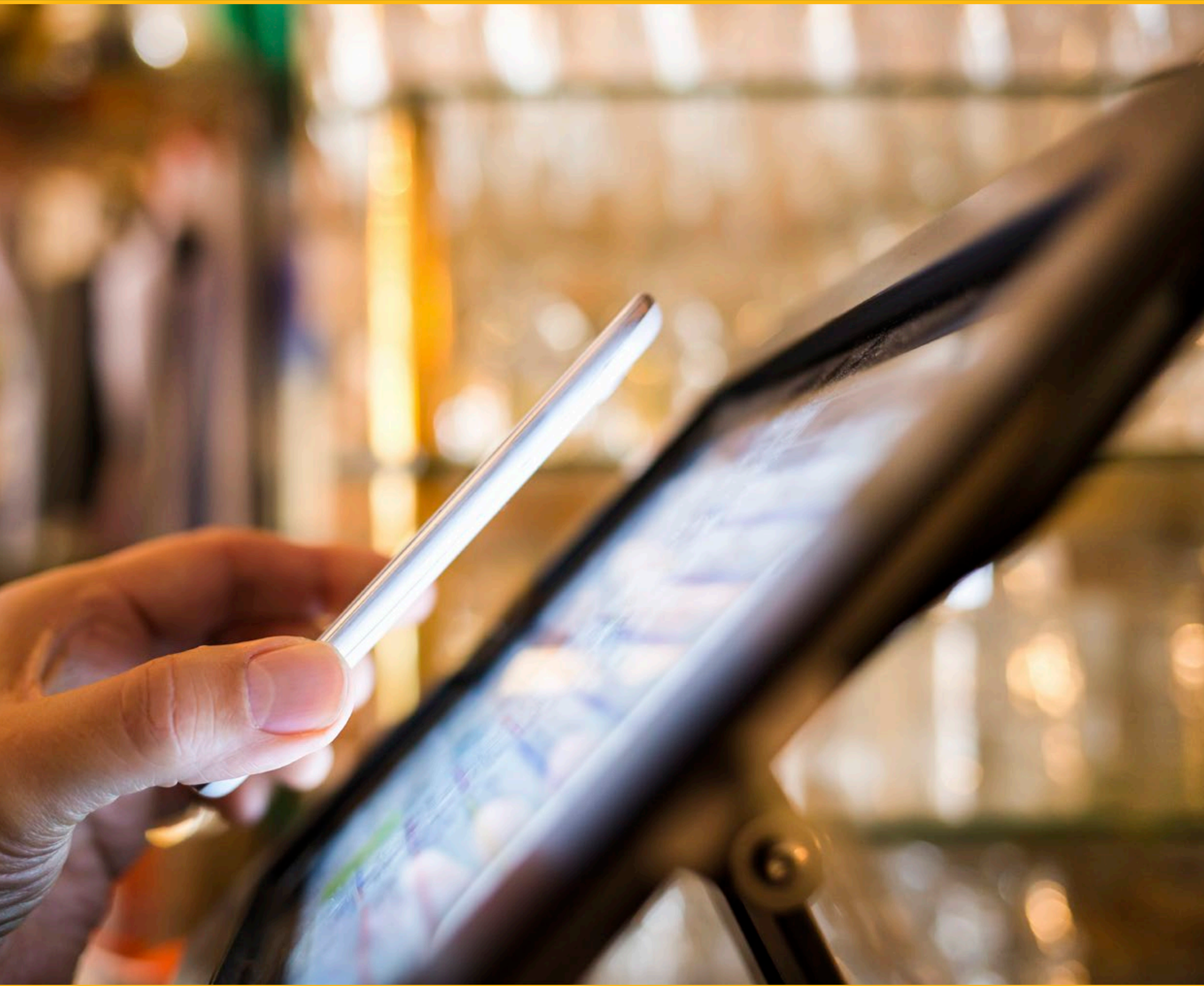

Doubling Digital Payments in MENA

A Call to Action to the Banking Industry

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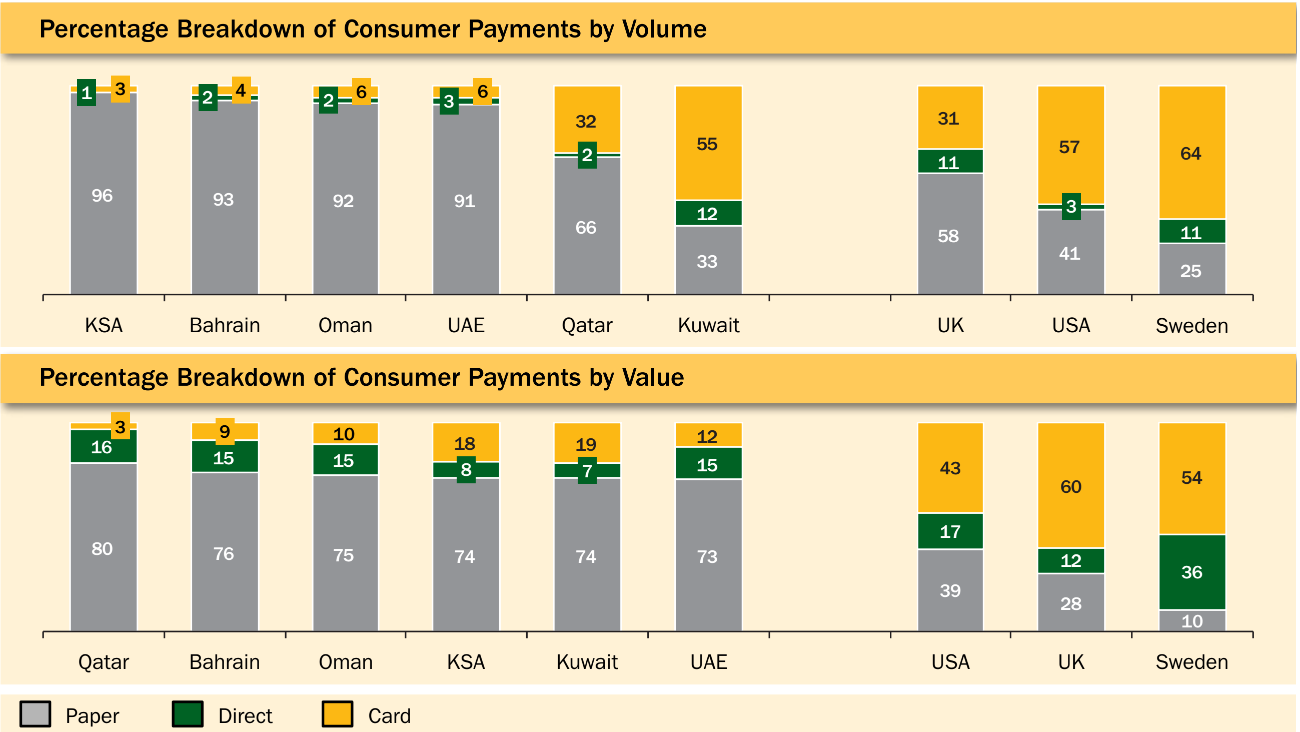
Introduction

MENA countries have the opportunity to double or in some cases triple adoption of digital payments over the coming years. Digital technology is rapidly changing the nature of social interactions and commerce. Consumer expectations are higher than ever; social media applications, such as Facebook, Twitter, and Instagram, have created a new norm in which consumers expect services to be instant, convenient, readily available, and cheap or even free. Similarly, digital retailers, such as Amazon, Alibaba, and Souq.com, continue to bridge the divide between physical goods and digital services, creating more seamless user experiences for purchasing goods and services through digital interactions. However, despite the rapidly evolving consumer landscape, digital payments adoption remains relatively low in the Middle East and North Africa (MENA) region, due in large part to the prevalence of outdated retail payments infrastructure and regulations, as well as to the lack of viable digital wallet solutions that effectively incentivize the broad ecosystem to displace cash in favor of digital payments.

As a result, MENA countries remain predominantly cash-based despite their advanced information and communications technology infrastructures and digital services adoption. This prevalence of cash creates notable social costs to MENA countries, ranging from 1.5 percent to 2 percent of GDP annually.[1] In addition, it hinders central banks from effectively monitoring transactions and ensuring compliance, and significantly reduces revenue generation for commercial banks from fees, interest, and cross-sell activity as the majority of financial transactions continue to take place outside of their established infrastructures. Cash predominance also impedes the development and growth of financial

Exhibit 1 | Cash vs. Digital Consumer Payments in MENA and Other Countries



Source: Euromonitor Consumer Finance

1 In line with the European Central Bank's 2012 study on social and private costs of retail payments instruments, the estimated social cost figure includes costs incurred by central banks, commercial banks and infrastructures, cash-in-transit companies, and retailers (consumer-to-business only) for payments instruments occupying more than 5 percent of national market share and of values less than €50,000; the costs incurred by consumers and households are excluded.

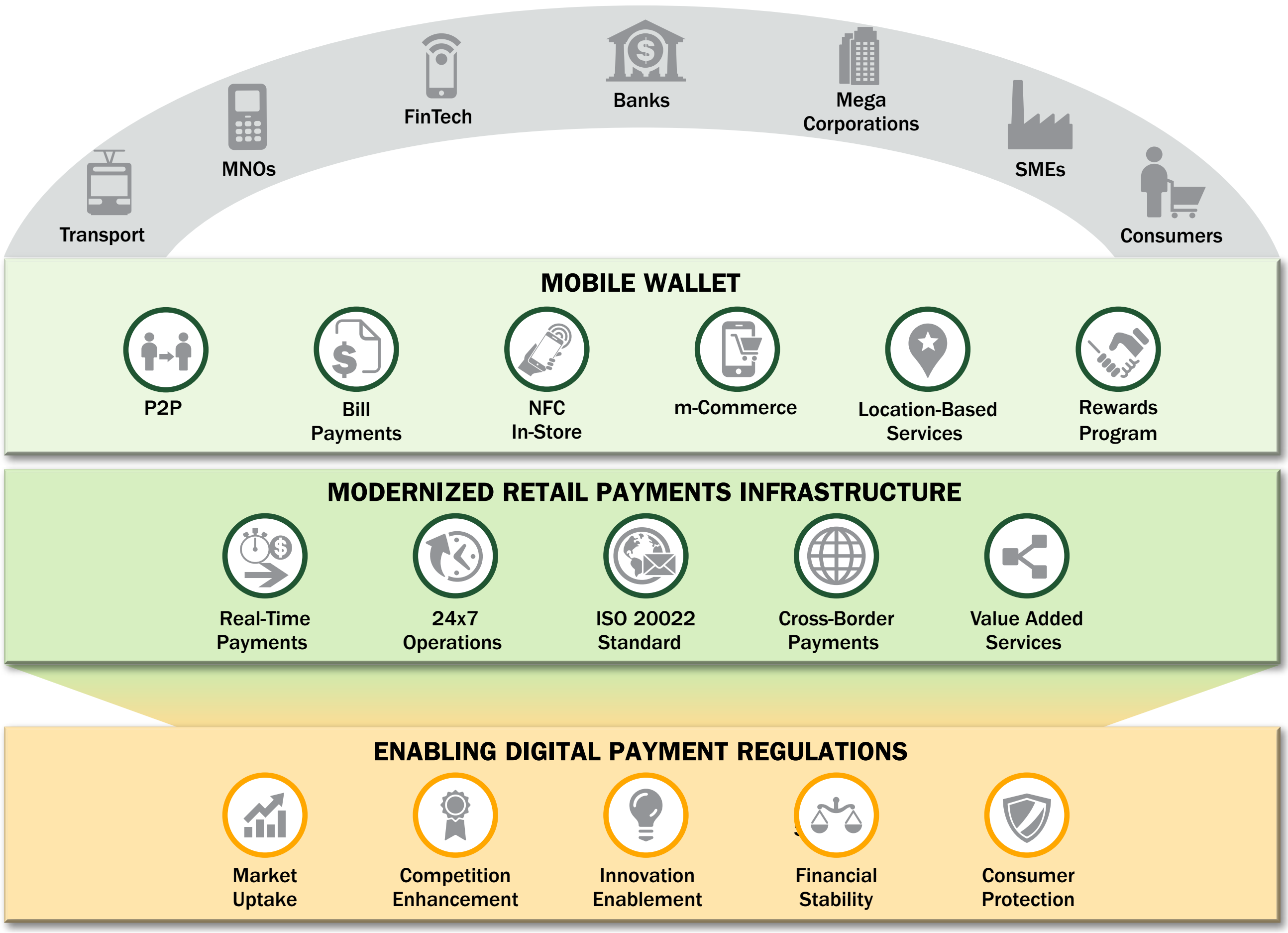
technology (FinTech) and e-commerce startups and small and medium-sized enterprises (SMEs), which are confined to small pools of digital transactions, and also decreases their opportunities to partner with banks. This is in stark contrast to countries such as the United Kingdom, United States, and those in the Nordic region, where banks are increasingly partnering with startups and SMEs to increase the competitiveness of their end-to-end offerings while limiting their information technology (IT) investments.

This Booz Allen Hamilton viewpoint provides our perspective on the actions that MENA central and commercial banks should undertake to materially increase the adoption of digital payments and effectively foster the creation of an inclusive digital economy. We start with a view on the need for modern retail payments infrastructure and new digital payments regulations, then examine the relevance of digital wallets in driving adoption, before concluding with recommended actions for central and commercial Banks alike to ensure a successful journey toward digital payments adoption in MENA countries.

The Call for Modern Infrastructure and Regulations

With the rise of digital services and digital interactions in daily consumer lives, a modern retail payments infrastructure is needed to enable growth in the digital economy and meet evolved consumer expectations. Central and commercial banks across the globe have already taken important strides toward building new retail payments infrastructure that centers on rapid, convenient, safe, and ubiquitous payment services. Such initiatives have often been preceded or rapidly followed by substantial regulatory reforms that enable digital payments uptake, encompassing greater ecosystem collaboration, transparency, financial inclusion,

Exhibit 2 | Components of an Inclusive Digital Economy



credit risk controls, and consumer protection. For instance, the United Kingdom was an early actor in establishing modern infrastructure, having launched Faster Payments Service in 2008, and has been followed more recently by a number of other countries, such as Singapore and Australia. The US Federal Reserve and the European Payments Council have also published recent papers addressing the need to transform their retail payments infrastructure. Furthermore, the European Commission recently published a new regulatory framework for digital payments, the revised Payments Services Directive (PSD2), which aims to enable mobile and online payment services through increased data and consumer protection rules, and to improve cross-border payments by enhancing the role of the Single Euro Payments Area (SEPA) and establishing a single European interface that interconnects the different payment systems.

Key Highlights of the European PSD2:

- Widens the scope of payment services covered to include payment transactions that start or finish outside the European Economic Area
- Enables third-party providers (including non-banking institutions) to access customers' bank accounts and initiate payments
- Creates a single European interface for seamless integration between third-party providers and financial institutions
- Introduces a set of data protection and liability rules for all payment services providers
- Prohibits surcharges on payment instruments used in-store or online (e.g., additional charges imposed for using credit cards)

In MENA countries, a new wave of modern retail payments infrastructure and digital payments regulations is required. Countries such as Saudi Arabia, the United Arab Emirates (UAE), and Jordan have initiated steps toward modernizing their retail payments infrastructure or defining new digital payments regulations; nonetheless, significant advancements are still required to bring these to market, while developments in the remaining countries are largely nascent.

Modern retail payments infrastructure in MENA should aim to promote efficient commerce, drive innovation and adoption, ensure the security of the financial system against fraud and cyber threats, and effectively mitigate broad sets of credit and operational risks. Specifically, modern retail payments infrastructure is characterized by four key emerging trends:

- **Real-Time, 24x7 Payments.** Gone are the days of restricting payments to 6-hour clearing and multiday settlement windows. Today's consumers, SMEs, corporations, and government entities increasingly require real-time, 24x7 payments that can meet their instant social interactions, spending behaviors, and core business processes centered on the rapid release of products and goods. Real-time, 24x7 payments are important foundations for displacing cash, as they are synonymous with the latter's ability to be transferred instantaneously and at any time of the day. Nonetheless, the transition to real-time, 24x7 payments is a complex and commercially demanding endeavor. Beyond central infrastructure costs and implementation complexities for central banks, commercial banks are often required to upgrade their core banking systems, amend their operations processes and staff training, and transform their cash management capability to manage liquidity more closely, while large corporations may need to effectively integrate with the central infrastructure and update their treasury processes. In light of this, programs may focus on a phased approach that blends the use of near-real-time payments as a starting point with incremental adoption of true real-time payments, or they may adopt a "big bang" approach that leverages momentum

to drive the ecosystem toward true real-time payments from day 1.

- **ISO 20022 Messaging Standard.** Following years of development, ISO 20022 is here to stay, providing a common and rich message standard geared at ensuring the interoperability of the financial services ecosystem. While still maturing in regard to its common definitions, the ISO 20022 standard supports a wide variety of payments, such as remittances, trade, and invoicing, with messages carrying richer information than previously possible. The European financial services community has been at the forefront of ISO 20022 implementation; the standard is entrenched across more than 11 European payments infrastructures under the SEPA initiative. Several other countries, such as Brazil, Singapore, Australia, and Japan, have—to a certain degree—adopted this messaging standard in their existing or planned retail payments infrastructure. As the standard is still in the process of being defined, with a number of local customizations being made available, now is the time for countries in the MENA region to coordinate their standard definitions in conjunction with their primary regional partners and potential international partners to ensure interoperability and ease of transacting regionally and globally.
- **Value-Added Services.** The enhanced architectures and processing capabilities of modern retail payments infrastructure, coupled with the development of ISO 20022, create opportunities for a wide variety of value-added services that magnify the benefits from clearing and settlement of payments. For example, customer-centric services such as account masking provide the ability to send payments using a variety of nontraditional identifiers, including mobile numbers, email addresses, and unique aliases. This creates a foundation for providers to offer a large variety of services at lower costs. Other examples can include enhanced screening and compliance through fraud management, anti-money laundering and combating the financing of terrorism (AML/CFT) services that can vary across pre-processing, real-time, and post-processing activities to improve the security of payments and reduce the exposure of banks and corporations. The strong adoption of digital services in MENA

SAMA Future-Ready ACH. *The Saudi Arabian Monetary Agency (SAMA) is playing a pioneering role in the region when it comes to transforming the payments landscape by establishing innovative and efficient payments infrastructure. SAMA is initiating the development of a new market infrastructure for low-value retail payments that aims to reduce reliance on cash and improve the efficiency of the financial ecosystem. The new infrastructure will aim to support innovative features, including real-time payments, the ISO 20022 messaging standard, and enhanced compliance capabilities.*

Exhibit 3 | Modern vs. Traditional Retail Payments Infrastructure

	Modern Retail Payments Infrastructure	Traditional Retail Payments Infrastructure
Clearing	*Real-time transfers*	*Batch processing*
Settlement	*Deferred net settlement*	*Multiday settlement windows*
Operating Hours	*24x7*	*6-hour clearing cycle, 5 days a week*
Currency	*Multi-currency system*	*Single, domestic currency*
Reconciliation	*Automated; straight-through processing*	*Manual reconciliation*
Message Format	*Rich; based on international standard (ISO 20022)*	*Very limited (under 100 characters); proprietary*
Direct Participants	*Banks and mega-corporations*	*Banks only*
Value-Added Services	*Account masking, fraud management, AML/CFT*	*None*

countries renders value-added services critical elements of modern payments infrastructure, with input from ecosystem stakeholders necessary to ensure the effective design and ultimate usage of these services.

- **Cross-Border Payments.** Cross-border payments represent a major efficiency opportunity for the financial services ecosystem in MENA countries. Growing global interconnectivity and commerce continue to drive consumers and corporations to transact beyond country borders. Enablement of cross-border payments as part of modern retail payments infrastructure can create significant opportunities to standardize increasingly stringent and varied banking compliance requirements, significantly reduce costs, improve end-to-end lead times, and optimize liquidity needs. Nonetheless, important challenges need to be overcome to enable cross-border payments, revolving largely around alignment with international partners and bodies; adherence to multicurrency compliance requirements; and a slew of technical tradeoff decisions around operating hours, foreign exchange management, and messaging protocols.

New digital payments regulations in MENA should adopt an incremental approach that at first fosters the development of "champion" solutions—solutions that focus on a few successful players that can reach critical mass—then adds new players and services as the market develops. This creates a level playing field conducive to competition, cooperation, and innovation while ensuring the stability and security of the financial system. Close attention should be paid to at least three key areas of the new digital payments regulations:

- **Champion Solutions.** A select set of champion solutions in a given MENA country or region should drive critical mass and enhance the sophistication of its digital payments ecosystem, taking advantage of existing solutions that have already driven adoption or, in the absence of these, encouraging a select few to rally the industry/ecosystem behind. As the market develops, increased entrants and competition should be further encouraged and facilitated over time, and interoperability should be fostered among solutions to maintain simplicity and convenience to consumers, merchants, and other ecosystem players.
- **Inclusion of Third-Party Providers.** Non-banking institutions such as mobile network operators (MNOs), transport authorities, post offices, and exchange houses can play important roles in offering payment solutions that target persistently cash-heavy segments, such as the unbanked and underbanked. The inclusion of such entities can help bolster financial inclusion and further increase digital payment adoptions but, if insufficiently regulated, can increase compliance, operational, and credit risks. The regulations thus need to strike the right balance between enabling additional institutions to operate in the digital payments space and containing their associated risks to preserve the soundness of the financial system.
- **Cultural Change and Consumer Protection.** As interactions and transactions increasingly turn digital, consumers require continued awareness to drive cultural change and protective measures that support their transition away from cash and to digital payments. Effective consumer protection mechanisms thus need to be closely revisited or put in place, covering areas such as customer registration and authentication, stakeholder liability, AML/CFT, data protection rules, and dispute management. Nonetheless, these measures should also carefully take into consideration the pragmatism of their implementation by payment service providers and oversight functions.

The Curious Case of the Digital Wallet

Despite mixed results and lackluster consumer adoption over the past decade, digital wallets represent an important opportunity that needs to be closely considered by central and commercial banks, as much for their benefits as for their potential to erode the role of financial institutions in niche

markets. The allure of a digital wallet has long attracted the attention of audiences with services such as person-to-person transfers, remittances, bill payments, m-commerce, and in-store payments using technologies such as near field communication (NFC) and quick response (QR) codes. However, consumer adoption has been minimal in most cases, largely because digital wallets did not present a solution to an existing problem, or conversely because they did not provide sufficient value add to incentivize consumers to displace the use of cash and cards in favor of their mobile devices. The lack of consumer action has been mirrored by merchants' reluctance to make the additional investments often required to support digital wallets. Nonetheless, Apple Pay has marked a turning point on the outlook of the digital wallet, quickly accounting for more than two out of every three dollars spent using Visa, MasterCard, and American Express contactless payments. The early successes of Apple Pay have been driven by its partnership with banks, its significant iPhone consumer base, the recent US mandate on merchants to install Europay, MasterCard, and Visa (EMV)-compliant terminals, and the value add provided to users in the form of a more streamlined process using NFC-based technology with Touch ID. Similarly, Samsung Pay has followed suit by offering an alternative solution compatible with both NFC and magnetic stripe readers. In the MENA region, mobile wallets such as Beam Wallet in the UAE and, more notably, Fawry in Egypt have seen some traction but remain limited by the need for regulatory and infrastructure reform, which are partly underway.

In light of the global and regional market dynamics in digital wallets, banks in the MENA region are at a crossroads. By standing still, they avoid costly initiatives while benefiting from future increases in card usage as card-based payment schemes such as Apple Pay and Samsung Pay start to penetrate their markets. However, inaction also comes at the risk of progressive disintermediation by these payment service providers and other niche financial solution providers, thus reducing the role of banks in the retail payments spectrum and their broad ownership of the customer relationship. If the right prerequisites are met, banks should collaborate to tap into the digital wallet space, supported through central bank infrastructure and guidance, in order to capitalize on the current window of opportunity. In this context, a successful digital wallet entails three core elements:

- **Targeted Service Offerings.** First and foremost, the digital wallet should address an industry or sector-specific problem. During the business design, payment market needs, as well as merchant and consumer pain points, should be assessed upfront. Digital wallet offerings should then be identified and services designed from customer and business-centric standpoints in order to address these pain points. Phasing should be adopted, starting with higher priority areas that can build critical mass, and then proceeding with additional services and functionalities over time. For example, M-Pesa was launched with the sole objective of facilitating the transfer of funds in a country where financial inclusion was low and money transfers were historically burdened by long commutes to deliver cash directly or costly alternatives. M-Pesa is now used regularly by about 75 percent of the population, and has subsequently sought to leverage its broad user base to expand to the point of sale.
- **Positive Value Proposition for Merchants.** The road to a highly adopted wallet starts with strong merchant acceptance and onboarding. Competitive incentives, driven largely by lower fees and faster payments, are needed for merchants relative to existing card-based schemes and cash handling, with minimal disruption to the current merchant infrastructure. Apple Pay, for example, leveraged the recently mandated EMV infrastructure to meet its own infrastructure needs. The digital wallet should also offer sufficient value to merchants, such as a customer targeting and acquisition platforms, analytics-based engines, and promotion schemes.

- **Broader Incentives for Consumers.** Failed wallets have typically provided insufficient convenience or incentives to motivate consumers to move away from cash and cards. The ability to sustainably switch consumers to digital wallets thus requires well-formulated and user-friendly incentives, which can take the form of loyalty points, promotional offers, increased security, or bundling of additional services beyond payments. For example, as one of the early success stories, Starbucks managed to successfully tap into its loyalty program to drive adoption, resulting in mobile payments reaching about 20 percent of all its US transactions. Similarly, Apple Play has incentivized consumer adoption through its Touch ID secure element, enabling passwordless authentication and one-tap purchases using iPhones.

Recommended Actions for MENA Central Banks

To drive the payments ecosystem toward innovation apace with market demands, central banks should take five key actions:

1. **Introduce digital payments regulations.** Regulators should issue new digital payments regulations and directives to foster innovation and competition in the market, accelerate growth, and offer greater consumer protection while ensuring the right balance between effective market uptake and overall payment stability. Regulations should include key requirements such as licensing and authorization, capital and safeguarding, governance, limits, and compliance (e.g., Financial Action Task Force and Principles for Financial Market Infrastructures). Regulators should also adopt a more dynamic approach to refreshing and revising their regulations over time as digital payments adoption increase and market dynamics rapidly evolve.
2. **Enhance or carve out retail payments operations.** MENA central banks need to consider increasing the speed of innovation and service levels of their retail payments operations through performance-enhancement programs or more concertedly through carve-outs of their payment operations via wholly owned entities or public-private partnerships. However, minimum readiness levels must be achieved as a prerequisite to potential carve-outs. For instance, oversight functions need to build sufficient payment expertise and knowledge, potentially through the retention of select operations staff within the central bank, to ensure continuation of effective regulation and policy setting. Management functions within the central bank with sufficient knowledge and capabilities need to be well established to subsequently monitor the new entity's service levels and performance. Finally, a strong demand management and ecosystem engagement capability is also needed to ensure the needs of the Central Bank and market are effectively captured and reflected in their priorities over time.
3. **Collaboratively design and roll out infrastructure.** The launch of a new retail payments infrastructure should be carefully designed in collaboration with

The Central Bank of the UAE Digital Payments Regulatory Framework. *The Central Bank of the UAE announced the launch of a new program to develop digital payments in the UAE and position the country as a global leader in the sector. At the forefront of the program is the design of a new set of regulations that will promote the broad adoption of digital payments across the Emirates and drive innovation and value creation, while ensuring the stability of the financial system and the protection of customers' interests. The Central Bank of the UAE has extensively engaged with key stakeholders, including banks, government organizations, and MNOs in developing its regulations.*

SADAD Online Payment. *In line with SAMA's ongoing efforts to de-cash the Saudi economy and building on SADAD's international success in designing and rolling out its Electronic Bill Payment and Presentment (EBPP) service in Saudi Arabia, SADAD is expected to officially launch its Online Payment system in the Saudi market in 2016. SADAD Online Payment is a secure and non-card-based payment method that allows consumers to make online payments directly to merchant websites using the SADAD checkout option. The service aims to address the digital payments gap to broadly enable e-commerce in the Kingdom for consumers, SMEs, corporations, banks, and other third-party providers.*

banks and other key ecosystem stakeholders. Furthermore, the design should be initially owned and incubated by business functions, focusing largely on providing a safe, secure, and convenient service to end users. The definition of key business features and requirements across stakeholders and industries, for example, should be a key first step in designing a new payments market infrastructure and should be followed by the progressive involvement of IT functions, which will play an increasing lead role in the technical design and implementation of the retail payments infrastructure.

4. **Establish ecosystem-engaging governance.** Central banks in the MENA region need to set up a governance structure that comprises industry stakeholders—namely banks and other key institutions, such as large corporations. Such governance ensures the development of innovative solutions that directly meet market demand while enabling the rapid identification and onboarding of champion banks and corporations. In addition, central banks should ensure that all stakeholders in the ecosystem, including entrepreneurs, SMEs, and technology players, are regularly engaged to ensure the continued evolution of the solution and growth of the ecosystem.
5. **Promote pragmatic financial inclusion.** Most central banks seek to improve financial inclusion, but in practice financial inclusion is often only achieved if costs are driven sufficiently low. As a result, while banks often echo the need for financial inclusion, their commercial obligations and risk averseness often result in its deprioritization. MENA central banks should work closely with commercial banks and other financial institutions to reassess the segments with true potential and volume for digital transactions as a starting point, and help identify suitable and cost-efficient offerings that can effectively cater to their needs. While initiatives such as wage protection systems have rapidly brought the unbanked into the banking system in many MENA countries, large opportunities remain to extend financial services beyond basic payroll and account services.

Recommended Actions for MENA Commercial Banks

Amid increasing economic pressures and disintermediation threats, commercial banks in the region have a critical opportunity to play a driving role in digital payments adoption. To achieve this, commercial banks should take the following five key actions:

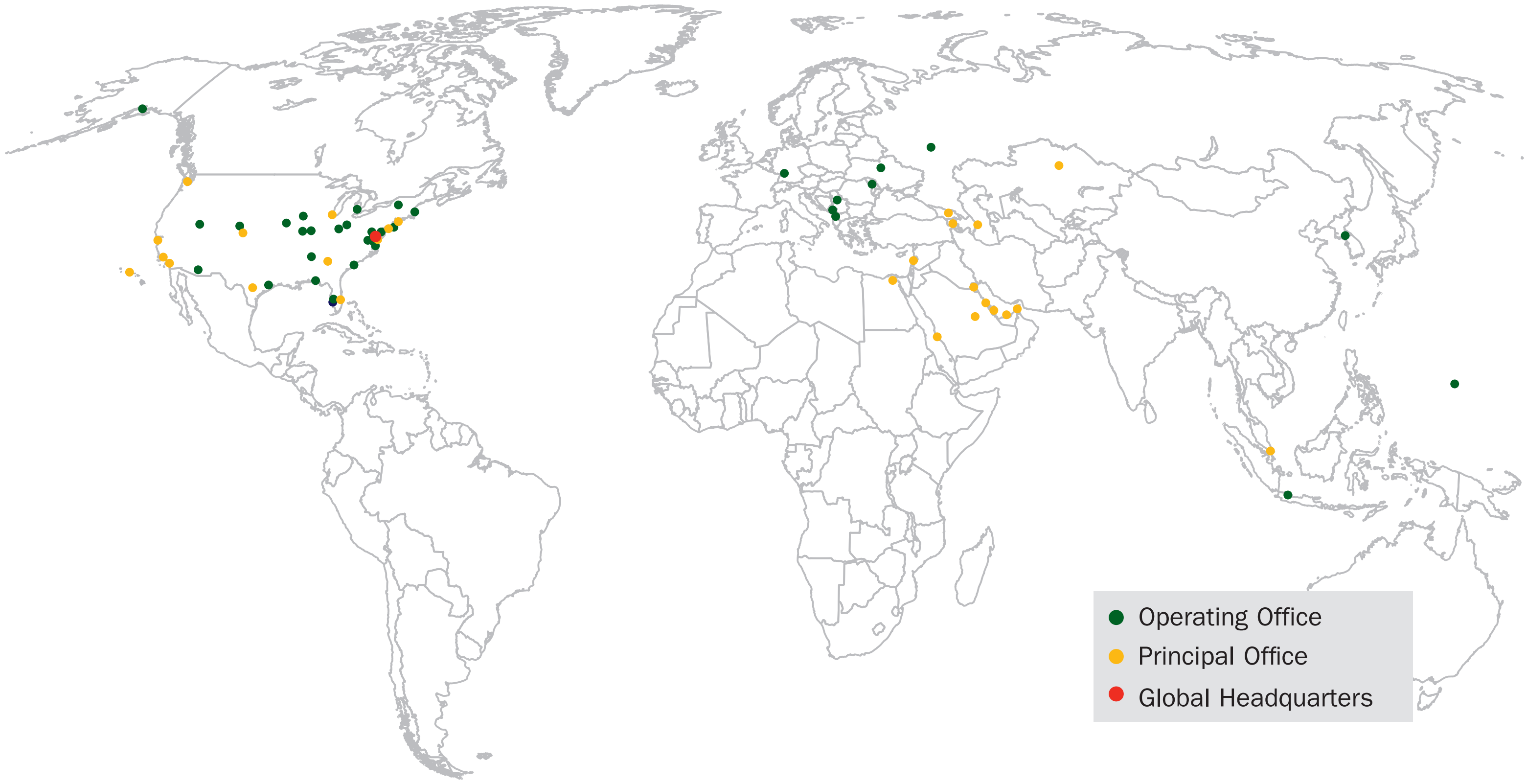
1. **Engage with central banks to roll out a modern central infrastructure.** Commercial banks need to work proactively with their central banks, or through consortia, to co-design and roll out a modern central infrastructure and digital payments platform. Such engagement will enable them to capitalize on growing technology disruptions rather than to be threatened by disintermediation, and to increase revenue streams with more compelling market offerings.

2. **Establish the right balance between bank cooperation and competition.** While competition enables innovation, the creation of siloed solutions that lack interoperability results in limited consumer pools. Commercial banks in the region need to commit to governance structures that strike the difficult balance between collaboration and competition with their peers. Value can only be created through network effects when sufficient cooperation takes place among a critical mass of commercial banks, which must collaborate to launch a single, interoperable solution that is easily adopted and can be used seamlessly.
3. **Develop new products and services.** To compete with regional and international technology players, commercial banks need to start designing and rolling out innovative products and services that meet evolving consumer needs. Governance and cooperation are central components of launching these new products and services, but so too are their product development function's speed, modernization, and strength of organizational linkages.
4. **Build healthy consortia.** Capabilities of non-bank stakeholders should be leveraged and integrated into niche areas of new bank products and services to increase their competitiveness and market appeal. Core competencies of different stakeholders can be better leveraged if the appropriate value proposition is defined upfront. For instance, technology players can extend infrastructure; telecommunication providers can help strengthen communication security, promotion, and distribution; payment aggregators can provide SMEs with integrated e-commerce and e-payment platforms; and national identity authorities can bolster customer authentication services to enhance the overall value proposition of banks. In fact, major banks in the UAE, Saudi Arabia, Egypt, and Kuwait have started partnering with payment gateways and technology providers such as PayFort, which supports merchants and SMEs throughout the e-commerce journey from consumer analytics to digital payment.
5. **Partner with and incubate FinTech startups.** Banks often lack the agility and IT budgets required to effectively innovate to meet market needs. By partnering with or contributing to the incubation of FinTech startups, banks can offer more competitive products and services while incurring less upfront cost. If executed properly, these partnerships can marry the resilience and compliance of bank-based models with the innovation and entrepreneurship of startups, creating compelling offerings that will create the next waves of revenue streams.

Conclusion

Decreasing cash reliance and addressing growing challenges in retail payments should be leading priorities for central and commercial banks in MENA countries if they are to unlock the significant benefits derived from the creation of an inclusive digital economy. Modern retail payments infrastructure and digital payments regulations will serve as the cornerstones of the next wave of retail payments value creation, a key component of which will be the ever elusive digital wallet, which can finally reach its potential to address consumer, merchant, and other ecosystem-player needs. The fate of central and commercial banks in the MENA region lies largely in their own hands. Inaction will entail the continued predominance of cash-based economies, and result in persistent social costs across the economy, limited controls for central banks, and lost revenue for commercial banks and SMEs. Commercial banks in particular will be further affected by growing threats of disintermediation by regional and international payment service providers and niche players, which over time can deepen into the disruption of their traditional services and reduce their ownership of the customer relationship. Nonetheless, central and commercial banks in the MENA region remain well positioned, with the right set of actions, to capitalize on a closing window that could see them lead the charge for a new retail payments reality and sit at the forefront of the sector's evolution for years to come.

International Office Locations



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