Agpaytech's Research
31st May, 2023

The State of Cross-Border Payment Systems in Africa

Agpaytech

Key Highlights

Regional RTGS for cross-border payment

- PAPSS
- EAPS-RTGS
- COMESA-REPSS
- SYGMA
- WAEMU RTGS
- SADC-RTGS
- *EPSS

Cross-border payment channels

- Banks transfer
- Int. wire transfer
- Electronic fund transfer
- Card payments
- Digital wallets
- Mobile wallets
- Digital currencies

Cross-border payment charges

- Exchange rate
- Taxes
- Transaction fees
- Interchangee fees
- Special levies

Cross-border payment use cases in Africa

Payer/payee	Person	Business	Government
Person	P2P (eg remittances, transfers to family/ friends)	P2B (eg payment for e-commerce purchases)	P2G (eg payment of taxes, utilities, property held abroad
Business	B2P (eg salaries, pensions to employees working abroad)	B2B (eg supply chain payments to foreign suppliers)	B2G (eg tariffs, utilities, taxes)
Government	G2P (eg pension, salary, aid payment to individuals)	G2B (eg purchases from international suppliers)	G2G (eg payments related to international aid, FDI)

Table of Contents

03 Introduction

04 Frustrations and Frictions in Cross-border Payment

06 State of Cross-Border Payment

07 RTGS for cross-border settlement

08 Currency for cross-border payment in Africa

09 The Solution to Cross-border Payment

Open banking

11 Mobile money

13 Cross-border Quick Response code

14 Pan-African Payment and Settlement System (PAPSS)

16 Online payment method

17 Businesses and Consumers are Ready for change

18 Driving the Growth of Cross-border Payment

19 Improved Payment infrastructure

20 Fintech, Neo-bank, and e-commerce

21 The need for cross-border CBDC in Africa

24 Cryptocurrency

Data and sandboxes regulation

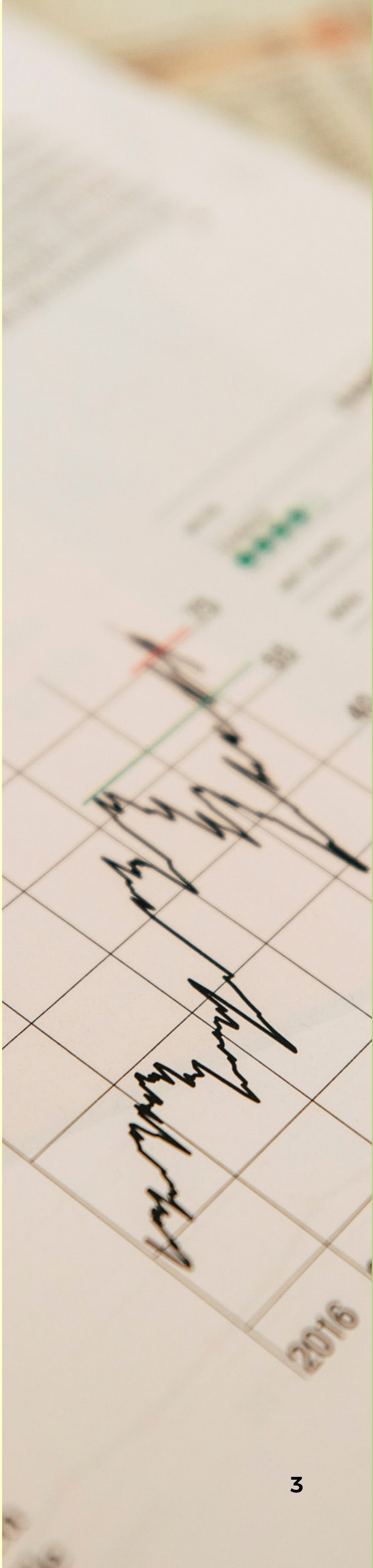
26 Conclusion

27 Refrences

Introduction

Cross-border payments are ever more vital for economies, especially transactions underpinning tourism, e-commerce, and remittances, which have grown substantially over the last decade (Coeuré, 2019). In recent decades, the state of payment models and systems in Africa has improved significantly. Policymakers, banks, and other financial institutions are collaborating to develop the right policies to connect the continent's markets, deepen regional integration and adopt reforms that enhance competitiveness and movement of financial flows and commodities. Africa's reel towards cross-border payment and frictionless intercontinental trade is driven by the new level of openness, transparency, and inter-nation infrastructural system. With a strongly growing economy, the abundance of natural resources, and dividend talent cultivation, the cross-border payment system remains an integral element and backbone to the many policies and development agenda.

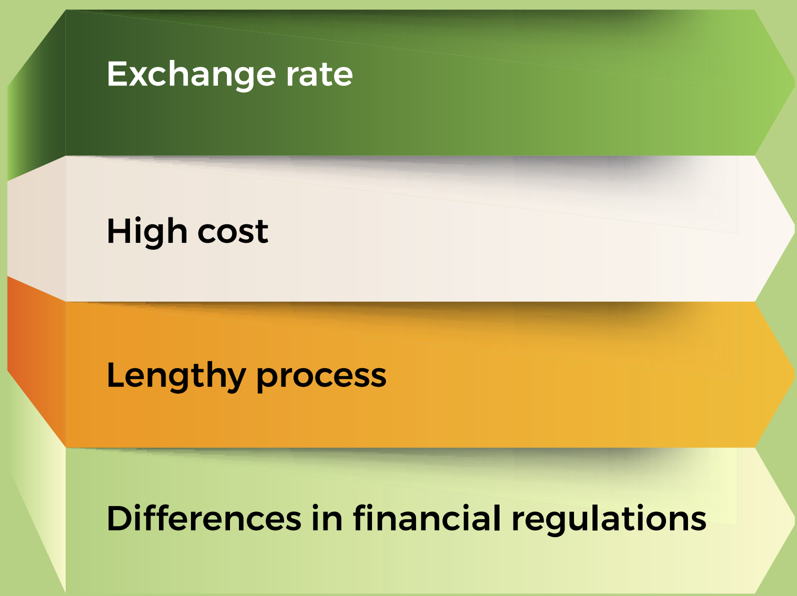
According to SWIFT data, there is a substantial growth in intra-African commercial payments, with almost 20% of all cross-border commercial payments being credited to an African beneficiary. This indicates that more goods and services are being bought and sold within Africa and an increasing number of payments are being routed through Africa instead of via a clearing bank outside of Africa. Besides, the upsurge of e-commerce businesses, fintechs, and sharing economy make cross-border transactions en-route to small and medium enterprise survival. Besides, our previous studies revealed 90% of countries in Africa have real-time gross settlement (RTGS).



Frustrations and Frictions in Cross-border Payment

Making payment from one African country to another is always possible but it comes with several challenges. Some common issues associated with cross-border payment in Africa include the high cost of transactions, lengthy payment processes, delays, and cumbersome requirements that sometimes discourage people. In some cases, it can sometimes take three working days to complete the transactions from one country to the other in Africa.

Figure 1: Frictions in cross-border payments



Source: Agpaytech

- **High costs**

Commercial banks are at the center of cross-border transactions and charge fees for all, whether internal or external. Although the transaction fee may vary across banking institutions, customers look forward to less costly transactions depending on the amount of money being sent. Consequently, it will be costlier for a Ghanaian or Nigerian to send money to the US than for someone in the US to send money to any African country.

- **Differences in Financial Regulations**

Cross-border payment is flexible with an enabling regulatory environment, which is still lacking in the vast majority of regions in the African markets. This challenge is deepened by the differences in the approval processes and regulatory requirements of each central bank and the lack of a common identification system. Each country's finance system is governed by regulations to prevent money laundering and transactions that finance acts of terrorism. Therefore, most customers-to-business (C2B) or business-to-business (B2B) transactions require the sender to comply with international finance regulations. With this, there is the need to have African financial regulations covering cross-border regulations.

- **Lengthy transaction processes**

Cross-border payments generally take longer to process from sending to recipient countries. While this is important in safeguarding the funds for both the sender and receiver, it is evident that it is inconvenient for both parties. However, the time needed to close a transaction depends on the payment methods used. For most banks, recipients must wait more than 24 hours before receiving their cash. Individuals engaged in business transactions may end up frustrated and unable to enter possession of their money within a given time frame.

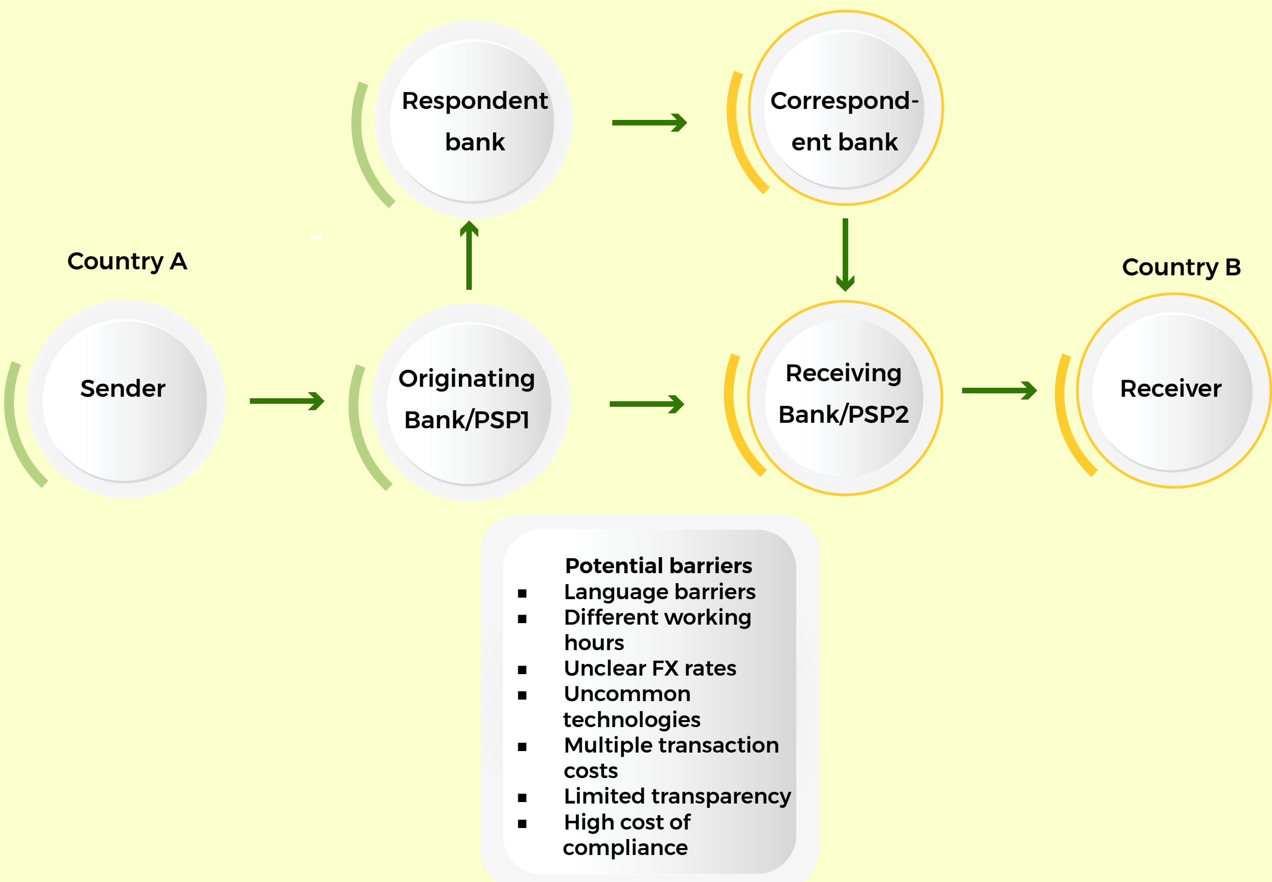
- **Exchange rates**

Lengthy transaction processes could sometimes be beneficial and disadvantageous because of exchange rate fluctuations. Cross-border payments require an exchange of currencies for countries that do not use the same currencies. Therefore, exchange rates are affected by differences in currency values and the time of transaction. For businesses, exchange rate fluctuations may make cash flow estimates inaccurate.

State of Cross-Border Payment

The existence of numerous currencies, languages, fragmented compliance, and regulatory policies have resulted in inadequate coordination among payment service and payment infrastructure providers in cross-border payments in Africa. The implications of the cross-currency payment have exposed parties to high transaction costs in the form of foreign exchange settlements. This implies that participating banks have to get enough reserve liquidity in other foreign currencies which can be risky due to the high volatility rate (Arner et al., 2022; Auer et al., 2021). Besides, the currency dichotomy in Africa has led to the involvement of several intermediaries in order to complete transactions among African counties. Most of the currency's denominations also differ making payment inflexible. During the multiple currencies for cross-border payment, in most cases, two or more intermediaries are required to complete the process. For each process, it is unclear what amount constitutes the processing fees. Due to time differences and working hours, the FX rate is different between the two countries increasing the hiding cost. While limited transparency has led to the surge of the informal channel, few have been done to resolve this issue across the continent.

Figure 2: Multiple currency cross-border in Africa

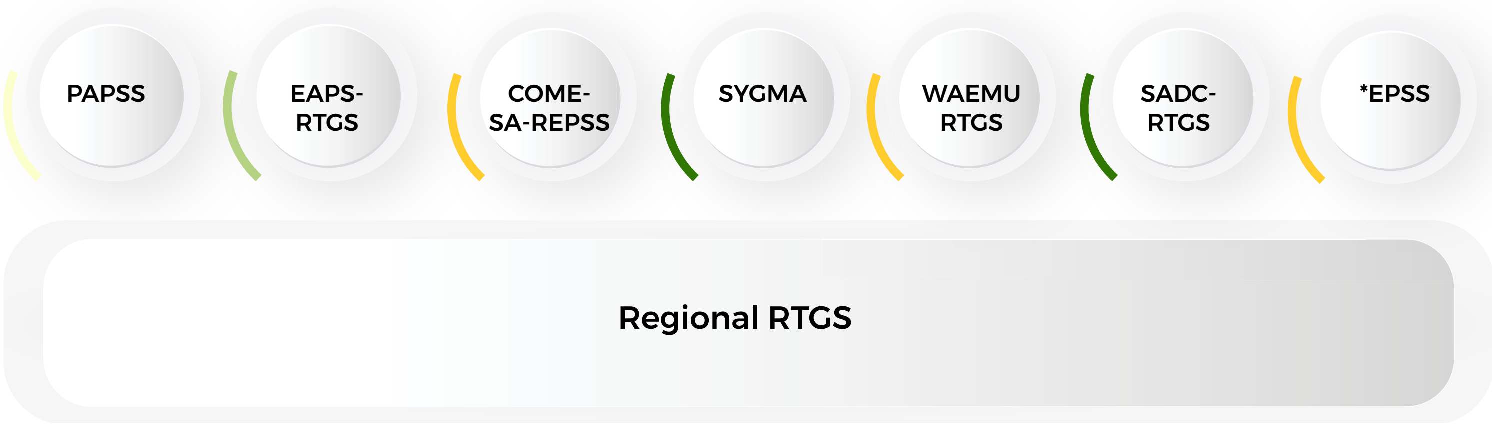


Source: Agpaytech

RTGS for cross-border settlement

The RTGS is a system for electronic payment where payment transactions between two financial institutions (stakeholders) happen in real-time and individually rather than in batches at the end of the day. RTGS is typically run by the central bank of a country, which is the backbone of the national payment system, sometimes acting as a clearing and settlement agent. Like any account holder, these institutions can store balances (reserves) in these accounts, or use them to make payments. Currently, more than forty-five (45) central banks have RTGS infrastructure whereas Cameroon, Central African Republic, Chad, Congo, Democratic Republic, Congo Equatorial Guinea, and Gabon have a synchronized RTGS known as the Système des gros montants automatisé (SYGMA). As envisioned by the Bank of England (BoE) to improve upon its RTGS by introducing a new functionality known as the Interledger Protocol to support the synchronization of payments between two simulated RTGS ledgers that enables payments to be made across different ledgers and networks across the world, such initiative could be implemented in Africa as being championed by Pan-Africa Payment and Settlement System (PAPSS). Currently, every regional block in Africa has a payment system for real-time transactions. The Central African countries use the SYMA, East Africans use the EAPS, West African countries usually the francophone states have the WAEMU RTGS, and Southern Africans have the SADC-RTGS.

Figure 3: Cross-border settlement facilities



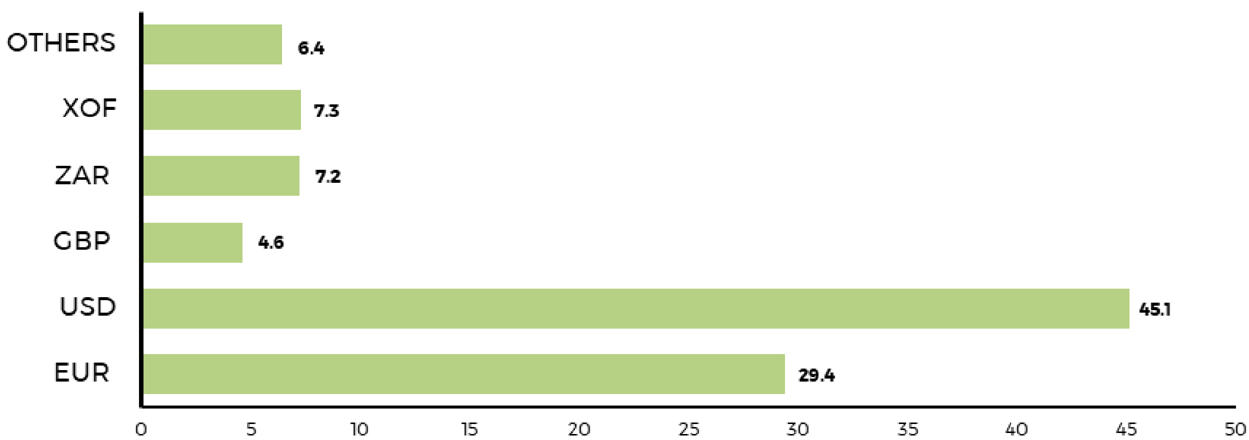
Source: Agpaytech

Currency for cross-border payment in Africa

According to the AfCFTA Secretariat, there are over 42 currencies in the continent, and this remains a constraint to intra-Africa trade due to the need to use international currencies such as US Dollar or Pounds for cross-border payments. The notable currencies are the West African CFA franc, used in eight independent countries, and the Central African CFA franc, used in six other nations. Their relative stability is guaranteed to utilize the fixed exchange rate; currently, both are pegged to the Euro. However, the only local currency ranked among the most traded in the international forex market is the South African rand, placed at 20th position globally. Multiple websites confirmed that the Libyan Dinar had been Africa's most robust currency. The US dollar accounted for more than 45.1% of payments from Africa in 2017. The Euro is increasing in importance by 29.4%. However, the British pound has seen a decrease in use from 6.2% to 4.6.

Presently, the problem remains that there is no single currency in Africa that is used as a common currency for cross-border trade transactions. Most cross-border payments are carried out via SWIFT and in the US Dollar exchange rate. Today, everything imported into Africa is bought in dollars, pounds, euros, etc., creating currency reserve shortage, depreciation, and inflation dilemmas.

Figure 4: Africa's currency usage for cross-border commercial payments



Source: Source: SWIFT BI Watch, 2017

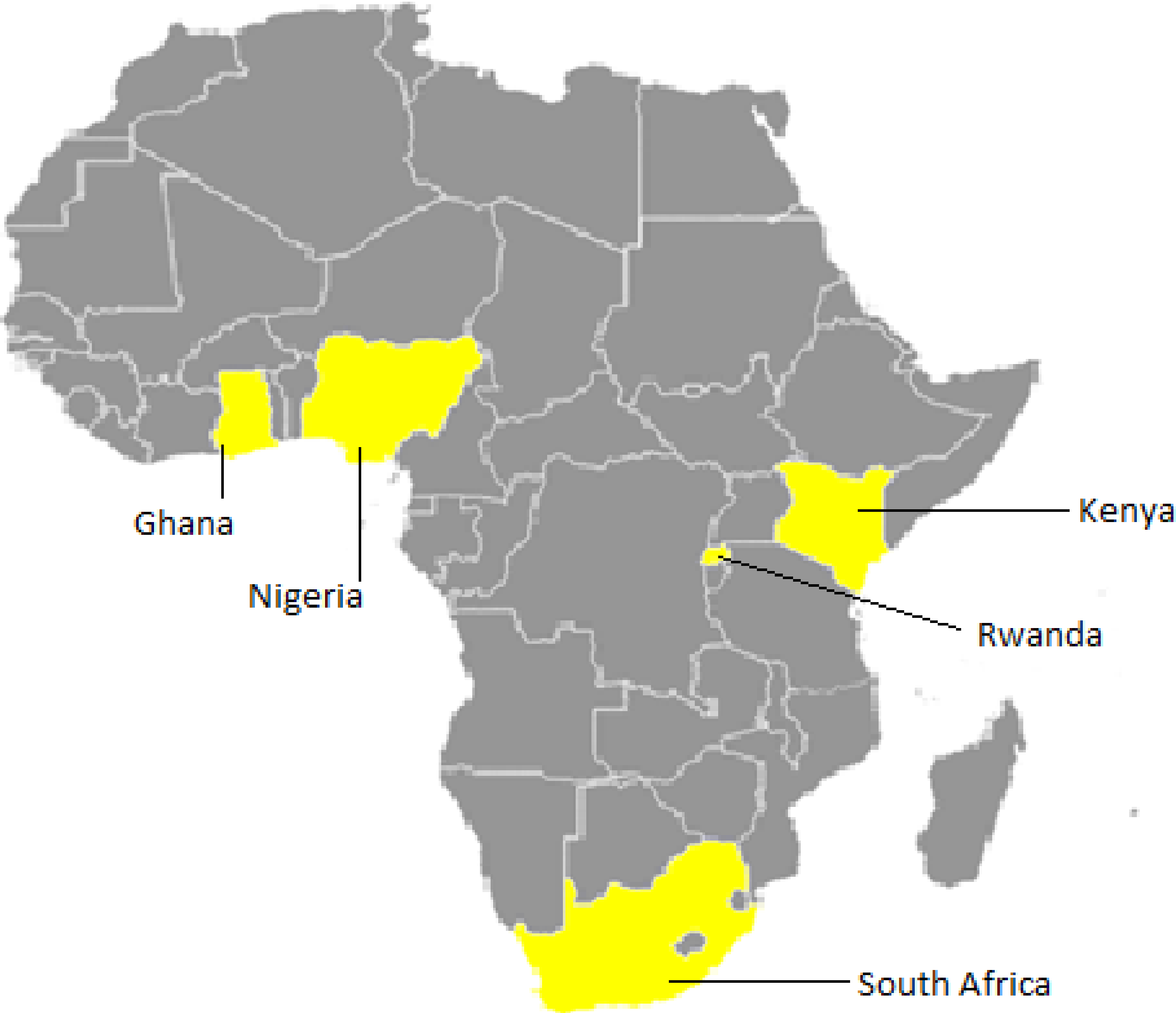
The Solution to Cross-border Payment

The 21st century has witnessed dramatic shifts in how people pay for goods and services, with electronic payments increasingly displacing cash and, more recently, cryptocurrency and digital currencies emerging as alternatives to traditional conceptions of money. With banks and nonbank players alike innovating to reduce friction in domestic and cross-border payments and deliver much-needed new solutions to consumers and businesses, Africa's domestic e-payments market is expected to see revenues grow. The African financial market is evolving around

Open banking

Open banking initiative has already kicked off in many countries like India, the UK, Canada, etc. Like a few developed countries, Nigeria, Rwanda, Ghana, South Africa, Kenya, etc., are among the few countries in Africa preparing to adopt open banking. Open banking provides a holistic business model that financial institutions automatically and securely share consumer data. By using an approved API, consumer data is securely transmitted because the API acts as a software intermediary allowing different applications to communicate with each other. With this open banking, users can access multiple financial accounts in one place. This gives consumers greater control over their financial data anywhere anytime. Open banking initiative is being driven by market competition and regulatory methods. Currently, Nigeria, South Africa, Rwanda, and Kenya are preparing grounds for the OB initiative. However, only Nigeria has issued a regulatory framework and approved guidelines to adopt the OB in its payment landscape.

Figure 5: Adopting Open Banking

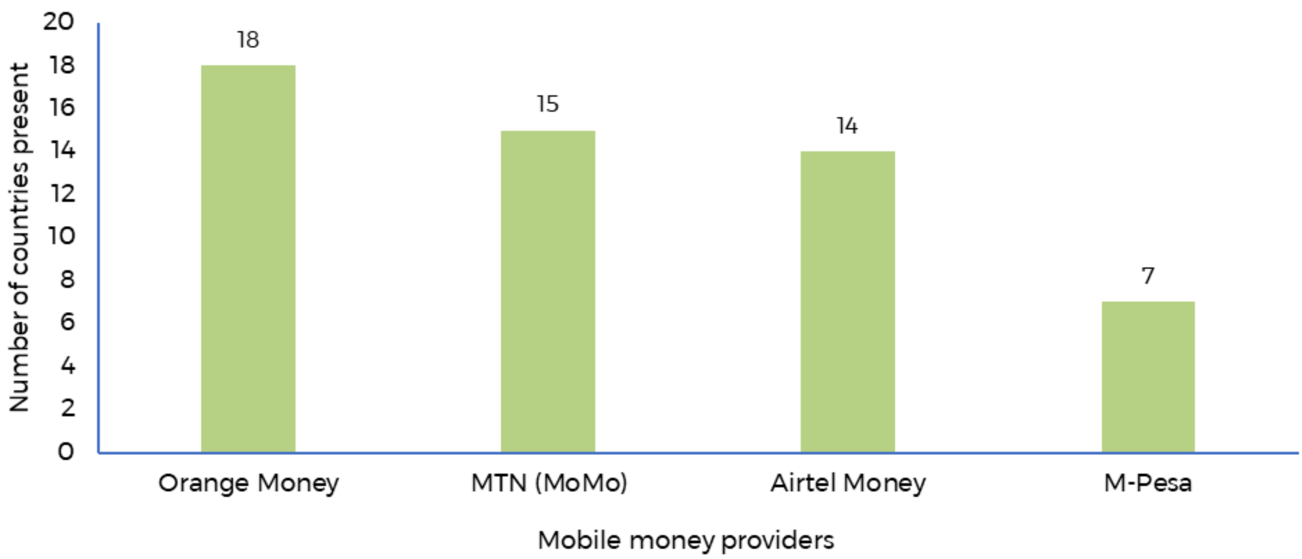


Source: Agpaytech

Mobile money

Mobile money payment is the most successful and leading electronic payment in Africa despite the adoption approach. Provided by telecommunication companies and supported by a network of licensed agents, mobile money services allow registered users to deposit cash into a virtual wallet, and use those funds for payments and purchases, including peer-to-peer (P2P) payments. Although the non-bank-led (mobile network operators) method is widely practiced in Africa, (e.g. Ghana, Kenya) the bank-led mobile payment (e.g. Nigeria) has also contributed to the payment industry. Most countries have advanced their mobile payment landscape with the interoperability between competing mobile wallets. With this model, users from different networks (Network A user transfer money to Network B registered users) can easily send and receive money in their mobile money digital wallet instantly. While this process is flexible and has been achieved and operated widely in countries like Ghana, Kenya, South Africa, Nigeria, etc., some network operators have limited value and volume of transactions. The transactional charges contribute greatly to the economic development and widen the technological and infrastructural growth of many African countries. It also comes with charges usually associated with the percent of transactional value or a range. The cross-network mobile payment has boosted the consumer finance market, and its low onboarding requirements, as well as the agent service model, had led to massive financial inclusion in Africa.

Figure 6: Mobile money providers



Source: Statista 2023

Mobile money has become one of the most successful businesses for telecommunication providers in Africa. Approximately 144 mobile money providers operate in Sub-Saharan Africa, with two companies such as M-Pesa, MoMo, and Orange Money accounting for a significant share of the market. In 2019, 200 million users made 24.46 billion mobile money transactions in Sub-Saharan Africa (Statista, 2023).

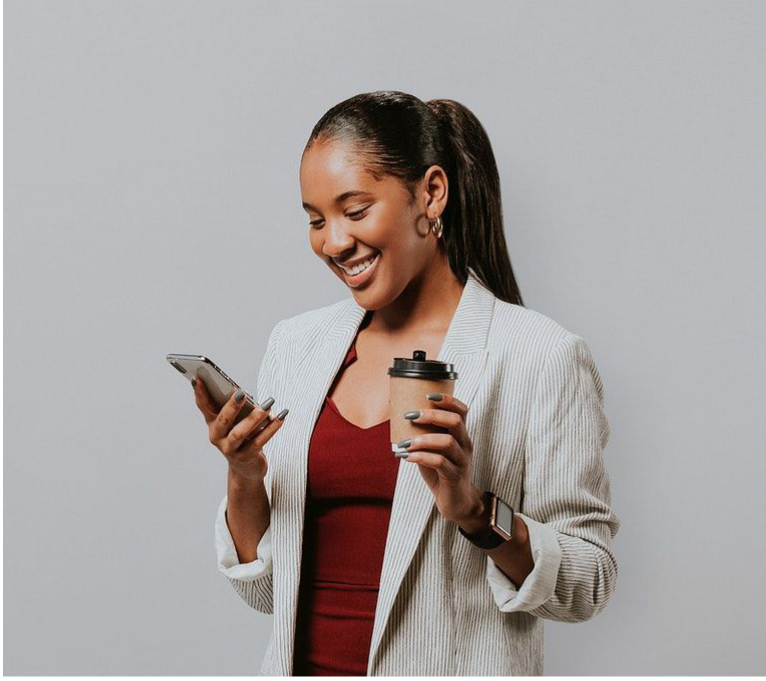
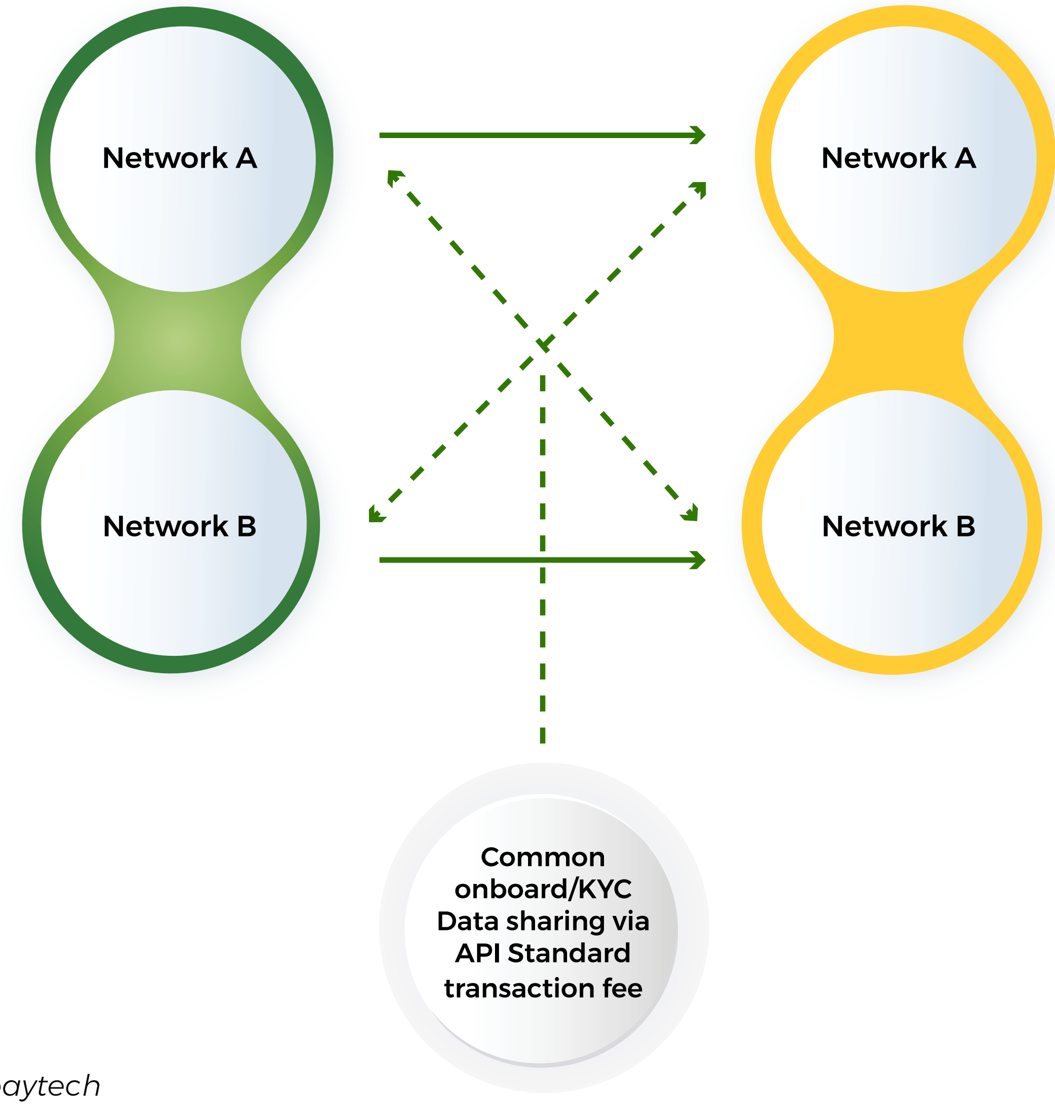
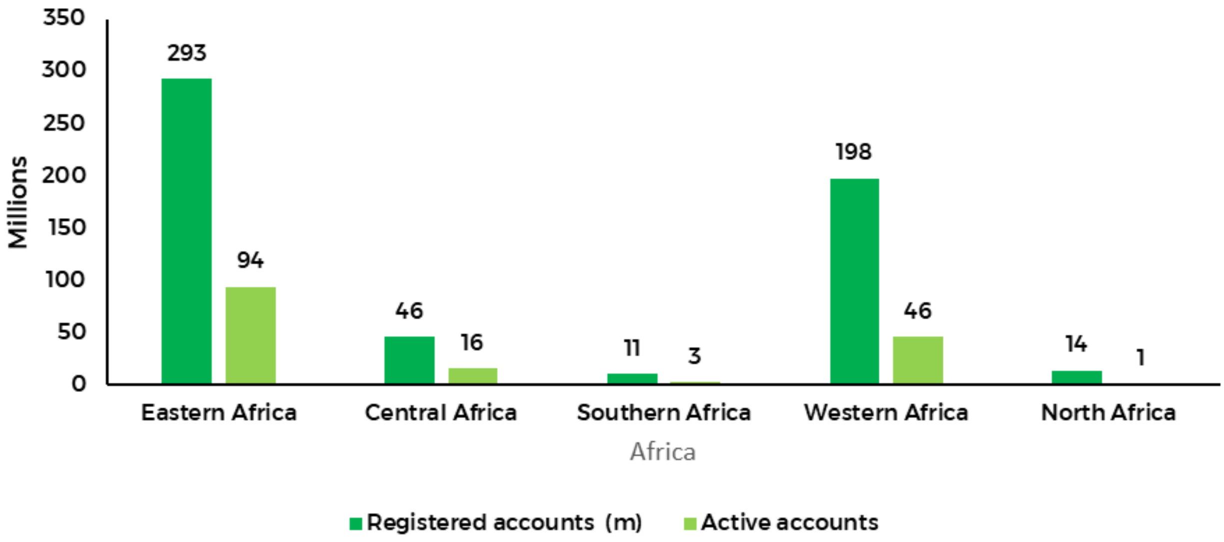


Figure 7: Cross-border direct and interoperable mobile money payment



Source: Agpaytech

Figure 8: Registered and active mobile accounts



Source: GSMA (2020)

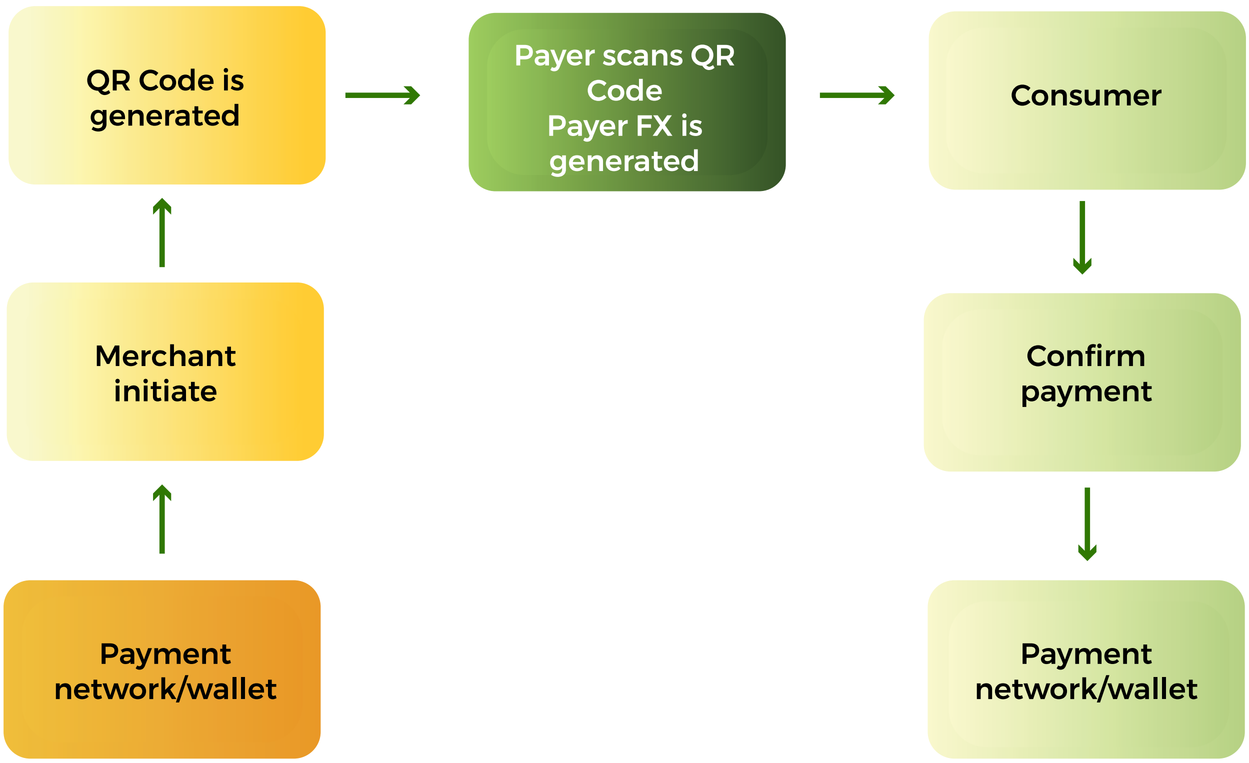
Cross-border Quick Response Code

Institutions, merchants, and consumers are now exposed to new payment models and alternative innovative technologies that make the transaction flow flexible. In countries like China, Japan, etc, QR Code payment has dominated the retail market transforming the economy into a cash-lite state. Cross-border payments from the WeChat Pay digital wallet platform now cover 69 countries and regions, with more than 1,000 overseas cooperating institutions, according to a senior manager at the company. In India, UPI and PayNow integration will allow users of the two quick payment systems in either nation to send money across borders quickly, securely, and conveniently. Furthermore, Bank Negara Malaysia (BNM) and the Monetary Authority of Singapore (MAS) today launched a cross-border QR code payment linkage between Malaysia and Singapore. This payment linkage will allow customers of participating financial institutions to make retail payments by scanning DuitNow QR and NETS QR codes. It will support in-person payments through the scanning of physical QR codes displayed by merchants, and online cross-border e-commerce transactions.

In Africa, some countries have introduced their domestic version of the QR Code. Some include integrated universal QR codes, including those sponsored or built by central banks or similar institutions, which are helping to reduce complexity as the number of payment methods grows. For example, Ghana's

Quick Response service (GhQR) enables payments from bank accounts, mobile money, and cards, and Nigeria has launched the NQR, a similar solution. QR Code usage is becoming popular in Africa and malls, big shops, merchants, taxi operators, companies, restaurants, and hotels can use QR codes to strengthen bonds with customers. Using QR codes means eliminating the hassle associated with handling cash. Transactions with QR codes are faster, safer, and secured also making the medium of exchange flexible.

Figure 9: How Cross-border QR code works

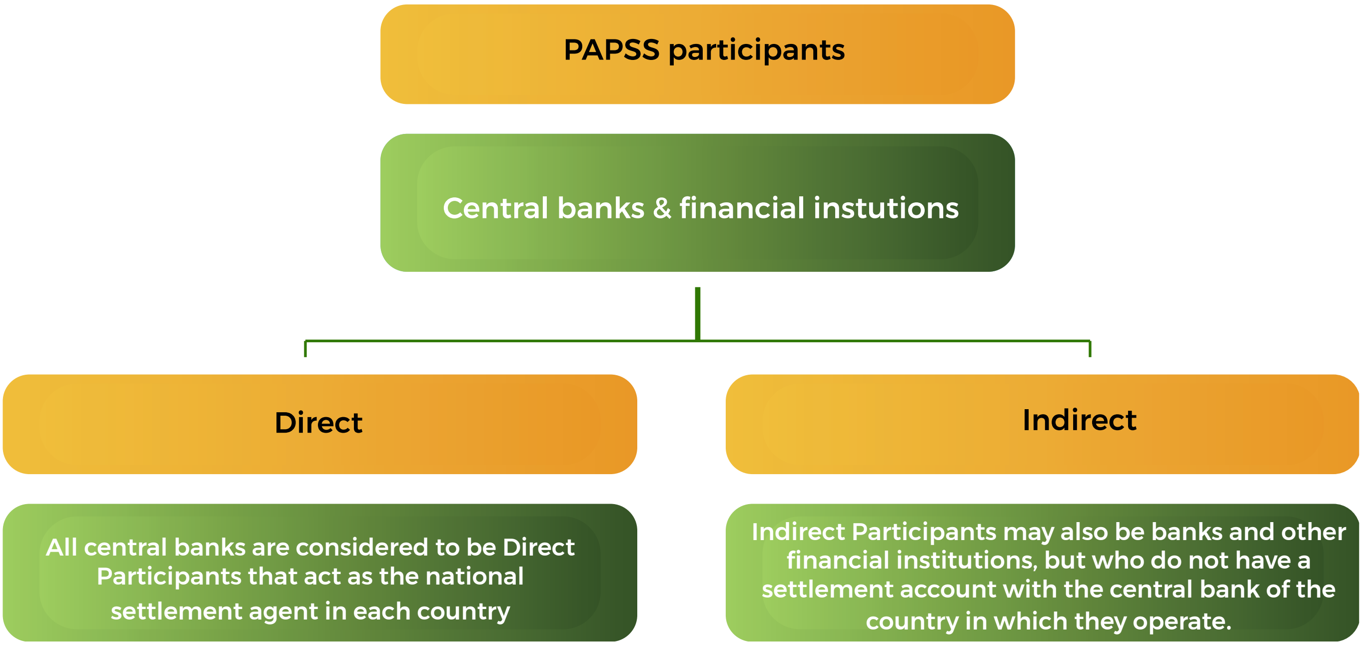


Source: Agpaytech

Pan-African Payment and Settlement System (PAPSS)

PAPSS is a single payment infrastructure that cuts through the existing challenges of local currency exchange and ensures instant payment of funds across Africa. PAPSS is a centralized payment and settlement infrastructure for intra- African trade and commerce payments. PAPSS collaborates with Africa's central banks to provide a payment and settlement service to commercial banks, payment service providers, and Fintech. PAPSS technologies aimed to facilitate the expected increased volumes in cross-border payments, whose mission includes stimulating African trade expansion, diversification, and development. PAPSS, developed by African Export-Import Bank (Afreximbank), is expected to boost intra-African trade by transforming and facilitating payment, clearing, and settlement for cross-border trade across Africa. The PAPSS has been piloted successfully in the six countries that make up the West African Monetary Zone (WAMZ); Nigeria, the Gambia, Sierra Leone, Liberia, Ghana, and Guinea. PAPSS has direct and indirect participants of financial intermediaries, commercial banks, fintech companies, and payment service providers (PSPs).

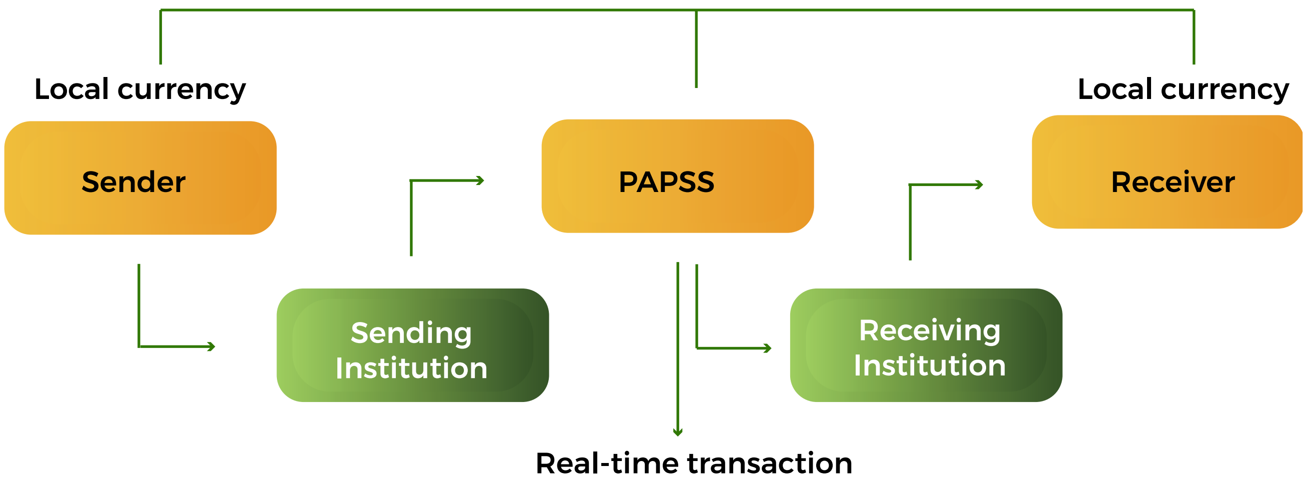
Figure 10: PAPSS participants



Source: Agpaytech

The PAPSS system facilitates instant payments across African borders in local currency under three primary processes; instant payment, pre-funding, and net settlement. With Instant payment, participants no longer need to convert local currencies into hard currencies, which entailed the funds leaving Africa to be converted before being sent back again to the beneficiary bank – adding days to the transaction time. In addition, compliance, legal, and sanctions checks are performed instantly within the system. Near-instant payments process within 120 seconds.

Figure 11: PAPSS instant payment

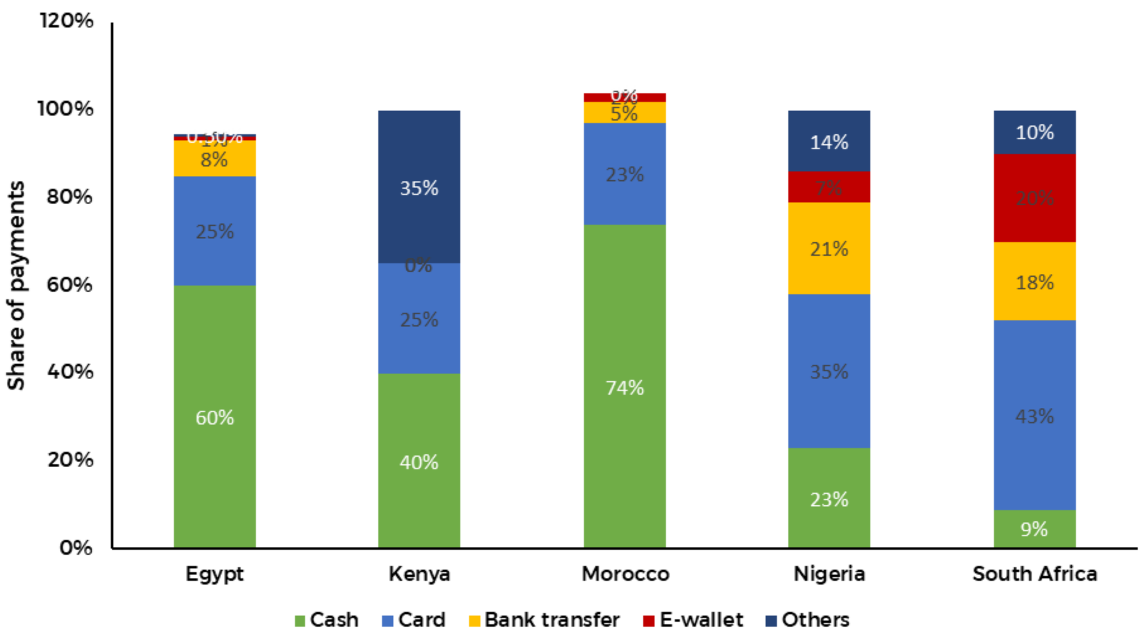


Source: adapted from PAPSS

Online payment method

The majority of the transactions in Africa occur in cash. Most countries on the continent rely significantly on cash, which is frequently used also in informal economies. Since credit cards are still not common in Africa, other payment methods are usually preferred. The same applies to online retail. When purchasing online, customers often use cash-on-delivery payments. Despite country-specific differences, cash remains the leading payment method in Africa. However, card payments, digital wallets, QR codes, and other online instant payments are beginning to gain massive adoption among merchants and consumers. On the other hand, cash was not that prevalent in Kenya, where 44 percent of e-commerce payments occurred by card, and 19 percent by bank transfer. In Morocco, most digital buyers used card-based payments (37 percent) and bank transfers (26 percent). In South Africa, most digital buyers used card-based payments (43 percent) and e-wallets (20 percent). Nevertheless, the use of mobile money has been growing significantly in recent years. In 2019, Africa was the leading region by the number of mobile money accounts worldwide. This payment method represents a huge potential for digital payments in a continent where a limited share of the population owns a bank account (Statista, 2023).

Figure 12: Online payment methods in selected African countries as of 2021



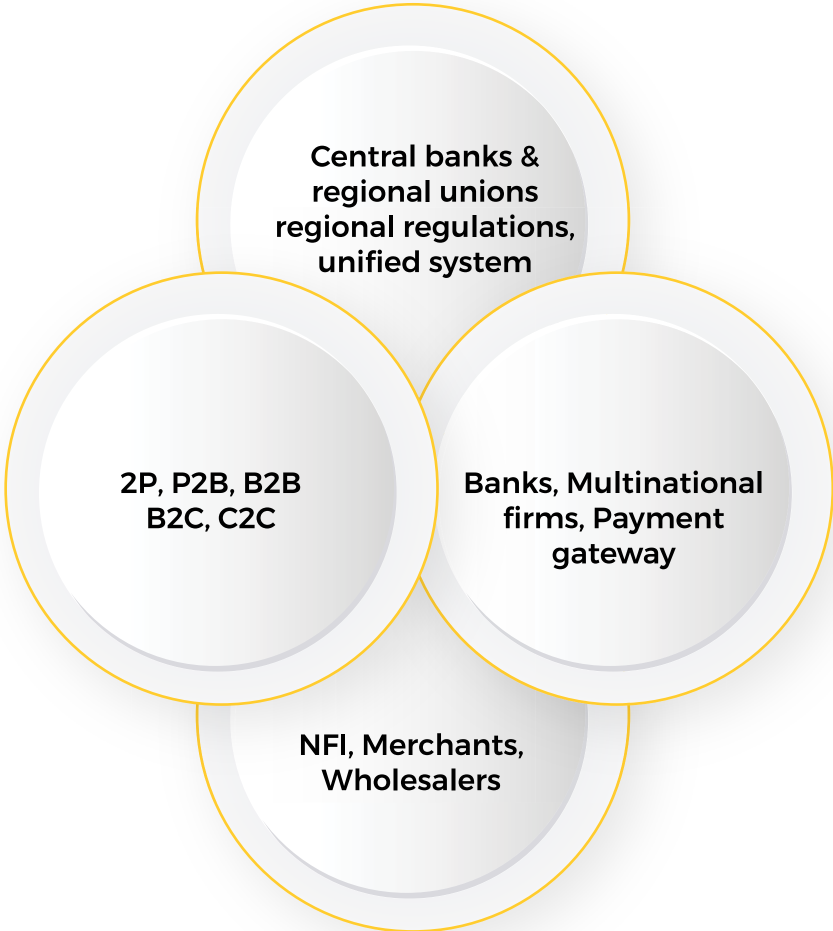
Source: Statista report, 2022

Businesses and Consumers are Ready for Change

International consumer and SME payments are exploding, with huge opportunities on offer for banks and fintech solutions that capture this growth. These changes have affected individual behavior too. People are no longer limited to living in the country they work in, but instead, can run their own businesses from anywhere in the world. New ways of working have been driven by advances in technology, changing regulations, and accelerated by the pandemic and affecting the global flow of money and the types of financial services people need. Businesses and individuals are therefore ready to engage in cross-border e-commerce, hire talents from afar, and form business partnerships. This has skyrocketed payment volumes and banks and fintechs that are in the position to provide seamless cross-border payment will see unprecedented market growth.

Payments to business and consumers are fluid, and it needs to flow without any delays or breakages. Today social media and trade (e-commerce) is becoming one thing, overtaking physical stores. For this reason, consumers and businesses are ready for change, to make payments or exchange monies irrespective of the location in Africa. Therefore, cross-border payments must be flexible to facilitate business, consumers, and government. Payments are therefore going digital, and mobile-assisted experiences are most preferable. Businesses demand better fintech solutions focused on transparency, speed, cost savings, and personalized services. Tremendous opportunity for fintech to influence B2B cross-border expansion. Faster payments and payment innovations also help ease concerns.

Figure 13: Payment, business, and consumer ecosystem



Source: Agpaytech

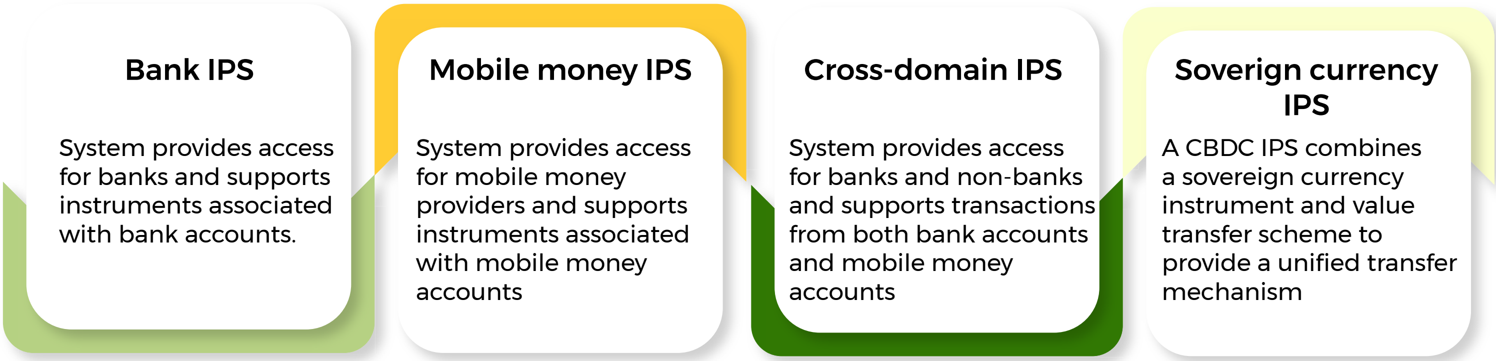
Driving the Growth of Cross-border Payment

Presently at the domestic level, there exist infrastructure and governance structures that allow the central banks to collaborate with the private sector to provide payment and financial services. Yet, at the regional level, inadequate coordination creates insufficient provision of public goods and results in inefficient arrangements for cross-border transactions. The need for better cross-border payments has long been recognized by the international community, central banks, governments, corporate entities, and individuals. Recently, cross-border payment in Africa is witnessing dramatic changes due to changes and improvements in regulations, infrastructural development, business models, technological innovations, the emergence of startups, etc., across the continent.

Improved Payment Infrastructure

The African payment system is an integral part of the financial infrastructural development and economic growth roadmap. The payment systems consist of all the financial projects, fintech innovations, and payment settlement technologies that improve financial inclusion, security, reliability, accessibility, and innovation among financial and non-financial institutions. Over the years, retail, wholesale, and real-time instant transactions have been improved. Several cross-border payment corridors have been created for international trade and settlement. For instance, PAPSS has centralized its payment and settlement infrastructure for intra- African trade and commerce payments. Today, many central banks, commercial banks, businesses, payment service providers, and Fintech have collaborated with PAPSS infrastructure. Besides, the rise of mobile transactions by telecoms, and Fintech companies have been a key driver of the substantial gains in the reach of the financial services sector in recent years (World Bank Findex, 2022). AfricaNenda (2022) reported that instant and inclusive payment systems (IIPS) process retail transactions digitally in near real-time and are available for use 24 hours a day, 365 days a year, or as close to that as possible in Africa. In the report, they found 29 domestic IPS and 3 regional IPS. However, cross-domain schemes that enable the instant transfer between bank accounts and mobile wallets have caught up with siloed systems and now make up the largest number of systems (ten IPS in total). The IPS domains facilitate secure, lower-cost daily transactions, and instant and inclusive payment systems that can boost the payment system across the continent.

Figure 14: IPS types and definition

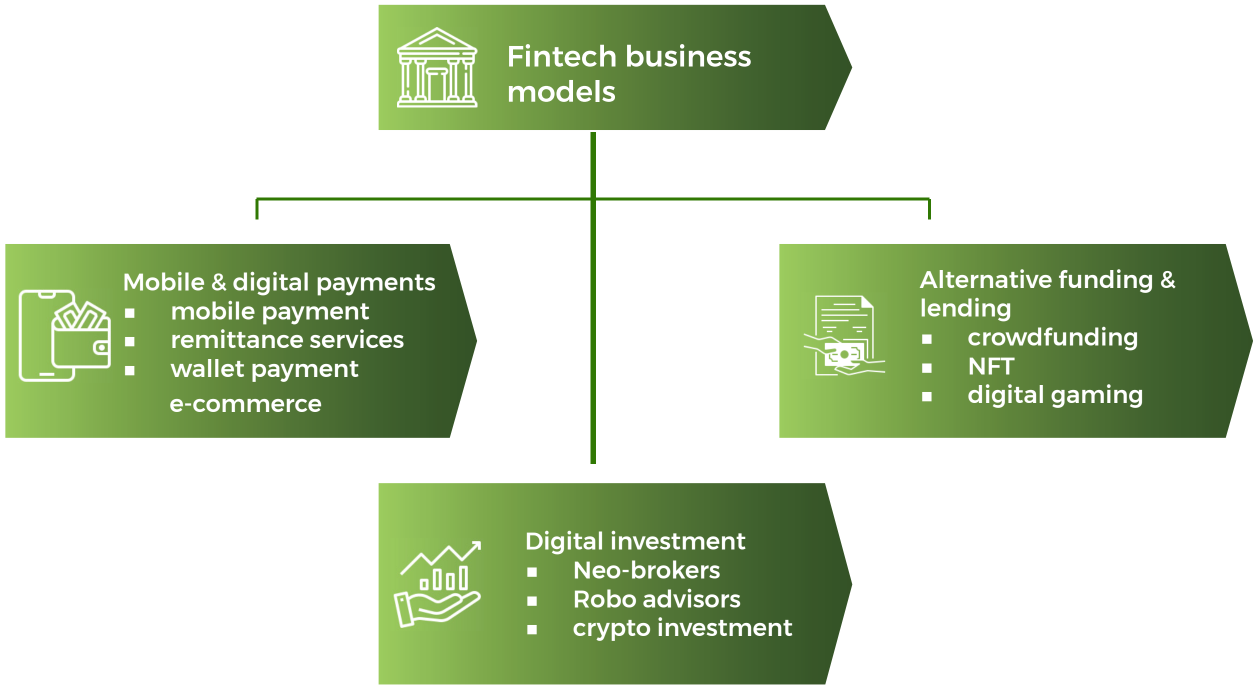


Source: SIIP Report, 2022

Fintech, Neo-bank, and e-commerce

Commercial banks in Africa have enjoyed decades of banking experience with customers in the financial landscape. But, within the past five years, the advent of technology has given rise to different financial models, and fintechs and Neo-banks provide similar financial services in more convenient ways. In a continent where many adult populations do not have a bank account, fintechs, and telecommunication players are providing retail banking opportunities for the millions. For instance, the growth in the startup sector continued in 2021 with reports that venture capital tech funding in Africa tripled to more than $5 billion, outpacing every other region in the world. Most of the funding about 63%, accounting for $3.3 billion went to fintech (International Finance Corporation of World Bank, 2022). The continent's multitude of small businesses can benefit from fintech as well. The World Bank estimates small and medium-sized businesses account for 90 percent of businesses patronized by some one billion Africans and create seven out of 10 jobs. The existence of fintech is shaping cross-border payment by providing cheaper, faster, smoother, and risk-free secure payment from their figure tips. This moment of trade and movement of money is pivotal to this young generation that seeks to break boundaries and the various fintech business models are set to go beyond borders.

Figure 15: Africa fintech market segment



Source: Agpaytech

The need for cross-border CBDC in Africa

Many central banks worldwide are exploring the possibility of issuing central bank digital currency (CBDC) that will be minted, controlled, and issued by the state. Currently, about two-thirds of the world's largest economies are researching, piloting, and building cross-border wholesale or retail CBDC. Like in the African continent, some countries have announced their interest to own CBDC. About thirteen (13) countries in Africa are in different stages of CBDC development (research, pilot, or launch), although Nigeria and Ghana are in the advanced stages. For instance, Nigeria is the first and only country that has launched its eNaira, whereas Ghana's eCedi is in the piloting stage. Nigeria partnered with Bitt Inc. and Ghana contracted Giesecke+Devrient (G+D) as the technology service provider. Both countries are exploring the offline and online versions of digital currency which will co-exist with the various payment instruments.

Table 1: CBDC in Africa

SN	Country	Central Bank	Year starts	Status	Whole or retail	Technology Provider
1	Nigeria (e-Naira)	Central Bank of Nigeria	2021	Launched	Retail	Bitt Inc. Hyperledger Fabric
2	Ghana (eCedi)	The Bank of Ghana	2021	Pilot	Retail	(G+D) Filia
3	Kenya	Central Bank of Kenya	2020	Research	Retail	N/A
4	Madagascar (e-Ariary)	Banky Foiben'i Madagasikara	2021	Research	Retail	
5	Mauritius	The Bank of Mauritius	2019	Research	Retail	
6	Morocco	Bank-Al-Maghrib	2021	Research	Retail	
7	Namibia	Bank of Namibia	2021	Research	Retail	
8	Egypt	The central bank of Egypt (CBE)	2018	Research	Retail	
9	Rwanda	The National Bank of Rwanda	2019	Research	Retail, Wholesale	
10	South Africa (Project Khokha)	South African Reserve Bank	2021	Research	Retail	
11	Tanzania	Bank of Tanzania	2021	Research	Retail	
12	Tunisia	Central Bank of Tunisia	2019	Research	Retail	
13	Zimbabwe	Reserve Bank of Zimbabwe	2021	Research	Retail	

Source: Agpaytech

However, one lacking project of CBDC in Africa is the interlink CBDC research to build a multi-CBDC. This experiment is long overdue as most European and Asia countries are exploring this opportunity. Central banks are exploring the opportunities CBDCs might bring to cross-border payment in several jurisdictions. Besides, groups of central banks are widely researching multi-CBDC. Bech et al (2020) defined the taxonomies of different models of CBDC variants of the "multi-currency cross-border" payment systems and arrangements. Multi-CBDC arrangements are preferable to proposals that involve the creation of a global private-sector global stablecoin. Instead, they look to foster a diversity of convertible national currencies and strengthen monetary sovereignty in the digital age (Auera et al., 2021).

Table 2: Examples of cross-border CBDC projects worldwide

Project	Participants	Purpose
Project Icebreaker	BIS Innovation Hub Nordic Centre, Bank of Israel, Norges Bank, and Sveriges Riksbank	Cross-border and cross-currency CBDC
Nexus	BISIH Singapore Centre is collaborating with the central banks of Indonesia, Italy, Malaysia, the Philippines, Singapore, and Thailand	It aims to enable cross-border payments in less than 60 seconds
Project Mariana	Switzerland, Singapore, Eurosystem BIS Innovation Hub Centres, the Bank of France, the Monetary Authority of Singapore, and the Swiss National Bank	To automate foreign exchange markets and settlement, potentially improving cross-border payments.
mBridge	The BIS Innovation Hub Hong Kong Centre, the Hong Kong Monetary Authority, the Bank of Thailand, the Digital Currency Institute of the People's Bank of China, and the Central Bank of the United Arab Emirates	Multi-CBDC for cross-border payments payments.
Project Dunbar	Project Dunbar brings together the Reserve Bank of Australia, Bank Negara Malaysia, Monetary Authority of Singapore, and South African Reserve Bank with the BIS	Facilitate direct cross-border transactions between financial institutions in different currencies
Project Inthanon-LionRock2	Hong Kong Monetary Authority (HKMA) and the Bank of Thailand (BoT) (BISIH	Explores the use of DLT for facilitating real-time cross-border funds transfers
Project Inthanon-LionRock2	The Swiss Centre, together with the Bank of France, the Swiss National Bank, and a private sector consortium, including the SIX Digital Exchange (SDX),	Explores the direct transfer of euro and Swiss franc wCBDCs between French and Swiss commercial banks on a single DLT platform

Source: Bank for International Settlement (BIS)

Cryptocurrency

Africa is one of the fastest-growing crypto markets in the world, according to Chainalysis, but remains the smallest, with crypto transactions peaking at $20 billion per month in mid-2021. Kenya, Nigeria, and South Africa have the highest number of users in the region. Many people use crypto assets for commercial payments, but their volatility makes them unsuitable as a store of value. About 20% of sub-Saharan African countries have banned crypto assets and only one-quarter of countries in sub-Saharan Africa formally regulate crypto (Chainalysis Report, 2021). The Central African Republic is the first country in Africa, and the second in the world after El Salvador to designate Bitcoin as a legal tender (IMF). South Africa classifies crypto assets as financial products. The move brings digital assets more under the purview of the country's regulators. The notice defines a crypto asset as a "digital representation of value" that is not issued by a central bank but can be traded, transferred, or stored electronically "for the purpose of payment, investment, and other forms of utility. The change, which takes effect immediately and falls under the Financial Advisory and Intermediary Services Act, of 2022.

Data and sandboxes regulation

The financial products and services sector is highly regulated almost everywhere in the world because governments want to make sure that their citizens' money is safe and protected. But although financial regulation is critical to protecting customers, it can also hamper innovation by raising the barriers to entry into the sector so high that they keep new players out. A regulatory sandbox is a controlled environment that allows entrepreneurs, regulators, and other players in the fintech industry to test out new financial products or services without being too constrained by inappropriate regulations. A regulatory sandbox introduces the potential to change the nature of the relationship between regulators and financial services providers toward a more open and active dialogue. It may also enable the regulator to revise and shape the regulatory and supervisory framework with agility.

Table3: State of the regulatory sandbox in Africa

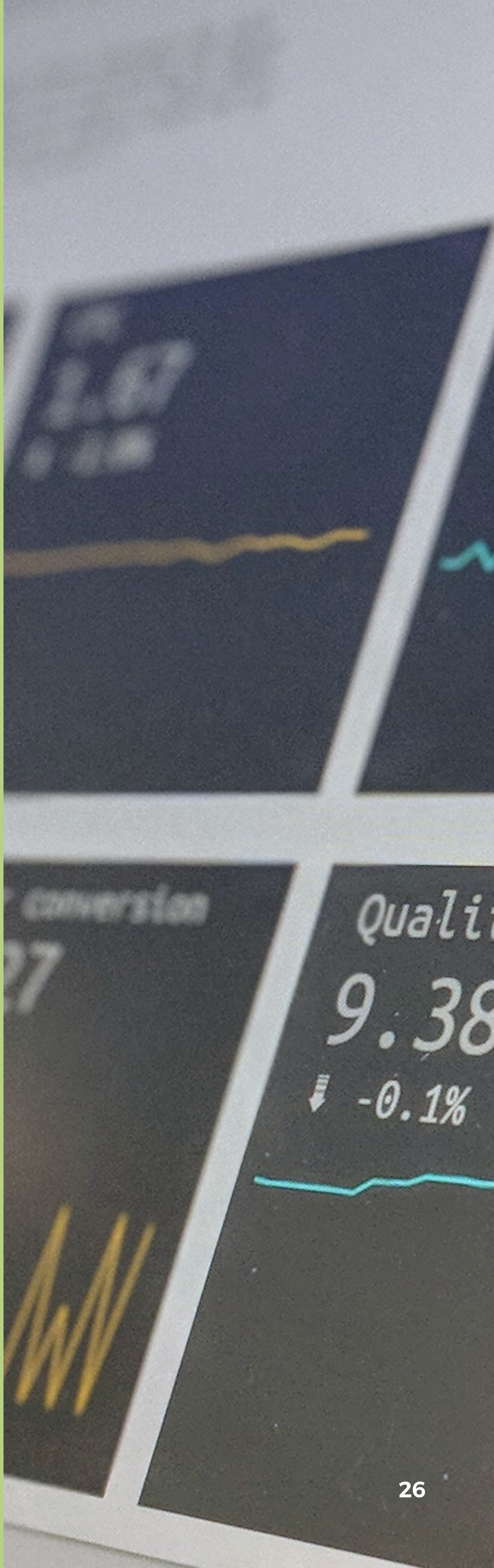
Country	Regulatory sandbox
Kenya	Kenya's regulatory sandbox is under the Capital Markets Authority of Kenya (CMA). It was approved in March 2019 when the CMA started to accept applications for admission into the regulatory sandbox. Interested companies or individuals are expected to apply to be considered, following a list of requirements outlined in the Regulatory Sandbox Policy Guidance Note
Sierra Leone	Sierra Leone's Sandbox Regulatory Framework was launched in 2018. The process was started by the Bank of Sierra Leone with the help of the Financial Sector Deepening Africa (FSDA) and the United Nations Capital Development Fund (UNCDF), as part of the country's Fintech Initiative.
Rwanda	The National Bank of Rwanda (BNR) in 2022 decided to create an enabling regulatory environment for digital innovations or Fintechs by establishing a regulatory sandbox
Mauritius	In Mauritius, companies apply for a Regulatory Sandbox License, giving them permission to conduct business where there is no legal framework guiding the activities to be conducted. This License is provided by the Economic Development Board to eligible companies that are willing to invest in innovative projects. Mauritius permits both fintech and non-fintech companies to apply for the licenses, providing guidelines for each category
Ghana	The Bank of Ghana in collaboration with Emtech Service LLC recently launched a regulatory sandbox pilot program
Nigeria	The Central Bank of Nigeria released Nigeria's regulatory sandbox framework in January 2021. It targets fintech and telecom solutions and will start to approve solution providers who apply for it on a cohort-by-cohort basis
Mozambique	Governor of the Banco de Moçambique, Rogério Zandemela, launched the 4th edition of the Regulatory Sandbox, an initiative aimed at tackling the challenges set forth by technological innovation in financial services. The project falls under the implementation of the 2016-2022 National Financial Inclusion Strategy, set to increase the use and access to financial services by the Mozambican population.
South Africa	The Intergovernmental Fintech Working Group (IFWG)1 is pleased to provide feedback on its inaugural regulatory sandbox (RSB) initiative, a framework used by regulators across the world to foster innovation in the financial services sector while keeping oversight of emerging risks.
Zambia	The Bank of Zambia (BoZ) launched its Central Bank Regulatory Sandbox in 2021 after identifying the need to develop regulations for fintech companies in order to foster innovation whilst managing the risks these technologies may present

Source: Agpaytech

Conclusion

New financial technologies are improving cross-border payments, making them faster, cheaper, seamless, and more transparent. The rapid and constant evolution of fintech is beneficial for economic growth and financial inclusion. Almost all African countries now have real-time gross settlement (RTGS), instant payment systems (IPS), and advanced electronic mobile money payment at the local level. Besides, central banks are exploring digital currency and providing guidelines for crypto-assets. Yet, cross-border payment is still facing several challenges with a lack of a common payment interface, cross-border QR Code payment, and multi-CBDC projects that can connect economies.

In a nutshell, a new multilateral exchange and contracting platform that centralizes payments and settlement and that integrates functionality needed for cross-border transactions would help in streamlining compliance, reducing the cost of foreign exchange conversion, and better managing financial risks. New technologies can be leveraged to better organize payments and associated financial markets and allow the design of a multilateral exchange system where participants can truthfully share information with smart contracts, but still retain privacy relative to other parties.



References

Coeuré, B. (2019). Digital challenges to the international monetary and financial system, speech at a conference on “The future of the international monetary system”, Luxembourg, 17 September

Auer, R., Haene P., & Holden, H. (2021). Multi-CBDC arrangements and the future of crossborder payments. BIS Papers No 115.

Adrian, T (2019). Stablecoins, central bank digital currencies, and cross-border payments: a new look at the international monetary system, speech at the IMF-Swiss National Bank Conference, Zurich, 14 May.

Bech, M., Faruqui, U., & Shirakami, T. (2020). Payments without borders, BIS Quarterly Review, March 2020, pp 53–65.

Committee on Payments and Market Infrastructures (2018). Cross-border retail payments, February.

World Bank (2014): Guidelines for the successful regional integration of financial infrastructures, January

AfricaNenda, ECA, & World Bank (2022). The State of Instant and Inclusive Payment Systems (SIIPS) in Africa 2022.

Bank of Ghana (2021, August 11). Bank of Ghana partners with Giesecke+Devrient to pilot first general-purpose Central Bank Digital Currency in Africa. [Press Release]. https://www.bog.gov.gh/news/press-release

CBDC Tracker (2022). Today’s Central Bank Digital Currencies Status [online, retrieved 2022, March 1]. https://cbdctracker.org/

Central Bank of Nigeria (2021, August 30). CBN Selects Technical Partner for Digital Currency Project [Press Release]. https://identitymanagementinstitute.org/facing-customer-identity-challenges/

South African Reserve Bank (2021, May 25). SARB commences feasibility study for a general-purpose retail central bank digital currency [Press Release]. https://www.resbank.co.

World Bank (2021). Developing Digital Payment Services in the Middle East and North Africa : A Strategic Approach. https://openknowledge.worldbank.org/handle/10986/36000

World Bank Group (2020). Global Financial Development Report 2014: Financial Inclusion; World Bank Publications: Washington, DC, USA.

World Bank, Global Findex Data. Available online: https://globalfindex.worldbank.org/ (accessed on 10 March, 2022).

About Agpaytech

Agpaytech Ltd. is a company pioneering in the Fintech Space with a focused approach to building robust technologies for eCommerce Card Processing Solutions for Payment Service Providers (PSPs). Additionally, we provide Compliance and Regulatory Umbrella, Remittance-as-a-Service White-Label Solution, Foreign Exchange, Cross Border Payments, and digital currency technology. We have partnered with multiple banks, non-banking financial institutions, and corporate organizations to create a solid service delivery model for them and their customers to ease their international remittances and payments concerns. Website: www.agpaytech.co.uk

United Kingdom
AGPAYTECH LTD.
3rd Floor, 86-90 Paul Street
London, EC2A 4NE, UK

Email: info@agpaytech.com

United States of America
AGPAYTECH USA LLC
9701 Apollo Dr Suite 100
Largo MD, 20774, USA

Email: usa@agpaytech.com