owners)	The central bank wants policy alignment without bearing full operational responsibility. The private sector has partial appetite for co-investment but requires public sector anchor investment to commit. A hybrid governance structure can balance inclusion mandates with commercial sustainability. The market has enough participants to populate a representative board.
	Regional scheme participation (no domestic operator)	The domestic transaction base is too small to justify a standalone system. The country is a member of a regional body operating or developing a cross-domain IPS (WAEMU, CEMAC, SADC, COMESA). The cost of regional scheme membership is lower than the cost of domestic infrastructure. The domestic financial inclusion agenda can be served through regional scheme connectivity rather than a bespoke domestic system.

Functional Scope and Use Cases

Minimal launch: P2P and G2P only

Institutional capacity to supervise use cases is constrained. The predecessor system failed partly due to over-ambitious scope at launch. Public trust in digital payments is low and must be rebuilt incrementally. The operator is newly established and the team is still developing operational capability. The central bank wants to demonstrate reliability before expanding scope.

Standard launch: P2P, G2P, and P2M

Core participant integration is complete across banks and major non-banks. Merchant onboarding infrastructure, specifically QR code acceptance, is ready in at least major urban centres. The operator has sufficient staff to manage three use case streams simultaneously. Fraud management is operational for all three use cases.

Comprehensive launch including advanced use cases (request-to-pay, cross-border, open banking)

The institution has substantial internal capacity and has operated a basic IPS successfully for at least two to three years. Regulatory frameworks for third-party access, data sharing, and liability allocation are in place. The technology architecture is API-first and documented for third-party integration. The overlay services governance framework has been designed and approved.

Regional scheme use cases only

The country has chosen regional scheme participation as its primary IPS strategy. Domestic transaction volumes do not warrant investment in a bespoke use case portfolio. The regional scheme's use case portfolio covers the primary financial inclusion needs of the domestic population.

Infrastructure and Technology Choice

Open-source

The central bank prioritises digital sovereignty and long-term independence from vendor pricing power. Budget constraints make proprietary licensing fees unaffordable or unsustainable. Donor funding is available and the donor ecosystem supports open-source deployment. The country has, or is committed to building, sufficient internal technical capacity to maintain the codebase. The central bank is willing to participate in the open-source community and accept community-governed product evolution. The country is small and the economics of proprietary licensing are unfavourable relative to transaction volumes.

Licensed proprietary platform

The central bank needs the fastest path to a live system and cannot afford the implementation timeline of an open-source deployment. Internal technical capacity is limited and vendor SLA accountability is a priority over sovereignty. Transaction volumes are sufficient to justify recurring licensing fees without creating unsustainable per-transaction cost structures. The central bank has, or can hire, the commercial and legal capacity to negotiate robust contracts. The country has specific technical requirements that a proven proprietary platform already satisfies.

In-house proprietary build

The country has a large market with high transaction volumes that justify the capital investment of a bespoke build. The central bank or its designated operator has a substantial internal engineering team with payments systems experience. Long-term total cost of ownership analysis shows in-house build is cheaper than licensing at projected volumes. Full intellectual property ownership and the ability to evolve the system entirely on domestic terms is a strategic priority. The country has a long-term institutional commitment to maintaining the technical team through salary competition with the private sector.

Sovereign-to-sovereign technology transfer

The central bank wants the benefits of a proven, high-performance platform without the commercial licensing costs of a proprietary vendor. A bilateral relationship exists with a government whose payment infrastructure is a credible technical model. The central bank is willing to accept the geopolitical dependency that comes with relying on a foreign government's technology roadmap. The source country's payment infrastructure is sufficiently well-documented to support skills transfer. The central bank can negotiate source code ownership and skills transfer as conditions of the partnership.

Financing and Cost Structure

Zero-fee pricing for individual transactions

Adoption is the primary constraint and transaction volume must be built before cost recovery is feasible. The central bank or operator has a diversified revenue base from other payment services, such as card switching, ATM transactions, or corporate payment fees, that can cross-subsidise free individual transactions. G2P volumes are large enough to anchor the system without generating direct fee revenue. The political mandate requires that the IPS be affordable for all users including the poorest.

Cost recovery pricing (fees set to recover operating costs, not generate surplus)

The system is past the initial adoption phase and has achieved sufficient transaction volume to support modest per-transaction fees without significantly suppressing usage. The operator is a standalone entity without the diversified revenue base needed to cross-subsidise free transactions. The central bank wants to establish pricing discipline before the system reaches the maturity stage, when changing pricing models is more politically difficult. Donor funding is expiring and the system must transition to self-financing.

Commercial or tiered pricing (fees generate surplus for reinvestment or distribution)

The system has reached maturity with high and stable transaction volumes. The operator is a commercially structured entity with shareholder obligations. The market is competitive enough that commercial pricing is constrained by participant behaviour rather than requiring regulatory caps. The overlay services built on IPS rails generate sufficient commercial value to warrant commercial pricing for those services while core P2P and G2P transactions remain at or near zero. PayNet Malaysia's cost-plus model with regulated interchange caps is the most developed available example.

Donor or grant funded with planned transition to cost recovery

The country is in the early design or build stage and cannot self-finance initial capital investment. Multilateral or bilateral donor funding is available on terms that do not compromise design autonomy. The central bank has, or can develop, a credible post-donor financing model before accepting funding. The system will reach sufficient transaction volume to be self-financing before the donor programme cycle concludes.

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