

Beyond the Build: Why Business Model Innovation is the Key to Inclusive Payments in Africa

Introduction: the misdiagnosis at the heart of African payments

The clearest evidence that current systems are failing users is where Africans are turning instead. Stablecoin usage across Sub-Saharan Africa now represents an estimated 6.7% of GDP, one of the highest rates globally. This is pragmatic substitution. When formal payment rails are too expensive, too slow, or too fragmented, users route around them. Stablecoins offer near-instant settlement, negligible fees, and no dependence on correspondent banking relationships or hard currency liquidity managed by central banks. Their adoption is a market verdict on the inadequacy of existing infrastructure. Every dollar flowing through USDT or USDC is a dollar that could be flowing through African payment systems, if those systems offered comparable value. The question regulators must confront is not how to suppress this migration, but what it reveals about the failures they have permitted to persist.

For years, the narrative surrounding African payment systems has centered on a perceived infrastructure deficit, suggesting that with more technology, the continent could build its way to financial inclusion. This diagnosis misses the mark. Technology is not the problem or the solution. The primary obstacles to creating inclusive, high-volume payment networks are not technological, but commercial.

Despite significant investment, the African continent is home to 33 domestic and 3 regional instant payment systems, yet none have achieved the volumes seen in other emerging markets. Only one (NIBBS in Nigeria) is classified as inclusive, and most are not interlinked, creating a fragmented landscape of digital islands. This paper argues that the key to unlocking network effects and achieving genuine financial inclusion lies not in building more systems, but in fundamentally reforming the business models that govern them. By dissecting the flawed, technology-first approach and drawing lessons from successful global examples, we can chart a new, market-oriented path forward. The analysis begins by quantifying the tangible costs imposed by the current fragmented landscape.

The high cost of fragmentation: quantifying the inefficiency tax

Payment systems derive their value from network effects, the principle that a network becomes exponentially more valuable as more users join. In Africa, fragmentation strangles these effects, imposing a direct and measurable "inefficiency tax" on consumers, businesses, and entire economies. This tax manifests as prohibitively high costs and stifles commercial activity, undermining the very goals of financial inclusion and regional integration.

The quantifiable penalties of this fragmentation are severe:

- **Exorbitant remittance fees:** the cost to send money to Sub-Saharan Africa (SSA) averages about 8%–8.5%, nearly triple the UN's Sustainable Development Goal target of 3%. In practical terms, this means a family receiving a \$200 remittance, a common lifeline, loses approximately \$17 to fees that a more integrated system could eliminate. Annually, this inefficiency drains billions from the pockets of those who can least afford it.
- **The intra-African penalty:** paradoxically, sending money *within* Africa is often more expensive than sending it from another continent. The lack of direct payment links forces transactions through multiple intermediaries, with costs in some corridors exceeding 20%. For example, sending \$200 from South Africa to Malawi cost about \$48 (24%) in fees in recent years, while transfers between neighbors like Tanzania and Uganda have also been observed with fees over 20%.
- **The low-value transaction penalty:** fragmentation hits small transactions hardest. The cost to send a low-value cross-border payment in Africa can be as high as 30% of the transfer amount. This effectively prices many people out of formal remittances, as minimum fees and foreign exchange spreads consume a disproportionate share of small transfers meant for daily needs, forcing reliance on cash or informal means.
- **The aggregate economic drain:** the reliance on external intermediaries and hard currencies for settlement carries a steep price. The routing of intra-African payments through correspondent banks in Europe or the US is estimated to cost the continent approximately \$5 billion every year in fees and delays. This is a direct efficiency loss that prevents capital from circulating within local economies.

The root cause of these costs is a systemic lack of interoperability. Consumers and businesses are trapped in "semi-closed networks" or "isolated islands," unable to transact seamlessly. This prevents any single network from achieving the economies of scale needed to drive down costs and is a direct consequence of a technology-first approach that has failed to address underlying commercial barriers.

The central debate: technological infrastructure vs. commercial innovation

The prevailing technology-first approach to African payments must be challenged by the commercial reforms that are the true catalysts for adoption and scale. For too long, the debate

has been dominated by the need to build new infrastructure, while the more urgent need for innovation in commercial strategy, pricing, and accessibility has been overlooked.

The flaw of a technology-first approach

The argument that Africa simply needs more or better payment infrastructure is demonstrably flawed. The continent already has 33 domestic instant payment systems across 25 countries and 3 regional systems. Yet, as noted, none have achieved significant transaction volumes or widespread inclusivity. The problem is not a lack of technology but a failure to create the right conditions for its use.

The Pan-African Payment and Settlement System (PAPSS), one of the three regional systems, illustrates the challenge. Launched in 2022 to facilitate cross-border payments in local currencies. However publicly available performance data remains limited, suggesting transaction volumes remain commercially insignificant.

To be fair, PAPSS faces structural challenges that single-country systems like UPI and PIX do not. It must coordinate across multiple sovereign regulators, navigate diverse legal frameworks, and manage foreign exchange liquidity across dozens of currencies, a fundamentally harder problem than building a domestic switch. PIX achieved scale within months; PAPSS may reasonably need longer.

Yet this complexity makes the commercial model argument more urgent, not less. A regional system burdened by coordination costs and currency friction cannot afford to also impose pricing friction and poor user accessibility. If anything, PAPSS needs a more compelling value proposition than its domestic counterparts to overcome these inherent headwinds. The absence of a zero-fee mandate, standardised user experience requirements, or aggressive interoperability targets suggests the initiative remains trapped in the technology-first mindset, assuming that building the rails is sufficient, when the real challenge is giving users and institutions a reason to use them. Without a compelling commercial case for users and businesses, even the most advanced systems will fail to gain traction.

The real barrier: pricing and accessibility friction

The primary friction preventing the adoption of instant payments in Africa is commercial. Three factors stand out: prohibitive pricing, poor user accessibility, and the absence of proxy-based addressing.

First, even modern systems often carry user fees that act as a major barrier. In South Africa, the newer Payshap system charges an average of seven rand per transaction. For low-value domestic payments, this fee makes the service unattractive and uncompetitive with cash. The core issue is pricing friction.

Second, user accessibility is frequently an afterthought. The UK's Paym system failed to gain traction because participating banks "buried it deep inside the app," making it difficult for users to find and adopt. In stark contrast, the Central Bank of Brazil mandated that the "PIX button" appear in the top half of every bank's home screen. This ensured high visibility and a consistent user experience across all providers, playing a critical role in its explosive growth.

Third, the use of proxies or aliases to address accounts has proven transformative globally. Mobile money's 1.4 billion registered accounts use mobile numbers as proxies, facilitating 5.4 billion monthly transactions over 15 years. India's UPI, launched in 2016, now processes over 20 billion monthly transactions, far exceeding its predecessor IMPS, available since 2010.¹ Brazil's PIX handles over 5.7 billion monthly transactions using proxies since its late 2020 launch.² This pattern repeats across Norway (Vipps), Denmark (MobilePay), Poland (Blik), China, Pakistan (RAAST), Sweden (Swish), and the US (PayPal and Venmo).

The path forward requires a shift in mindset, recognizing that the most crucial innovations are often commercial, not technological.

Innovation isn't always about building new technology. Sometimes it's about having the courage to change how we charge for what we already built.

This shift from identifying the problem, commercial friction, to implementing proven solutions is the most critical step toward an inclusive payment ecosystem.

Blueprints for scale: lessons from successful global payment systems

A blueprint for building inclusive, high-volume payment systems already exists. Successful national platforms around the world, from India's UPI to Brazil's PIX, have demonstrated a clear and repeatable formula for achieving mass adoption. By deconstructing the core principles of these models, African policymakers and financial leaders can find actionable lessons to apply within their own markets.

The strategies common to all successful systems at scale can be distilled into three core principles:

1. **Embrace a zero-fee model for end-users:** this is the non-negotiable foundation of every successful system. In India (see UPI case study below), Brazil (see PIX case study below), Singapore (PayNow), and China, (AliPay and WeChat Pay) instant payments are free for the consumer. This model eliminates pricing friction, the single

¹ [NPCI: UPI Product Statistics](#)

² [Banco Central do Brasil: Sistema de Pagamentos Instantâneos, 2024 Annual report](#)

greatest barrier to adoption for domestic, low-value payments. When transactions are free, fast, and reliable, users have a powerful incentive to switch from cash to digital, rapidly accelerating network effects.

2. **Fund infrastructure with asymmetric business models:** the immediate question raised by a zero-fee model is, "How does the industry pay for it?" The answer lies in asymmetric business models, a concept banks themselves invented. Instead of taxing the transaction itself, the payment system becomes a foundational utility. Revenue is then generated from a broader ecosystem of services that this utility enables, such as merchant analytics, instant credit offerings, or insurance products. This is not an alien concept; several markets have already proven how immensely profitable inclusion can be when the business model is right.

A critical clarification: "zero-fee" does not mean "zero-cost." Every transaction carries infrastructure, compliance, and operational costs that must be recovered somewhere. The more accurate framing is "zero-fee-to-consumer, cross-subsidised elsewhere." In India, the government initially absorbed costs through merchant discount rate subsidies and continues to debate sustainable funding mechanisms as UPI's monetisation remains a live and unresolved tension. In Brazil, PIX is funded through the broader value banks extract from customer relationships: deposits, credit products, and merchant services. China's model relies on the vast e-commerce and financial services ecosystems of Alipay and WeChat Pay. The honest question for African markets is whether these cross-subsidy models are replicable in economies with smaller populations, thinner margins, and less state capacity for indefinite subsidies. The answer is not guaranteed, but it is not hopeless either. M-Pesa demonstrated that transaction fees can be eliminated at the peer-to-peer level while revenue flows from cash-out fees, merchant payments, and adjacent services like credit and savings.³ The principle holds: someone pays, but it need not be the end-user making a simple transfer. Designing who pays, and for what, is the core business model innovation required.

3. **Mandate prominent, uniform accessibility with proxy-based addressing:** a frictionless user experience is just as important as a zero-fee price point. Brazil's PIX succeeded through regulatory mandates requiring every financial institution to offer PIX with prominent, easily discoverable placement in their apps, ensuring a consistent user journey, regardless of which bank a person used, removing the cognitive burden for consumers and driving rapid adoption. Equally critical is the use of proxies or aliases to address accounts. Traditional payment addressing requires users to know and share long account numbers (often 10-16 digits), sort codes or routing numbers, IBANs (up to 34 characters for cross-border), and the recipient's exact bank name. Proxies replace all of this with something people already know, a mobile number, email address, or simple username.

³ [M-PESA Charges](#); free for low-value peer-to-peer transactions.

These principles prove that building an inclusive system is not an act of charity but a strategic commercial decision. On the continent, Safaricom and other mobile operators demonstrated just how profitable inclusion can be, M-Pesa in Kenya generates over a billion US dollars in annual revenue alone. But if any doubt remained, India and Brazil have settled the debate. Applying these proven lessons is the next logical step in creating a playbook for Africa's financial future.

Case Study: Brazil's PIX — How Free Payments Conquered a Continent-Sized Economy

When Brazil's Central Bank (BCB) launched PIX in November 2020, it made one non-negotiable design decision: person-to-person payments would be free. Not subsidised, not capped at a low fee, but zero-cost to end users by regulatory mandate. The results were immediate and staggering. Within its first year, PIX attracted over 100 million registered users. By late 2024, it was processing over 5.7 billion transactions per month, making it one of the highest-volume instant payment systems on earth. Brazil went from a cash-heavy economy where electronic transfers were reserved for the banked middle class to one where a street vendor, a domestic worker, or a rural farmer could send and receive money instantly, for free, 24 hours a day.

The free P2P mandate was a deliberate strategy. The BCB understood that charging users per transaction would throttle adoption at exactly the moment it needed to accelerate. By eliminating the fee barrier, PIX converted hundreds of millions of informal cash transactions into digital ones, creating a dataset and distribution channel that banks could monetise through credit scoring, merchant services, and value-added financial products. The system's revenue model is explicitly asymmetric: consumers pay nothing for basic transfers, while businesses pay modest merchant acceptance fees. Banks that initially resisted the zero-fee mandate have since reported that PIX customers are more engaged, hold higher balances, and purchase more financial products than non-PIX users. Free payments shifted bank revenue to higher-value services.

Three design choices reinforced the free pricing. First, the BCB mandated that every licensed financial institution must offer PIX, with the PIX button prominently placed on the home screen of every banking app. Second, PIX introduced proxy-based addressing through 'PIX keys' tied to a user's CPF (national ID number), mobile phone, or email, eliminating the need to know account numbers. Third, PIX operates 24/7/365 with settlement in under ten seconds. The lesson for Africa is unambiguous: free person-to-person payments are not a concession to be debated. They are the ignition mechanism. Everything else, the merchant revenue, the credit ecosystem, the tax formalisation, follows from the volume that only zero-fee access can generate.

Case Study: India's UPI — Free Payments as the Foundation of a Digital Economy

India's Unified Payments Interface (UPI), launched in 2016 by the National Payments Corporation of India (NPCI), offers the most compelling long-run evidence that free person-to-person payments can reshape an entire economy. UPI processes over 20 billion transactions per month as of late 2025, with an annualised throughput exceeding \$2 trillion. Person-to-person transfers on UPI are free, a policy the Indian government has defended against repeated industry pressure to introduce user fees. The Reserve Bank of India and the Ministry of Finance have consistently held that taxing P2P transfers would undermine the very network effects that make UPI valuable.

UPI's growth trajectory illustrates the power of removing pricing friction. When IMPS (Immediate Payment Service) launched in 2010, it charged per-transaction fees. Adoption was modest. UPI launched six years later with identical underlying technology but a fundamentally different commercial model: free for users, interoperable across all banks, and accessible through simple mobile apps via a Virtual Payment Address (VPA) like 'name@bank'. The result was exponential growth. UPI went from processing 0.1 million transactions in its first month to over 20 billion per month within eight years. IMPS, despite a six-year head start and the same real-time infrastructure, never came close. The difference was not technology; it was the business model.

The sustainability question that African sceptics raise is a live debate in India too. The government currently subsidises UPI through merchant discount rate (MDR) reimbursements to banks, and NPCI has begun exploring tiered interchange models. But the macro-economic returns dwarf the subsidy cost: UPI has accelerated formalisation of the informal economy, expanded the tax base, enabled direct benefit transfers that reduce leakage, and created a platform on which fintech lending, insurance, and investment products have flourished. India's experience proves that free P2P payments are not a permanent cost centre; they are an investment in economic infrastructure whose returns compound over time. For African policymakers, the UPI lesson is clear: the question is whether you can afford not to make payments free.

Anticipating objections

Three counterarguments are commonly raised against the commercial reform agenda. Each deserves engagement.

"Zero-fee models only work in large markets like India and Brazil. Smaller African economies lack the scale."

This concern is legitimate but overstated. First, several smaller economies have implemented successful zero-fee or low-fee instant payment systems: Norway (5.5 million people) has Vipps, Denmark (6 million) has MobilePay, and Sweden (10.5 million) has Swish. Scale helps, but it is not determinative. Second, the fragmentation argument cuts both ways; if individual African

markets are too small to sustain inclusive payment economics alone, this strengthens the case for regional integration rather than undermining it. A unified West African or East African payment area offers the scale of Brazil; the continent collectively exceeds India. Third, M-Pesa itself emerged in Kenya, a market of 50 million, proving that African economies can generate sustainable, profitable inclusive payment models. The question is not whether scale exists, but whether it is being captured or squandered through fragmentation.

"Mandating interoperability will discourage private investment in payment infrastructure."

This argument assumes that network lock-in is the primary incentive for investment. It is not. Electricity grids are interoperable; companies still invest in generation. Card networks are interoperable; banks still compete fiercely for customers. When infrastructure becomes a shared utility, competition shifts from controlling access to improving service: better apps, faster settlement, superior merchant tools, innovative credit products. The current fragmented landscape is not, in fact, attracting abundant private investment; it is producing dozens of subscale systems, none achieving breakout success. Interoperability does not destroy value; it redirects competition toward where it benefits consumers most.

"Mobile money succeeded precisely because of closed-loop networks. Forced interoperability might have killed M-Pesa in its infancy."

This is the strongest objection, and it contains a kernel of truth. Early-stage platforms often need protected space to invest in network-building without free-riders capturing value. Safaricom bore the cost of building agent networks, educating consumers, and establishing trust. Mandating interoperability in 2007 might indeed have undermined those incentives.

But there is a difference between protecting pioneers during scale-up and protecting incumbents indefinitely. M-Pesa is nearly two decades old. The pioneer-protection argument has an expiration date, and it has passed. Moreover, Kenya has since introduced interoperability requirements, and M-Pesa continues to thrive, suggesting that mature platforms can compete on service quality rather than captive networks. The lesson is not that interoperability is wrong, but that timing matters. For greenfield systems, interoperability could be a design principle from day one. For mature markets, the transition must be managed but should not be indefinitely delayed to protect legacy revenue streams.

A new playbook: recommendations for an inclusive African payments ecosystem

The path forward requires a decisive shift from infrastructure projects to commercial and regulatory reforms designed to foster adoption and unlock network effects. The technology largely exists; what is needed now is a strategic playbook to put it to work for all. The following

recommendations offer an actionable framework for regulators, central banks, and industry leaders.

Note that these three recommendations are interdependent, but resources and political capital are finite. For regulators and policymakers facing real-world constraints, sequencing matters.

Start with user experience mandates and proxy addressing. Enforce pro-adoption user experience standards: African central banks should follow the Brazilian model by mandating clear, prominent placement and standardized user flows for instant payment options within all licensed financial applications. Making instant payments easy to find and intuitive to use is a powerful, low-cost regulatory tool for driving mass adoption and building consumer trust in the digital economy.

This is the lowest-cost, highest-impact intervention. It requires no new infrastructure, no complex multi-country negotiations, and no subsidies, only regulatory will. A central bank can mandate prominent placement and proxy registration within existing systems tomorrow. This builds consumer familiarity and trust, creating demand-side pressure that makes subsequent reforms easier to justify.

Second, tackle domestic pricing friction before cross-border complexity. Zero-fee mandates for domestic person-to-person transfers are achievable at the national level, where a single regulator holds authority. Cross-border interlinking and FX liquidity solutions require multi-stakeholder coordination that takes years. Winning the domestic battle first demonstrates viability and builds institutional capacity for the harder regional negotiations ahead.

Third, acknowledge who loses and design around them. Banks profit from fragmentation. Transaction fees are visible revenue; the diffuse economic benefits of an inclusive payment ecosystem are not. Any reform agenda that ignores this political economy is naive. The path forward requires either compensation (letting banks capture value elsewhere, as Brazil did) or coalition-building that isolates incumbent resistance. Fintechs, mobile operators, and merchants are natural allies, they benefit from interoperability and can provide political counterweight. Regulators should actively cultivate these coalitions rather than assuming good policy sells itself.

The risk of presenting recommendations as a neat list is that it implies they can all happen simultaneously through sheer rational appeal. They cannot. Reform is a campaign, not a declaration.

Conclusion: from isolated islands to a connected continent

The technology required for inclusive, real-time payments in Africa already exists. The demand for such services is not theoretical; it is proven by the immense success of mobile money and starkly, by the stablecoin migration documented earlier in this paper. When 6.7% of a continent's

GDP flows through dollar-denominated tokens on public blockchains, that is not a crypto trend to be dismissed; it is a vote of no confidence in existing payment infrastructure. Africans are actively seeking faster, cheaper ways to transact, and they are finding them outside traditional systems.

The final, missing piece is not another piece of hardware or a new software platform. It is business model innovation. It is the courage to reform outdated pricing structures, the foresight to prioritize user accessibility, and the strategic will to mandate the interoperability needed to unlock continent-wide network effects. The blueprints from successful global systems are clear, and the economic cost of inaction is immense.

Will we'll enable these systems to actually serve African needs or continue creating isolated islands in an increasingly connected world.

Which African country will move first and show the rest the way?