Kigali International Financial Centre

Unlocking the Potential of Digital Payments in Africa:

A Comparative Analysis of Regulatory Sandboxes and Payment Service Providers

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Full report to be published soon

Research Partner

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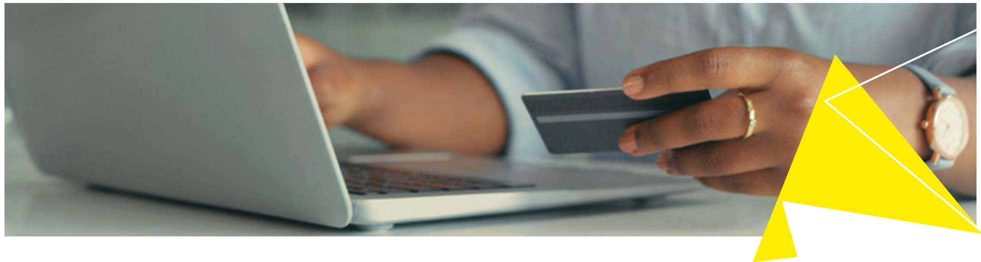
Executive Summary

The environment within which African financial systems operate has undergone radical changes since the turn of the century. Once chronically on the fringes of the global arena for traditional finance, a deepening of financial systems can be observed in almost every country across the continent bringing banking, insurance and credit services to more households and enterprises than ever before. New players and new products, often enabled by new technologies, have broadened access to financial services in Africa. Competition and innovation dominate African financial systems, cutting across all facets of the payments industry - including channels, methods and value chains - to reach previously unbanked vestiges of the population.

In this new and changing payments landscape, regulators are tasked with the twin burdens of fostering financial innovation whilst ensuring consumer protection and regulatory compliance. Driven by proprietary data, complimentary research and in-depth interviews with representatives from relevant stakeholders, the *Unlocking the Potential of Digital Payments in Africa* report examines the legal and regulatory environment underpinning the metamorphosis of payment systems in Africa. Focusing on Kenya, Nigeria, Rwanda, South Africa, and the West African Economic and Monetary Union (WAEMU), the report provides a comparative analysis of the key features of regulatory sandboxes and payment service licenses in these jurisdictions. The comparative advantages and continental gaps identified in this exercise are the subject of the final element of the report, which provides policy and practitioner recommendations to improve and harmonise regulation across these jurisdictions.

An Introduction to the Payment Industry in Africa

Technology has emerged as a silver bullet in Africa, enabling the continent to keep pace with the changing landscape of payments for goods and services globally. Africans are adopting electronic payments such as cryptocurrency and digital currencies as a complement to traditional cash-based payments. These shifts towards electronic payments and the surge of alternative conceptions of money has precipitated an influx of new investments and supportive regulatory changes that are redefining Africa's payment landscape. Digital payments are changing the mode of everyday functions, including how Africans bank, shop, and do business. Nonetheless, the majority of monetary transactions in Africa remain cash-based, with less than 10% of all payment transactions made via electronic or digital channels[1]. The growth drivers fuelling the penetration of digital and mobile based payments in Africa, as well as the challenges impeding its development, convenience and scalability are discussed in turn on the next page.



1 The Banker, 2023. *Payments Innovation the Key to Financial Inclusion in Africa*

Growth Drivers of Digital Payments in Africa

Continuous Growth in E-Commerce

Global e-commerce volumes increased by 25% between 2019 and 2020 and are further expected to display annual growth averaging 12-15% until 2025[2], thus driving innovation in and uptake of digital payments.

Covid-19 Containment Measures

Containment measures during the Covid-19 pandemic mandated a consumer shift from cash to contactless digital payments, a trend that was particularly pronounced in Africa. Mobile-money transaction volumes doubled to 800 million in Nigeria in 2020, while South Africa saw a 40% growth in e-commerce during the 2020-2021 lockdowns[3].

Government Support

Government efforts to facilitate interoperability, plug tax leakages, and ensure the effective distribution of aid accelerated the uptake cashless payment systems, as did regulatory changes in large markets such as Nigeria, Egypt, Kenya, and South Africa[4].

Mobile Penetration & Money

The rapid adoption of mobile technology in Africa, amplified by a growing middle class in urban areas using mobile money to make purchases, has accelerated the number of mobile transactions[5]. Notably, Africa contributed 68% (US$836.5 billion) of the global value of mobile transactions in 2022 and was also the region with the biggest rise in adoption and active usage of mobile money between 2021 and 2022[6].

2 McKinsey and Co., 2022. *Sustaining Digital Payments Growth: Winning Models in Emerging Markets*
3 McKinsey and Co., 2022. *The Future of Payments in Africa*
4 McKinsey and Co., 2022. *The 2022 McKinsey Global Payments Report*
5 Cellulant, 2023. *The Rise and Rise of Proximity Payments in Africa*
6 GSMA, 2023. *The State Of The Industry Report On Mobile Money 2023*

Challenges Facing Digital Payments in Africa

Connectivity and Infrastructure

Despite increasing internet and mobile phone penetration across Africa, access to reliable internet remains limited. Beyond affordability, inadequate digital and real-time payments infrastructure make it more challenging for businesses to conduct online transactions and for customers to access digital payment solutions.

Institutional and Regulatory Frameworks

Regulatory requirements for real-time and digital payments in many African countries are complex and evolving. Regulatory uncertainties and a lack of comprehensive, appropriate, and supportive regulatory frameworks for payments (and FinTech more generally) are hindering the increased adoption of cashless forms of payment[7].

User Confidence

The perceived utility of and faith in digital payments by consumers and small businesses in Africa lags behind other parts of the world. This relative lack of confidence in the safety and security of online payment methods, coupled with a low level of computer literacy, means cash still reigns supreme amongst those with low digital skills on the continent.

Digital Transaction Costs

Given the relatively low average income per capita and purchasing power of most of Africa's population, values of individual customer transactions are often lower than more developed economies. Processing costs per dollar for instant payments are therefore more expensive. These high digital transaction costs are amplified by stiff tariffs on digital transactions by governments, further affecting mass adoption.

7 Finance Magnates, 2023. *The Impact of COVID-19 on Digital Payments and e-Commerce in Africa*

Map of Payment Service Providers in Benchmarked Jurisdictions*

Mobile Money Payments

These are mobile money service providers that develop and deploy financial services through mobile phones and mobile telephone networks.

Payment Processing for Merchants

These are providers of platforms for online business operators in any vertical to accept card payments and deliver digital or physical products and services to consumers.

Payment Processing for Third Parties

These are payment providers that process payments for two parties. Examples of third-party payment services include PayPal, Stripe, Apple Pay, Google Pay, and Venmo.

Cross-Border Payments Providers

These are enablers of financial transactions where the payer and the recipient are based in separate countries. They cover both wholesale and retail payments, including remittances.

Nigeria

Cellulant, DOT, paga, PayU, Konetpay, OnePipe

Betastack, cashenvoy, KongaPay, SPOUTpay

etranzact, Interswitch, paystack

Accelerex, flutterwave

appzone, CEVIANT, fincra, Onepay, Unlimit, UPPERLINK, VoguePay

Rwanda

airtel money, MTN, mobicash, tigo cash, Wanda Money Transfer, Virunga Money Transfer Services

pesapal

flutterwave

Dahabshiil, unimoni, Rwanda Cash

Kenya

JUMIA PAY, Telkom

PayU, pesapal, pesawise, SasaPay, WAKANDI

M-PESA

Finserve

airtel money

Unlimit

Interswitch, kenswitch, Craft Silicon, iPay, virtualpay

Cellulant, IPSL, Pesaflow

DPO pay, d·local, paystack

South Africa

myGate, PayU

iVeri, Pay4It, PayFast, peach payments, SID

* Please note this only maps a selection of licensed payment service providers in each jurisdiction. For access to a full list of licensed entities in each country, please visit the websites of the relevant regulatory authority, as follows: Central Bank of Kenya, Central Bank of Nigeria, National Bank of Rwanda, and the Payments Association of South Africa.

Regulation of Sandboxes

Key Definition:

Regulatory Sandbox

"A regulatory sandbox is a regulatory approach, typically summarized in writing and published, that allows live, time-bound testing of innovations under a regulator's oversight. Novel financial products, technologies, and business models can be tested under a set of rules, supervision requirements, and appropriate safeguards."

- United Nations Secretary-General's Special Advocate for Inclusive Finance for Development[8]

8 UNSGSA, 2020. *Briefing on Regulatory Sandboxes*

The rapid evolution of financial technology and the shift towards an online, digital, and application-based financial ecosystem has birthed new and emerging financial products, services, or delivery channels that may not be fully compliant or compatible with existing regulatory requirements.

One way governments and regulators are responding to this challenge is by instituting Regulatory Sandboxes. These sandboxes allow regulators to gain insight into the advantages and risks of newly developing technologies, which can then be used to inform evidence-based regulation and adapt their regulatory environments accordingly.

This element of the report identifies the eligibility, access and application criteria for regulatory sandboxes in select African countries working to enable the development and adoption of innovative financial technology in the payments space. The key features of each regulatory sandbox are compared to identify the countries with comparatively advantageous institutional and regulatory frameworks enabling FinTech innovation to thrive. Key findings from this exercise include:

Regulatory Sandboxes Benchmark Summary

All Regulatory Sandboxes

- Have an **emphasis on innovation and financial inclusion,** screening for dynamic, high-potential companies.
- Have a **resource availability** requirement (both material and technical) for all applicants.
- Provide **electronic access** to sandbox applications, with varying degrees of sophistication.
- Require continual **monitoring and evaluation** of testing progress in interim reports.
- **Permit extensions to the initial testing period** by 6-12 months, depending on the regulator and the participant's reasons.

Multiple Regulatory Sandboxes

- Impose **no application, administration, or participation fees** on applicants (Nigeria, Rwanda, South Africa).
- Require participants to have an **exit strategy** in place (Kenya, Nigeria, Rwanda, South Africa).
- Have **data security and confidentiality** requirements that participants must implement to protect customers during the testing period (Nigeria, Rwanda).

Individual Regulatory Sandboxes

- Have a **multi-lingual repository** of relevant sandbox guidelines (Rwanda).
- Require the integration of **customer redress mechanisms** providing financial compensation for adversely affected customers (Rwanda).
- Have robust **records maintenance** requirements for testing outcomes (Nigeria, Rwanda).
- Run **multiple cohorts** per year (Rwanda, WAEMU).
- Make **public disclosures of lessons learned** and testing outcomes (South Africa).
- Promise **expeditious application processing** in 14 working days or less (Rwanda, Kenya).

Regulation of Payment Service Providers in Africa

Key Definition:

Payment Service Provider

"Any person, payment and credit institution, or electronic money issuer with access to a regulated payment system that provides services to consumers or businesses who are not participants in a regulated payment system, for the purposes of enabling the transfer of funds using that regulated payment system."

- United Kingdom Financial Conduct Authority[9]

The adoption and development of financial technology in Africa has also transformed the payment systems landscape, requiring Payment Service Providers (PSPs) to expand their service offerings to the extent possible within their respective jurisdiction's regulatory framework. However, licensing requirements for PSPs vary across different African countries, creating challenges for businesses and consumers alike.

By understanding the common characteristics of licensing requirements for PSPs, as well as unique competitive advantages and best practices procedurally, regulators and policymakers can work towards a harmonized framework for PSP licensing in Africa. This will promote financial inclusion, support economic activities, and ensure consumer protection and security.

Accordingly, the report identifies the licencing requirements for PSPs in select African countries transitioning quickly towards digital payments, identifying best-in-class regulatory approaches, and highlighting regulatory gaps towards achieving a harmonised framework for PSP licensing in Africa. A selection of key findings include:

PSP Licencing Benchmark Summary

All PSP Regulators

- Impose a **minmium capital requirement** to be eligible for licensing.
- Impose an **application or licesnsing fee** on applicants.
- Requre applicants to present a comprehensive **risk management framework**.

Multiple PSP Regulators

- Have **time bracketed license validity** once issued, requiring renewal upon the conclusion of the specified time horizon (Kenya, Nigeria, South Africa, the WAEMU).
- Require a **letter of no objection** for foreign entities allowing the applicant to provide payment services in another jurisdiction (Kenya, Rwanda).
- Permit licensed PSPs to engage in **merchant acquisition services** (Kenya, Nigeria, Rwanda).
- Permit licensed PSPs to **issue payment Instruments** (Rwanda, South Africa, the WAEMU).
- Permit licensed PSPs to engage in **account management activities** (Rwanda, the WAEMU).

Individual PSP Regulators

- Permit licensed PSPs to provide **e-money issuances services**, including to issue, process, store, send and facilitate e-money or mobile money payments (Kenya, Rwanda).
- Permit licensed PSPs to process **payments on behalf of informal or semi-formal financial groups** such as SACCOs or micro-finance institutions (Kenya).
- Have a particular emphasis on **customer protection and security,** imposing safeguard frameworks aligned with international standards (Rwanda).

9 Financial Conduct Authority, 2023. FCA Handbook

Policy and Practitioner Recommendations

The ripple effects of the digital evolution of Africa's financial industry also necessitates the adoption of novel approaches that are fit for purpose and foster the regulatory agility needed to adapt to the changing landscape of the financial system. Drawing on the expertise of industry practitioners and complementary desk based research, the report highlights the following general suggestions for regulators to achieve this goal, and ensure the stability and integrity of digital financial services:

Develop a Dedicated FinTech Policy: Regulators should prioritize the development of a dedicated FinTech policy focused on demystifying FinTech, encouraging innovation, outlining government support measures, and highlighting regulator roles.

Balance Consumer Protection and Innovation: Regulators should strike a balance between financial stability and promoting innovation to protect consumers while fostering growth in the FinTech sector.

Leverage and Create Education Opportunities: Regulators should invest in training for mid- to senior-level officials to bridge the FinTech knowledge gap between innovators and regulators.

The report also highlights specific recommendations for creating such a framework for responsible and innovative FinTech services, identifying strategies that will harmonize regulatory regimes across the jurisdictions benchmarked and the continent more broadly.

Recommendations for Regulatory Sandboxes

Encourage Regulatory Collaboration

In multi-peak jurisdictions, explore coordination mechanisms allowing all authorities to work together on applications and testing programs. This can be achieved by linking sandboxes to provide a single point of entry for FinTech product trials or consolidating into a single sandbox.

Develop Multi-Jurisdictional Sandboxes

Promote cross-country or multi-jurisdictional regulatory sandboxes to facilitate regional regulatory convergence. Existing regional or continental cooperative efforts can be leveraged to initiate joint or shared regulatory sandboxes that facilitate seamless "passporting" of FinTech solutions across borders.

Align With Financial Inclusion Goals

For regulators with a mandate to advance financial inclusion, ensure regulatory sandboxes are linked to the country's National Financial Inclusion Strategy and target products or enabling technologies with particular relevance to inclusive financial ecosystems.

Relax and Streamline Sandbox Processes

Reduce burdensome application processes to increase participation and market satisfaction. This includes simplifying or reducing paperwork, developing digital interfaces for application submission, and expanded communication channels to reduce review and processing times.

Recommendations for Payment Service Provider (PSP) Licensing

Diversify Risk Management Options

Implement advanced risk management strategies that allow startups with higher risk profiles to begin operations while ensuring appropriate controls and safeguards are in place. This could involve imposing limits on the number of individual transactions or capping transaction values per month, allowing regulators to conduct ongoing due diligence and monitor performance.

Introduce Tiered or Phased Licensing Options

Consider phasing or customizing existing requirements for new entrants based on their size, type, and service scope. A tiered approach, such as those used by the Central Bank of Kenya and Monetary Authority of Singapore, can make regulatory oversight more targeted and reduce barriers to entry.

Pursue Regional Harmonisation

A long-term goal should be the development of bi or multilateral agreements to facilitate cross-border interoperability and eliminate regulatory duplicity. Licensed PSPs should be able to operate cross-jurisdictionally without the need for further authorization, streamlining processes and reducing fragmentation.

Integrate RegTech Solutions

Leverage technology to improve the efficiencies of supervisory and regulatory tasks and enhance internal reporting processes. This includes automating reporting, live monitoring and enforcing of regulatory compliance, and integrated collection of granular data to improve the depth and breadth of regulatory oversight.

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