

Trends in Regional Payments Inside the Evolving Global Payments Landscape







- 1. Going Cashless: Spotlight on Payments
- 2. Leading the Way in Instant Payments
- 3. Open Banking on The Rise in Middle East
- 4. Mobile Payments Fuel Financial Inclusion in "Africa"
- 5. Regional Trends





Introduction

Major shifts driven by consumer preferences, regulatory movements, and new technologies have upended payments experiences. Now, a new era is emerging marked by a decoupling where a mix of banks, payment service providers, and fintechs institute new products and technologies to try and keep up with the ever-growing demand for cross-border payments.

While payments trends vary by region, some themes are more pronounced globally. Within each region, modernized payments solutions, including blockchain-enabled payments, are bringing faster, more inclusive, and transparent experiences. The acceleration of instant payments is paying the way for faster, more efficient payment rails. And the adoption of open banking is paying the way for greater transparency. Stakeholders from central banks and super app providers to rural consumers stand to gain.

This presentation explores principal payment trends. We examine the genesis of these, and spotlight success barriers, opportunities, and potential impacts.







Inclusion and trust

- Two-pronged strategies and opportunity will drive consumer and merchant inclusion impedially across Africa, Latin America and Asia;
- Focus on mobile money, wallets, and domestic and OR code solutions will ensure reach and low cost.
- Central banks will maintain their role in ensuring privacy, stability and trust in new providers, payment methods and the financial system.

Digital currencia

- Skty percent of central banks are exploring digital currencies; 14% are conducting pilot tests.
- Decentralised finance and private cryptocurrencies are facing central bank concerns about undermining the conduct of monetary policy.
- Fiat-cryptocurrency conversion and storage are emerging opportunities.

Digital wallets

- Use of mobile payments will continue its inexamble ree.
 (CAGR between 2019 and 2024 is estimated at 23%.)
- OR code, open banking and super-app profession will drive digital wallet adoption.
- Convenience will drive users and usage to digital wallets as a first point of contact—and away from traditional card and banking interfaces.
- B2B and digitised supply chains are the next frontiers for wallets.



Battle of the rails

- Payment initiation is changing from cards and accounts to digital wallets that are supported by open banking.
- Regulators will force the industry to strengthen domestic infrastructure for payments.
- Consumers in emerging markets are leapfrogging the 'card' age' and migrating directly to mobile wallets and account-based payments.
- Both traditional card networks and domestic wallet solutions will be challenged to connect 'open loop' payments with cross-boyder payments to retain relevance.

Cross-border payments

- Instant, lose-cost payments are driving the minvention of cross-border payments.
- Global payments standardisation will enable cross-border connectivity of domestic instant solutions.
- Regional solutions inspecially in Asia) and global normank solutions based on cryptocurrency and digital waitets will emerge.

Financial crime

- As consumers and businesses adopt open banking and instant and alternative payments, organised fraud-as-aservice/ is growing.
- In our survey, security, compliance and data-privacy risks were the top concerns for banks and finitechs.
- As financial crime becomes more sophisticated, providers will need to protect their full acceystem.



Global cashless payment volumes are set to increase by more than 80% from 2020 to 2025, from about 1tn transactions to almost 1.9tn, and to almost triple by 2030, according to analysis by PwC and Strategy&, PwC's strategy consulting business. Asia-Pacific will grow fastest, with cashless transaction volume increasing by 109% from 2020 to 2025 and then by 76% from 2025 to 2030, followed by Africa (78%, 64%) and Europe (64%, 39%). Latin America comes next (52%, 48%), and the U5 and Canada will have the least rapid growth (43%, 35%)

Number of cashless transactions in billions 61% GROWTH Total 3,026 82% GROWTH Total 1,882 Total 1.035 2030 2.020 2025

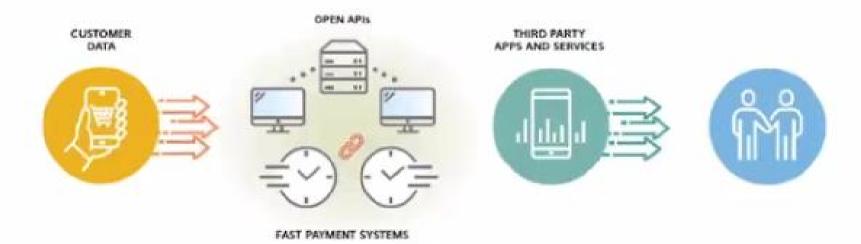
Note: Coshless transaction totals for 2025 and 2026 are projections. Beamor: PwC Strategy& global payments model, 2021





Introduction

Instant payments help today's start-ups and scale-ups accelerate hiring, delivery, and growth. Invoices and salaries are paid on the day they are due, rather than days in advance. The money arrives instantly, unlocking millions in extra liquidity for large corporates – a kind of cash injection for their business. Both employees and customers get paid early, currency conversion (for overseas payments) is automatic, and back-office reporting is standardized using the ISO 20022 messaging standard. Whether based on ISO 20022, a CBDC, card rails, or wallets, instant payments will prove as big as any innovation since the internet.



Source: World Bank.





Global Market Overview

Drivers of Instant Payments systems in the Middle East include rising mobile phone ownership, growing e-commerce sales, the licensing of new payments operators, and changing consumer preferences. Further, the combination of Instant Payments and Open Banking APIs is potentially an upcoming trend in the region, creating opportunities for increased collaboration, new revenue pools and reducing competition from other participants in this ecosystem.

Challenges that banks in the Middle East could face when implementing Instant Payments systems include; dealing with legacy systems and at times a more batch-oriented processing approach; cash-centric economies, though this is changing; the rise of new digital entrants; and, in some instances, a branchfocused customer experience.

Successfully implementing Instant Payments requires that banks consider far more than the return on investment. They need a concept that integrates Instant Payments as part of a more comprehensive digitalisation strategy that comprises technical, operational and business aspects. A future payments strategy needs to comply with next-generation requirements in all of these layers.





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Value Proposition



- Instant, Convenient and 24/7 in 10 Sec
- Open the floor for innovation Open API's (PSPs & Fintech)
- Highest security (Hard Binding/Cryptography box)
- Multi Channels Support (e-channels and PSP Apps)
- One App to connect all your financial accounts
- Digital Acceptance >> QR code, Request to Pay & eCommerce
- Alias management (Mobile # or User ID)
- Send money to anyone (accounts, cards, wallets) Push & Pull
- Deferred Net Settlement through RTGS
- Limits for PSP Apps (Transaction, daily and Monthly)



IPN Model & Stakeholders





Instant Payment Network Implementation Roadmap

IPN SERVICES











Access Any





Alias Management (Mobile # & IPA)



Balance inquiry, mini statement, IPN PIN definition

eChannels (Internet and Mobile Banking)





Purchase (Collect Request or R2P)

Intent Call

Commercial launch wave 2

Tap & Go "NFC" 1)



Bill Payment

Recurring Payment (m)

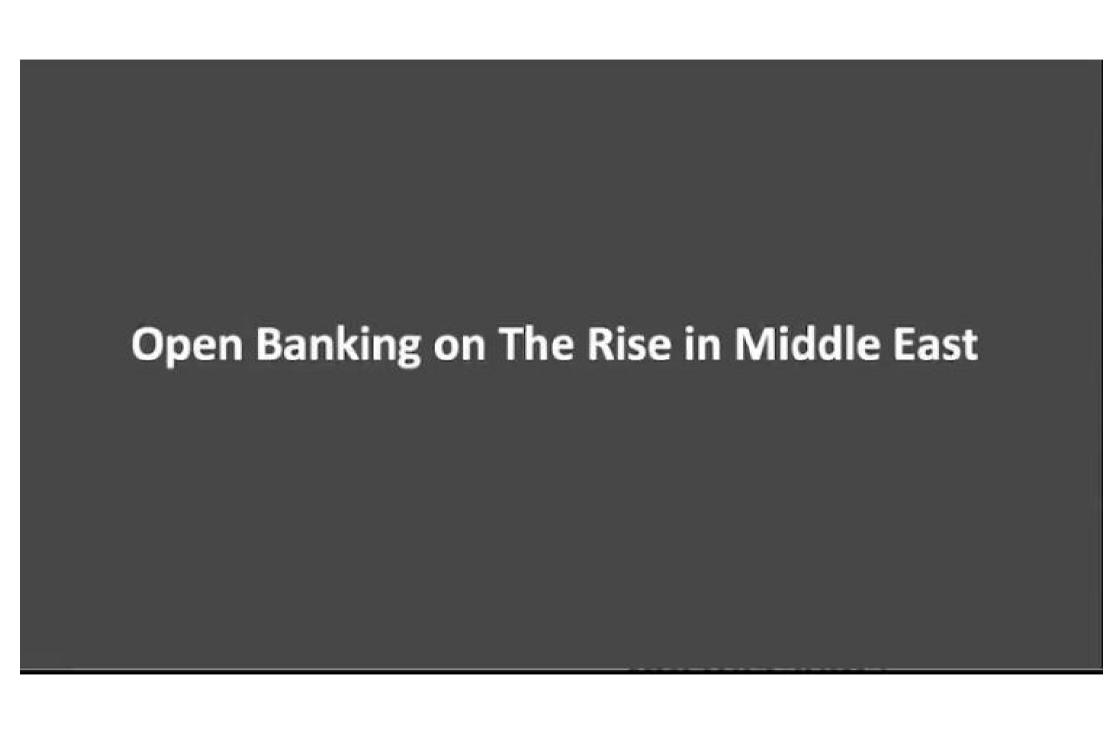


Pay On Delivery



Cardless ATM withdrawal











Key Takeaway:

- Egypt has been one of the countries actively involved in the discussion on how to implement open banking. Recent initiatives by the regulators are expected to boost the digital banking sector and pave the way for a full introduction to open banking in the near future.
- The IPN represents the first execution of open banking transactions in Egypt, pioneering the deployment of APIs for managing bank accounts in real-time, in addition to the initiation of a regulatory sandbax by the CBE as a live testing ground for startups that are developing new banking models.
- New policies mandating public sector use of e-payments and easing documentation requirements to open accounts are spurring investments in e-payment platforms.
- Despite its current low levels of digitization and financial inclusion, Egypt remains one of the most attractive fintech destinations (outside of the GCC) and one of the largest markets in the region in terms of population and digital payment transaction volumes, which showcase its huge growth patential through the coming years.

Assumptions:

25%

OF Market CAGR 2022-2027 (The compound growth rate)

50%

Estimated Discount Factor (Net present value)

Sciences: Which House, Construct thores of Egypte.

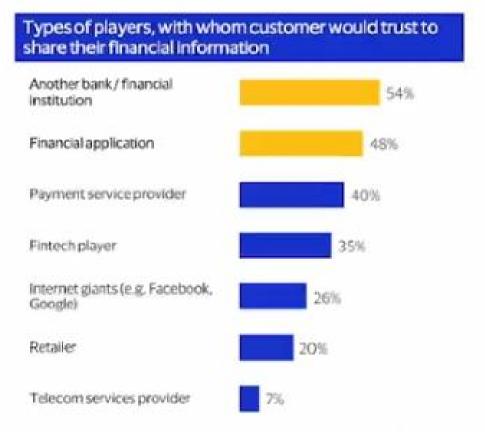




Egyptian customers are also ready for new offerings based on Open Banking

% of responses (bankable individuals in Egypt)











What's still holding OB back in the region?



Limited technical expertise within market stakeholders



Need to coordinate activities of multiple regulators



Limited funding for the regulators



Unclear regulatory jurisdiction



Low percentage of banks-fintech partnerships



Lack of willingness on behalf of banks



Mobile Payments Fuel Financial

Inclusion in "Africa"





Mobile money payments have transformed how people transact in Africa, especially in rural areas with limited access to traditional banking services.

What is Mobile Money?

Mobile money is a form of digital payment that allows users to send and receive money using their mobile phones. The service enables users to store money in a digital wallet, which they can use to pay for goods and services, transfer funds, pay bills, and even withdraw cash from authorized agents.

Mobile money has become a game-changer in Africa, where over 60% of the population is unbanked. The service has provided a way for people to access financial services that were previously out of reach, especially in rural areas. The convenience and accessibility of mobile money have also helped to boost economic growth by enabling businesses and individuals to transact more easily and efficiently.

Top Mobile Money Services in Africa

M-Pesa, Orange Money, MTN Mobile Money, and Airtel Money are some of the top mobile money services available in Africa, with millions of users across the continent. According to Statista, these four mobile money services account for a significant market share, especially as over 144 mobile money providers operate in Sub-Saharan Africa. These services allow users to send and receive money, pay bills, and purchase airtime and other digital products.





How Mobile Money is fostering financial inclusion in Africa

Mobile money payments have played a crucial role in fostering financial inclusion in Africa, especially for the unbanked population. The service has enabled people to access financial services, which were previously out of reach, and provided a way for them to save, invest and access credit. Mobile money payments have also provided a way for businesses to provide financial services to individuals, boosting economic growth.

According to the GSM Association's (GSMA's) State of the Industry Report on Mobile Money 2023, globally, there are 1.6 billion registered mobile money accounts, growing 13% year-over-year (YoY) in 2022, and 781 million of those are in Africa, with accounts on the continent spiking 17% YoY. Total transaction values also grew 22% between 2021 and 2022 to US\$1.26 trillion.





Growth in Africa in 2023

Live

169

Registered

856 m

(30-day) accounts

237 m + 137 Transaction

62 bn + 28* Value (5)

919 bn

West Africa

Live services 6
Registered accounts 3
Active (30 day) accounts 6
Transaction volume 11
Transaction value (5) 3

56 m +23° 64 m +19° 19 hn +40° 347 bn +60°

North Africa

Live services 13
Registered accounts 20 m +17*
Active (30-day) accounts 2 m +54*
Transaction volume 150 m +44*
Transaction value (5) 7 bn +48*



Central Africa

| Live services | 2:0 | |
|--------------------------|------------|-----------|
| Registered seconds | #12 m | 4 THE T |
| Active (30-day) accounts | 28 00 | +18* |
| Transaction volume | Si lore | +255 |
| Transaction value (\$) | P.R. Barry | W 1 (8 ** |

Southern Africa

| Live services | 355 | |
|--------------------------|-------------|-------|
| Registered accounts | 20.30 (199) | + 14F |
| Active (30-day) accounts | Si erre | * J** |
| Transaction volume | 552 m | +107 |
| Transaction value (\$3 | 6 tro | + 3" |

East Africa

| Live services | 34.3 | |
|--------------------------|--------------|------|
| Pregistered accounts | 872 m | -10 |
| Active (30-day) accounts | TER on | * 2" |
| Transaction volume | 30 ton | +23 |
| Transaction value (5) | etition form | -3" |



Regional Trends

Regional

trends

Europe

- From cashless to digital currencies. A key priority in Europe is managing the transition to cashless payments arricl greater acceptance of cards and mobile payments. But some of the larger economies (notably Germany) are still seeing more cash than cashless transactions. The Bank of England, Sweden's Riksbank and the European Central Bank are exploring digital currencies, focused on data privacy and financial inclusion.
- Battle of the rails. Europe is making serious steps
 towards instant payments, fuelling the battle of the
 rails. The EU has called on basiks to offer instant
 payments across the board by the end of 2021 and
 has laid out a vision for all payments becoming instant.
 Some countries, such as the UK and Switzerland,
 have been pioneers and have well-established, fast
 payments infrastructures, instant payments are set
 to become the backbone of card, mobile and online
 payments directly from accounts, putting accountbased payments into the centre of the payments
 evolution.
- European solutions. Building a European payments scheme for card and online payments, the European Payments initiative has moved from debate to implementation. The project involves balancing a mix of commercial considerations by banks and retailers, sovereignty concerns of payment supervisors, the innovation needs of banks and a view of payments as a key enabler of a European digital agenda by policymakers. First results are expected in 2021 and 2022.
- Open banking. The UK has taken the lead in Europe in giving third-party payment providers access to banks' customer data through application programming interfaces (APIs), with ountomers' consent, and better protecting user data. The EU is following, with implementation of its second Payment Services Directive. Strategies and scope differ, but there's a clear direction towards non-bank providers such as digital wallets taking larger parts of the front end of payments, account information and aggregation, product comparisons, and loyalty and marketing integration.

North America

- Real-time payments (RTP). The long overdue overhaul of North American payment systems is well underway. Canada is modernising its payment system, including through the Real Time Rail initiative, which will be the country's new real-time payment system by 2022. In the US, several initiatives are in progress, including the expansion of instant mobile payments business Zelle, the Cleaning House's RTP service, and the Federal Reserve's FedNow payment service, planned for launch in 2023, Looking to 2025 and beyond, RTP represents one of the most significant opportunities. in payments for some time. Combined with continued advancements in digital engagement, increased RTP usage for bill payments, peer-to-peer remittances and traditional debit purchases are all anticipated to be significant growth areas.
- Interchange, and no battle of the rails (so far). Most card interchange in the US continues to operate by free market principles, unlike in other regions, where interchange is often regulated. On the back of a strong card legacy in North America and the pervasive use of land, for some, need for) credit as a form of payment, we anticipate a slower and more gradual shift to

alternative payment methods than is happening in other regions. Additional headwinds against such a shift include strong rewards programmes on spending and a highly competitive market among card issuers laden with attractive incentives for consumers to switch card products.

Integrated payments. North America has led the growth of more integrated payment solutions. The emergence of integrated software vendors that integrate business management sapabilities with payment solutions for small and medium-sized enterprises has transformed how payment services are sold, with significant implications for 2025 and beyond. As software continues to become more important than hardware, traditional point-of-sale (POS) providers will be pushed to the edges, leading key stakeholders to engage in M&A and increase innovation budgets in order to expand their range of POS solutions.

Digital currencies. The year 2020 proved to be the moment when digital currencies attained a degree of legitimacy in North America. Payment networks and digital wallets, such as those offered by Mastercard, Visa and PayPat, have started enabling transactions with cryptocurrencies, and Facebook is pursuing a global project with Diem. Some enterprises have also eaid they will accept digital currencies and deliver shareholder returns in a depressed interest rate environment). Despite the prospects and in light of a cautious regulatory approach, and given the competitive landscape across consumer payment ophoris, digital currencies will likely make up a small percentage of personal consumer expenditure by 2025.

Africa

- Inclusion and trust. In Africa, banks, mobile operators and retailers are taking the lead in equipping consumers with cashless means of payment. They're also playing a key role in bringing about financial inclusion and trust in digital payments. Regulators, too, are stepping in to drive financial inclusion. It is being strengthened by the need of many African migrant workers to send money home via affordable cross-border payments. Mobile money solutions such as Mama Money, an international payments app in South Africa, and others offered by retailers are making cross-border payments affordable and convenient. To keep up with the competition, banks are increasingly focusing on a mobile-led transformation to reach financially excluded populations.
- Mobile money rather than wallets. Alternative 'closed. loop' systems, such as e-money and telecom-led mobile money solutions, will confinue to dominate a large proportion of the African continent, especially sub-Saharan Africa, due to the footbold mobile money agent networks have already established. This trend will persist, with more financial-services offerings. built on top, such as those offered through M-Pesa, the Kenya-based mobile payment service. The rise in mobile payments has further led to wider adoption. of QR code payments. In 2020, Ghana became the first African country to introduce a universal QR code. In South Africa, the Payments Association of South Africa (PASA) has identified a need to streamline the experience of both payer and payee and is in the process of standardising QR codes across the sector.
- Battle of the rails, Account-to-account credit transfers. are likely to continue growing across Africa, given enhancements to the national clearing infrastructure focusing on low-value, high-volume payments such as the Rapid Payments Programme (RPP) in South Africa, Instant clearing is a key feature of RPR which has its roots in the requirements of the South African. Reserve Bank's Vision 2025 road map and PASA's Project Future initiative. BankservAfrica, the largest African automated cleaning house, in partnership with the payments industry, is driving the implementation. of a payments platform to deliver an instant payment solution to the market, while deepening digital financial inclusion. Ghana has seen significant growth in GhIPSS Instant Pay, an electronic payment system that enables instant payments between bank accounts or wallets. Nigeria and Kenya have also introduced instant payments.
- Digital currencies. South Africa has embarked on its second CBDC project to explore the use of both a wholesale CBDC and a wholesale settlement token for interbank use.

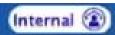
Latin America

Inclusion and trust. Latin America is at the forefront
of financial inclusion, thanks to central bank and
government leadership in initiatives promoting new
payment technologies, interoperability, cost reduction
and open competition. QR code payments in the region
are helping to leverage underlying instant payments
infrastructures, providing easy and cheap access to
digital payments, through either a traditional POS
device or a mobile phone to both merchants and
consumers.

- Battle of the raits. All regulators are progressing in creating RTPs and tostering higher levels of interoperability within the ecosystem, although with different approaches and at different levels of maturity. New initiatives by regulators—such as CoDI in Mexico. Pix in Brazil and Transferencias 3.0 in Argentina—are leveraging alternative raits. This means that card operators could lose volume over the next five years if transactions migrate from their rails to the new, alternative raits. Given these new, alternative payments infrastructures and the fact that there are also new, wholly cloud-based providers challenging traditional local players, banks are already re-examining their underlying card processing models and providers across the region.
- Acquiring model evolution. The licensing of payment service providers is bringing new competition into the market as banks reconsider their former interbank setup on the issuing side. At the same time, banks are moving from monobrand to multibrand acquiring.
- Digital wallets. Numerous players are vying for a share of consumers' payments, and state-owned banks have launched digital wallets to channel social and pandemic-related subsidies to people, as well as to promote discounts for their users. This is helping scale up adoption of digital payments, especially among people with no previous experience of banks. Marketpiaces such as Mercado Libre, with its Mercado Pago service, are faunching their own ecosystems in which merchants and individuals can do business and meet personal financial needs.

Asin

- Financial inclusion. Use of digital payments in e-commerce across the ten countries of the Association of Southeast Asian Nations, use of digital remittances by overseas workers in sending funds back home to the Philippines, and the explosive growth of Singapore-based ride-halling and payments app Grobhave all highlighted the power of payments to empower people in the region.
- Digital wallets. Digital wallets are a big trend in Asia.
 with wallets used not only to access funds stored
 elsewhere (on a card or in a bank account) but also
 to store money. Digital wallets are often embedded
 into wider solutions and super-apps, such as GrabPay
 or GoPay. Some countries, notably Indonesia, are
 promoting QR-based mobile wallets to drive consumer
 and merchant inclusion.
- Digital currency. China has made an early start
 on developing a digital currency, in 2020 testing a
 digital renmerb with several orban pilots involving
 what is known in China as digital currency electronic
 payments. The currency might incorporate secure
 technologies such as blockchain, along with near-field
 communication capabilities that allow offline money
 transfers when two wallets (typically mobile devices)
 touch. However, India has cast doubt on digital
 currencies; pending legislation could ban the concept
 in this country of nearly 1,4bn people.
- New payments infrastructure. The Indian digital payments sector has seen extraordinary growth in the past few years, with the volume of transactions growing at an average CAGR of 23%, according to PwC India analysis of data from the Reserve Bank of India and National Payments Corporation of India. Growth in digital payments has been driven by multiple factors. such as the launch of new and innovative payment products, increasing smartphone adoption, a growing need for faster payment modes, and a strong push from government and regulators towards adoption of digital channels. The faunch of new and innovative payment products such as Unified Payments Interface (UPI), National Bectronic Toll Collection (NETC) and Bharat Bill Payment System (BBPS) have firmly placed the digital payments industry on an upwards growth trajectory.





Thanks