

UAE's Prepaid and Digital Payments Eco-system

Prepared by Jeremy Srouji





noorbank.com

About Noor Bank

Noor Bank was established in January 2008, in Dubai, United Arab Emirates. In 2018, as it celebrated its 10-year anniversary, Noor Bank was ranked as the 11th largest bank in the UAE in terms of assets.

Noor Bank is a full-service Shariah-compliant bank, offering a comprehensive range of products and services in corporate and personal banking, wealth management, Takaful (Islamic insurance), treasury and trading. It has a presence across the country, with branches in Abu Dhabi, Dubai, Sharjah and Al Ain.

Noor Bank strives to deliver customers creative, innovative and responsible products and services, tailored to suit their specific business and personal needs. Its efforts to provide professional services and build lasting relationships have resulted in a consistent growth of new customer segments among individuals, investors, institutions, companies and public-sector entities.

In addition to its esteemed Board of Directors, Noor Bank is overseen by an Internal Shari'ah Supervision Committee, a team of reputed scholars and experts who oversee and ensure Shari'ah compliance on all documentations, financial products & services and banking operations.

Noor Bank is rated "A-" IDR with a stable outlook by Fitch Ratings.

About MEED Insight

MEED Insight is the consulting arm of the MEED business. It provides tailored market research, business plans, feasibility studies and corporate strategy development studies to help our clients make more profitable and informed business decisions. MEED Insight has access to a wealth of regional information ranging from broad macroeconomic statistics to specific sector data to help its clients accurately and cost effectively forecast market growth and trends.

MEED Insight has a particular focus on project-related market data thanks to its proprietary database of projects in the region, MEED Projects. Thanks to the respected MEED name and magazine, MEED Insight consultants have considerable access to the market, enabling them to speak directly to clients, consultants, government ministries and other companies.

About Tanmia Capital

Tanmia Capital is an advisory firm with operations in Europe and the UAE, focused on alternative banking, financial inclusion and capacity-building. It was founded in 2011 by ex-Deloitte consultants specialized in economic development and growth strategies, and delivers projects in the GCC, Middle East, Europe and Africa. Its clients include financial institutions, multilateral organizations, educational institutions, and government entities.



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FOREWORD

John Iossifidis Chief Executive Officer Noor Bank

There are few sectors today that have felt the transformative impact of technology as much as finance. From plastic cash to cryptocurrency and biometric payments, FinTech has evolved to the extent that it touches every aspect of our lives.

The UAE's push towards a digital future has been centred around the world of payments and seamless transactions. In Dubai, the nerve centre of the nation's smart city vision, the government has made over 1,000 services accessible online. These extend across domains ranging from transport to utilities and urban planning, making it possible now for individuals and businesses to enjoy unprecedented speed and convenience.

To this end, we at Noor Bank have invested heavily in our digital infrastructure and have partnered with several FinTechs in the region to deliver outstanding customer experiences.

Yet, going digital in the banking and finance industry comes with its hurdles, not the least of which is financial education. From trust to awareness and the risk of debt, the shift to cashless transactions is being impeded by several factors. This is true across the globe, with markets such as Japan and the US continuing to witness an interesting contrast between digital innovation and the rise of cash in the economy. The same can be said of the UAE.

It is important to note that the prevalence of cash in itself is not a barrier to progress. Instead, it serves as a reminder that FinTech innovation must accommodate not just the digitally savvy but also those who prefer cash over cards and online payments. Moreover, it points to the opportunity for greater adoption of alternative payments. In the world of Islamic finance, this potential can help expand market share and create adaptive solutions that cater to the needs and preferences of individual customers.

Owing to the vision of the UAE leadership including President His Highness Sheikh Khalifa bin Zayed Al Nahyan, His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, and His Highness Sheikh Mohammed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi and Deputy Supreme Commander of the UAE Armed Forces, the UAE has policies in place that positively shape the financial industry, encouraging collaboration and the exchange of knowledge.

In this context, I am pleased to share the White Paper on Prepaid Cards and Digital Payments in the UAE, developed by Noor Bank in collaboration with MEED, a leading publication house in the region. This study aligns with our digital agenda and our strategic priority of becoming simpler through technology and analytics.

We hope that the key trends and deep insights included here will complement and advance the broader conversation around digitalization in the banking and finance industry.

John lossifidis April 2019



Table of Contents

Executive Summary	5
UAE Digital Payments Strategy	7
The Resilience of Cash	8
Global Payments Landscape	9
e-Commerce in the UAE	11
UAE Payments Landscape	12
Industry Interviews	15
Considerations for Future Growth	19



Executive Summary

This white paper explores the UAE's prepaid & digital payments eco-system

UAE Digital Payments Strategy

- The UAE Central Bank's National Payments System Strategy, announced in February 2018, sets out to gradually transition the UAE to a cashless economy
- It also seeks to ensure that payment systems in the UAE are inter-operable, secure and offered to customers in a cost-effective manner
- UAE payment system regulations also recognize four types of payment service providers, including retail and peer-to-peer services, setting the framework for further diversification of the UAE's payments landscape

The Resilience of Cash

- Contrary to widely held views, the use of cash has increased globally
- Cash is important for sustaining the informal economy in both developed and emerging markets, while in developing countries the expansion of financial services to the previously unbanked through initiatives such as mobile money have boosted the cash economy and cash circulation
- Among advanced economies, only two countries Russia and Sweden – have seen electronic payment instruments significantly replace cash
- For the majority of countries, the digital economy and the cash economy have grown hand-in-hand, reinforcing each other

Global Payments Landscape

- Non-cash transactions which include debit and credit cards, bank transfers and checks – have grown strongly in the past six years
- Non-cash transactions have grown at 21.6% in the Asia-Pacific region between 2013 and 2018, followed by Eastern Europe, the Middle East and Africa at 16.0%
- In terms of payments, debit and credit cards accounted for 51% of spend at point-of-sales (POS) in 2018, followed by cash at 31% and e-wallets at 16%
- In terms of e-Commerce, e-Wallets took the lead globally, with 36% of spend in 2018, followed by debit and credit cards and bank transfers

e-Commerce in the UAE

- e-Commerce trends differ significantly in advanced markets
- In the UAE, credit cards accounted for 26% of online spend in 2017, compared to 12% in Sweden and 67% in Singapore
- Cash-on-delivery also accounted for 19% of UAE e-Commerce transactions, as some shoppers continue to be cautious with online payments

UAE Prepaid & Digital Payments

UAE Payments Landscape

- UAE non-cash transactions including POS payments, bank transfers and cheques – grew an average of 18% between 2014 and 2018
- POS transactions have grown the fastest (20%), with the average value of transaction declining from AED 487 to AED 313 during the period, reflective of using digital payment means – i.e. cards, e-Wallets - more frequently and for smaller payments
- In 2018, POS accounted for an estimated 90.6% of noncash payment transactions, followed by bank transfers at 5.7%, and cheques at 3.8%
- Cash accounted for up to 70% of POS transactions in the UAE in 2017, followed by credit cards (16%), prepaid and debit cards (8%), and e-Wallets (6%)

— Industry Interviews —

- The UAE benefits from a diverse payment landscape, which includes collaborations between banks and FinTechs, homegrown and white-label solutions, as well as international players that have entered the market
- While diversification is good, the UAE payment landscape is somewhat fragmented and there may be potential to reduce transaction costs for merchants
- Enhancing inter-operability between payment platforms, as well as introducing incentives, can also help to direct customer preferences and increase adoption of digital payments
- Sweden built its advanced payments eco-system and cashless economy through strong collaboration between the country's main banks, as well as expectations from citizens that government and financial services should be available digitally

Considerations for Future Growth

- KYC to onboard new customers for financial services is still dominated by in-person documentation checks. The presence of digital IDs and biometrics provides an opportunity for digital onboarding, which could enhance the reach of digital payment platforms in the UAE
- The fragmentation of the UAE payments sector can be reduced through greater coordination between banks, regulatory authorities and industry sectors, to work towards further streamlining payments channels & instruments
- Moving too quickly towards a more digital and cashless economy could harm the unbanked segment of the population in our region. Innovation in financial services should continue to have a strong focus on financial inclusion



UAE Digital Payments Strategy

The UAE aims to transition to a cashless economy

The basis for diversifying the payments landscape through a secure and streamlined customer experience and the promotion of FinTech solutions has a long history within the UAE vision. The below summary demonstrates how objectives and thoughts have evolved in the past decade, creating opportunities for businesses across the payments value chain, enhancing regulatory frameworks and possibilities for innovation, and building the UAE's reputation as a FinTech hub for both home-grown ideas as well as solutions inspired from abroad.

UAE Vision 2021 (2010)

Vision 2021 sets out the establishment of a strong base of infrastructure that would enable the provision of "smart services" to UAE residents. Both public and private sectors were encouraged to enhance the customer experience improved availability, connectivity and the use of multiple channels.

UAE National Innovation Strategy (2014)

This important strategy set the basis for the UAE Smart Government initiative. The National Innovation Strategy directed government institutions to ensure that regulatory frameworks encouraged research & development and technology adoption across government services and within seven priority sectors including renewable energies, transport, education, healthcare, water and space.

UAE Strategy for the Future (2016)

The strategy sets a framework for identifying future needs and challenges and addressing them through long-term panning to build a more sustainable economy and improve quality of life. Similar to the National Innovation Strategy, priority sectors were identified.

The UAE National Payments Systems Strategy seeks to ensure that payment systems are interoperable, well-regulated at offered to consumers with lower transaction costs, both for local and cross-border payments.

4th Industrial Revolution Strategy (2018)

This highly-anticipated strategy seeks to achieve a fundamental transformation of the UAE economy, with a focus on new and emerging sectors, leveraging the latest physical, digital and biological technologies. In terms of payments and financial infrastructure, the strategy encourages the adoption of digital technologies, including Blockchain, to strengthen economic security and enhance the customer experience.

National Payments Systems Strategy (2018)

In February 2018, the UAE Central Bank announced its national payments strategy, with the objective of safe, efficient and customer-focused solutions for both local and cross-border payments. It also seeks to ensure that payment systems are inter-operable, well-regulated and offered to consumers with lower transaction fees. Significantly, the strategy sets out to transition the UAE to a cashless economy in the long-term.

The strategy builds on the **Regulatory Framework for Stored Values and Electronic Payment Systems**, issued by the UAE Central Bank in January 2017. This framework sets out the central bank's role in regulating payment service providers across the payments value chain covering licensing, registration, payments initiation, execution and consumer protection. It also recognizes four types of PSPs - retail, micropayments, government and non-issuing PSPs. The latter are nondeposit taking institutions that offer retail and peer-topeer payments.

There is no doubt the framework will encourage diversification within the UAE payments landscape, and generate interest from FinTech circles and nontraditional payment providers that see opportunity in the UAE market. However, it does not cover the role of technical service providers, who often work in partnership with PSPs in data processing, network and infrastructure management, leaving this as a grey area. Another grey area is virtual and crypto-currencies, while data hosting laws may be seen as too stringent by foreign PSPs seeking to enter the UAE market.

Central Bank regulations issued in 2017 recognize four types of payment service providers, including peer-to-peer services, encouraging further innovation in the payments landscape

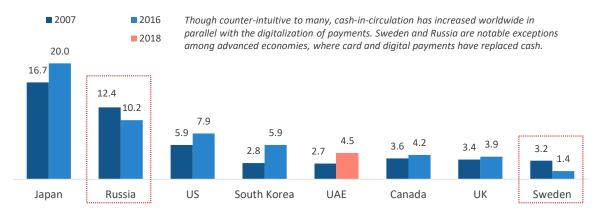


The Resilience of Cash

Far from dying-out, cash-in-circulation has actually increased globally

Cash-in-circulation in selected advanced economies, 2007 vs 2016

In percent (%) of GDP



With the constant buzz about mobile and digital payment solutions and technologies, it is easy to overlook to continued importance of cash. Despite the growth of digital payments around the world, cash continues to be an essential means of payment, and the demand for cash has actually risen since the 2008 financial crisis. In its 2018 paper, the Bank of International Settlements highlights that since 2007 both card payments and cash-in-circulation have grown in the majority of advanced markets. Only Russia and Sweden among advanced economies show a trend of substitution from cash to cards.

In advanced and emerging economies, cash in circulation has increased from 7% to 9% of GDP between 2000 to 2016. Yet among advanced economies, there are significant differences, with cash-in-circulation equivalent to 1.4% of GDP in Sweden and 20% of GDP in Japan. Part of the reason for the growth in cash is the expansion of ATM functionalities in these markets, permitting bill payments and deposits. ATM terminals have grown from 0.4 per thousand residents to 0.6 between 2007 and 2016. Another reason is the low interest rates since the crisis, that has encouraged people to hold and transact in cash.

Card payments in the major advanced and emerging economies have grown from 13% of GDP in 2000 to 25% in 2016. This is being driven of course by payment technology and also by the expansion of both card issuance and POS terminals, encouraging users to make ever smaller payments by card either physically or via contactless or mobile devices. The average number of credit and debit cards held per person was 1.1 in 2007, increasing to 2.5 in 2016, with growth driven by emerging economies. Similarly, POS terminals have doubled to 13 per thousand residents in the same period.

In developing markets, financial inclusion initiatives have also contributed to the ongoing attractiveness of cash. In countries like Kenya and Cote d'Ivoire, mobile money for payments and person-to-person transfers – for the nonbanked segment – are heavily reliant on cash to top-up accounts, as well as for 'cash out' withdrawals at agent locations. Mobile money services have helped both individuals and small businesses to transact across distances in a secure and efficient manner. In South Africa, a return to cash has also been attributed to loan defaults, with people preferring mobile money over the use of current accounts to avoid loan repayments.

In developing markets, mobile money and ewallets have resulted in an increase in the use of cash, as individuals seek out agents to either top up accounts or send money to their peers.

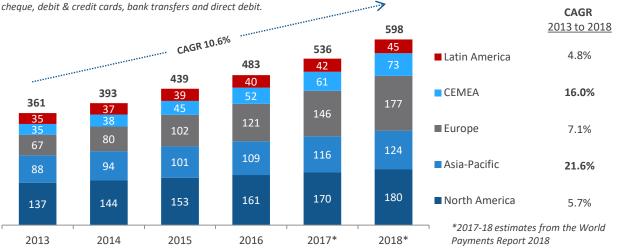
Card payments have grown from 13% to 25% of GDP in both advanced and emerging economies. Cash remains an essential component of financial inclusion alongside digitisation



Global Payments Landscape

Non-cash transactions have grown at 10.6% between 2013 and 2018

Global non-cash transactions by region, 2013 – 2018 billion transactions



The World Payments Report defines non-cash transactions as cheque, debit & credit cards, bank transfers and direct debit.

Developing nations lead non-cash transaction growth. The Asia-Pacific region is leading global non-cash transaction growth, followed by Eastern Europe, the Middle East and Africa. The expansion is attributed to increased use of card and bank transfers, electronic bill presentment and payment (EBPP) solutions, mobile payments and e-wallets.

Financial inclusion initiatives in emerging markets are fueling non-cash adoption. Mobile, peer-to-peer payments and pre-paid cards are helping to extend financial services to the non-banked segments of society, especially in countries like India, Vietnam and Indonesia. Examples Include the Indian Government's Bharat Interface for Money (BHIM) as well as Peru's BIM, which is being positioned as the preferred national mobile money platform.

In mature markets, NFC, contactless technology and mobile payments are diversifying the payment landscape, both for individuals and businesses. Peer-to-peer, mobile payments and e-commerce solutions providers are competing to provide more streamlined and costcompetitive solutions to their customers. There is still significant scope to innovate, particularly for B2B and C2C solutions, especially in the online shopping e-Commerce segment.

Cash continues to be an important payment instrument, especially in developing countries. While the share of cash in total payment volumes is generally declining, total cash in circulation has increased globally, and has even made a come-back in some markets. In South Africa, Cash Send from Absa and e-wallet from FNB allow customers to send cash to anyone who has access to an ATM, without requiring an account at the bank. In many countries, cash is essential for the informal economy and for merchants without access to payment infrastructure.

Credit and debit cards are the leading payment instrument globally, accounting for 67% of non-cash payment transactions in 2016. Bank transfers are one of the fastest growing instruments, for e-commerce and peer-to-peer payments, accounting for 17% of all transactions, while direct debits accounted for 11%. The use of cheques continues to decline in all major markets, with Australia and the UK announcing plans to phase them out completely. Cheques accounted for 5% of transactions in 2016.

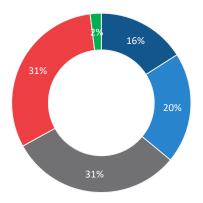
The Asia-Pacific region leads global non-cash transaction growth on the back of financial inclusion initiatives, electronic bill presentment and mobile payments

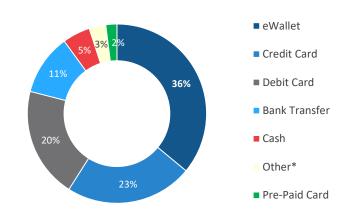


Global Payments Landscape

Credit and debit cards, followed by cash, lead global POS payment spend

Global payments spend by type of instrument and trends, 2018Point-of-sale payment spende-Commerce payments spend





* Other includes mobile carrier billing, crypto-currency payments or other digital payment instruments

Rise of the e-Wallet

e-Wallets dominated e-Commerce payments in 2018, accounting for 36% of total payments value. e-Wallets provide users with speed and security as well as retail reward and benefit schemes. The World Payments Report estimated e-Wallet transaction volumes at 41.8 billion in 2016, with China accounting for 39% of this volume. Multiple factors are responsible for the growth of the e-Wallet, including regulations, connectivity as well as the presence of major retail players such as Amazon, Google, Apple & Alipay in this lucrative space.

Growth of Subscription Revenue Models

Media consumption – for music, news, TV streaming services, gaming – has shifted to a subscription model. Merchants are benefiting from the regular income streams provided by subscription models, but must also ensure their payment and accounting infrastructure are adapted to manage instalment payments. The SEPA direct debit system in Europe has enabled direct-debit payments across the continent regardless of where one's physical bank account is located. This also accounts for the growth of bank transfers as a payments instrument.



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Bank Transfers Challenge Cards



Bank transfers have grown strongly in the past five years, and accounted for 11% of all e-Commerce payments in 2018. Their popularity is being driven by European markets where regulations have enabled real-time free IBAN transfers for e-Commerce, as well as peer-to-peer payments. This is particularly beneficial for merchants, who can avoid the fees associated with debit and credit cards. The EU's second payments services directive of 2018 is expected to further boost bank transfers as a preferred payments instrument.

Biometrics for Authentication

Integration between biometric data and digital databases is streamlining authentication and reducing reliance on passwords. Traditionally, authentication takes place through password, pin numbers, verification questions or mobile pin codes. Biometrics allows authentication via fingerprints, iris scans and facial recognition. While these evolving technologies represent huge potential, the risk of fraud or compromise of biometric data needs to be addressed with adequate controls and data encryption.

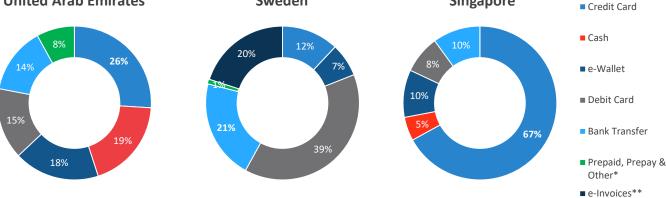
e-Wallets dominate global e-Commerce payment spend, followed by payment cards



e-Commerce in the UAE

e-Commerce payment preferences differ significantly in advanced markets

e-Commerce payment spend by type, 2017 **United Arab Emirates** Sweden



* Prepay is when users buy a card or a voucher to pay for a transaction, usually via a closed-loop scheme. Other includes mobile carrier billing, crypto-currency payments or other digital payment instruments

* e-Invoices is when consumers pay for goods without sharing payment card or bank details, but by providing personal or biometric data, such as mobile phone number, examples include Sweden's Klarna and Australia's AfterPay

UAE shoppers continue to be concerned about online payment security, or the reliability of online merchants. This explains the preference for "cash-on-delivery", which accounts for 19% of the value of e-Commerce transactions. This also explains the higher reliance on credit cards (26%), which are seen to be more secure than debit cards in cases of disputes. Merchants have made significant progress in adopting 3D technologies, secure and perception of payment security can be improved with better communications.

e-Wallets have come far in the UAE, accounting for 18% of e-Commerce value. The younger demographic is keen on online shopping for travel, leisure, electronics and clothing. e-Wallets have also become a popular payment instrument at point-ofsale among residents and visitors.

Swedish users have a high level of trust in their financial institutions, with debit cards accounting for 39% of e-Commerce transactions in 2017. Sweden ranks among the top five markets in Europe for online shopping, as well as having an advanced FinTech eco-system. Residents are accustomed to using multiple channels for payments. iZettle, a POS solution, was acquired in 2018 by PayPal.

Mobile and peer-to-peer payments in Sweden are powered by instant bank transfers. Swish is used for peer-to-peer transfers and to make payments, with 5 million users in the country, over half the population. Money is transferred between bank accounts, requiring only the other person's mobile number. Klarna, which honors stores' claims for payment and handles customer settlements, accounts for 40% of Swedish e-Commerce transactions.

Similar to the UAE, Singapore users are concerned about the security of online payments, choosing credit cards as the main payments means. e-Wallets have also seen substantial growth in recent years, with players like DBS PayLah! and ApplePay. The e-Commerce market is booming, with 73% of adults shopping online, and more than half of goods purchased sourced from merchants abroad, which explains the concern for secure payments.

Singapore

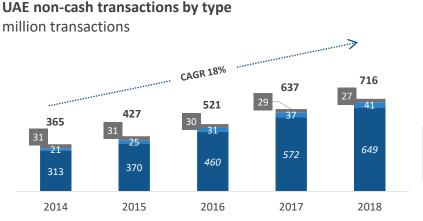
The Singapore Monetary Authority rolled out а standardized QR code for payments in 2017, unifying the QR codes displayed by merchants and reducing clutter from multiple payment services. The QR codes aim to be inter-operable across all e-Wallets. These include players such as GrabPay, a ride-hailing provider, and NETSPay, a wallet for both retail and business.

While the UAE has a diverse e-Commerce payments mix, concerns about the reliability of some online retailers and payment security means cash-on-delivery remains important

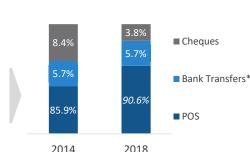


UAE Payments Landscape

POS transactions have led payments growth in the UAE

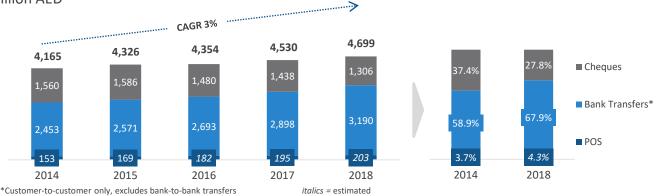


Distribution 2014 vs 2018



Distribution 2014 vs 2018

UAE non-cash spend by type billion AED



Point of sale (POS) card transactions have driven payment volumes in the UAE, growing at CAGR 20% between 2014 and 2018. POS transactions currently account for 91% of payments in the UAE. The average value of each transaction has declined during the period from AED 487 to an estimated AED 313, reflective of the use of debit and credit cards for smaller payments, in line with global trends. Mobile payments including contactless and QR payments linked to cards would also fall in this category.

Bank transfers have grown at CAGR 18% during the period keeping up with POS transaction growth, maintaining their share of overall payment volumes. The average value of each bank transfer has declined from AED 118K in 2014 to AED 78K in 2018. While most UAE banks offer cost-free

transfers between individual retail accounts, for businesses bank transfers sometimes represent a more costly option, driving many especially small and medium size businesses to prefer using cheques.

Contrary to many advanced markets, cheques tend to be a cost-effective payment means for small & medium-sized businesses in the UAE. The use of cheques has declined slightly relative to bank transfers and POS. The average value of cheque payments has moderately declined from AED50K in 2014 to AED48K in 2018, reflecting a preference to utilize cheques for larger payments. Cheques are also the preferred instrument for rental payments in the UAE, and remain popular with businesses as well.

Contrary to many advanced markets, cheque use has remained relatively stable, especially that cheques tend to be cheaper for small & medium businesses in the UAE than bank transfers

UAE Prepaid & Digital Payments Source: UAE Central Bank, 2018

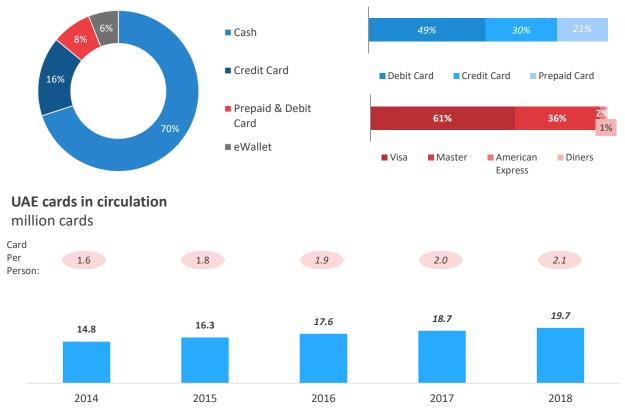


UAE Payments Landscape

Cash accounts for up to 70% of spend at points-of-sale in the UAE

Payment cards by type*

UAE point-of-sale spend by type, 2017 Percent (%) value of total transactions



*Payment card types are estimates by Euromonitor, distribution between card associations is from Global Payment Report, 2018 italics = estimated

Cash accounts for 70% of spend for in-person points-ofsale transactions in the UAE, compared to 16% for credit cards, and eight percent for prepaid and debit cards, based on the findings of the Global Payments Report 2018. Card and e-Wallet payment have grown though as the UAE Central Bank has made significant efforts to standardize and reduce transaction fees. This included issuing fee caps in 2018 on 43 types of charges from home loans to late payment penalties for credit cards.

The number of payment cards in circulation has steadily increased to an estimated 2.1 cards per person in the UAE. Globally, the number of cards per person in the major advanced and emerging economies has grown from 1.1 in 2007 to 2.5 in 2016. This suggests there is still some room

for further growth in card adoption in the UAE, even as payment channels diversify.

Prepaid cards account for an estimated 21% of cards in circulation, with significant diversification of the prepaid card offering in the past few years. Banks and money exchanges have tapped into the open-loop prepaid card segment via the Wage Protection System (WPS)-enabled cards as well as currency and travel cards.

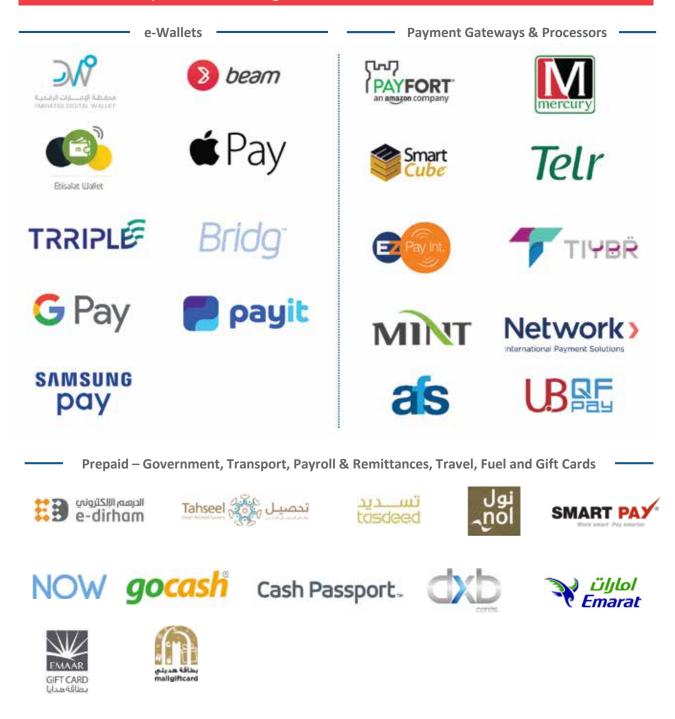
For government payments, the edirham card issued by FAB comes in both open-loop and closed-loop versions. As in many markets, the prepaid card offering in the UAE has been bolstered by financial inclusion initiatives, with competition between players driving down reload, withdrawal and transaction fees.

Card and e-Wallet payments have grown significantly, especially as the UAE Central Bank has worked hard to improve payment security and bring down card service fees



UAE Payments Landscape

A diverse eco-system of homegrown, FinTech & international solutions



Reflective of the UAE economy, with an important place given to government payments, payroll and remittances, travel, gift, retail and reward card programs



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Industry Interviews: Noor Bank

Noor Bank sees significant opportunities in the UAE payments space

Noor Bank has contributed significantly to the diversification of payment solutions in the UAE through collaborations with fintechs, e-Commerce vendors and expanding its mobile payment options for residents and visitors.





Ehsaan Ahmed Head of Global Transaction Services Noor Bank

In the light of the UAE's national payments strategy and the transition to a digital economy, what opportunities does Noor Bank have?

The UAE is fast evolving from a cash to cashless society and Noor Bank has been supporting this transition through its digital transformation initiatives in the payments space. In 2009, the UAE Ministry of Labour, along with the UAE Central Bank, introduced the Wages Protection System [WPS], where employees' salaries were transferred via banks, exchange bureaus or financial institutions through digital distribution. Since then, we were working in sync with the Government strategy on digitalisation. Similarly, the prepaid offerings have continued to diversify with gift cards, loyalty cards, travel and virtual cards. We see increased interest to launch new prepaid schemes, and this will continue to drive growth in the market. We are also active in the e-commerce acquiring space, helping companies to expand their online payment options. All this is supporting the UAE's transition to move towards a cashless digital economy and building an efficient digital payments eco-system.

How are you currently addressing the needs of large versus smaller corporates in the payments space?

The needs for small versus large corporates can be quite distinct. We usually support SMEs with treasury and trade services for working capital and other operational needs. For the larger corporates, we assist in offering more sophisticated solutions such as host-to-host integration with their ERP platforms. Currently, one of our major thrusts is on collaborating with fintechs and helping them develop successful business models. In e-Commerce, we have supported Tiybr - the UAE's only Shari'ah compliant payment gateway. In the prepaid space, we have several collaborations with fintech programme managers and payment processors.

We have also helped to diversify the digital payment offering by bringing new players such as Alipay and UB QFPay into the market and supporting their implementation. We will soon launch another value-added service through a fintech collaboration. We see digital payments as an exciting space in the UAE with lots of activity and potential for tie-ups across the entire valuechain.

Physical documentation checks still dominate in the UAE for KYC, how do you see this developing? We are lagging behind some of the advanced markets in terms of digital KYC and customer onboarding. However, the UAE Central Bank and partner bodies are working towards developing these solutions, and testing them from a security and authentication perspective, as well as enhancing integration between platforms. The Emirates ID infrastructure is already connected with banks and other institutions for secure ID verification of end-users. I believe it is a matter of time before we see full digital KYC and onboarding. In terms of broader collaborations, we are working with the Smart Dubai Initiative to ensure that our payment solutions are in line with what the government is looking to deliver from a cross-industry perspective. There are many interesting initiatives related to blockchain and artificial intelligence that will have implications for various sectors of the economy.

Digital payment technologies are not without risk from fraud and hackers, how do banks and PSPs manage these risks in the UAE?

Security is a critical element of any digital payment solution that we offer. Any solution that we take to market goes through a rigorous IT screening and ethical hacking process, to ensure that controls and security levels are robust. Moreover, we revisit these systems regularly to ensure we are keeping up with the latest technology developments in the market. With our fintech partnerships, a rigorous risk assessment process is implemented on the platforms and solutions before the launch to ensure the integrity and security of the customer data.

Digitalization and fintech collaborations are transforming the payments sector



Industry Interviews: UB QFPay

Growing GCC – East Asia links have extended to the payments landscape

QFPay, founded in 2011, is a mobile payment technology, service and solution provider, with operations in 14 Asian markets. It extended operations to the UAE in 2017 through a joint-venture with United Brands establishing UB QFPay.







Please describe the Chinese mobile payment landscape and your operations in Asia?

The Chinese were early adopters of mobile payments, leapfrogging from a country with limited financial services to one of the world's most advanced mobile payments ecosystems. Two companies, WeChat Pay and Alipay, have 1.5 billion users between them, and are the preferred means of payment for Chinese nationals traveling abroad.

In other Asian countries, mobile payments are expanding rapidly. Our technology enables merchants to accept payments from Alipay, WeChat Pay and China's UnionPay, as well as other mobile wallets, utilizing QR codes from across Asia. We partner with banks, mobile wallets and payment companies in each market, and through our solution merchants can transact payments via their existing POS devices, tablet or smartphone. While the Chinese segment of clients and travelers is important, we also want to contribute to the domestic payment landscape in each market. We envision establishing a "mobile wallet scheme" that would connect all merchants, consumers and wallets across the region.

"The Chinese were early adopters of mobile payments. Two companies, WeChat Pay and Alipay, have 1.5 billion users between them."

Tell us about your expansion to the UAE, your first foray into the Middle East?

We are proud to be one of the first Asian payment companies to operate in the Middle East. The first indicator for us was the rapid increase in Chinese travelers to the UAE, close to one million visitors in 2018. The UAE is a crossroads between East and West, and a natural stopping point for Chinese travelling in either direction. In the UAE, with support from our local partner Noor Bank, our QR solution allows merchants to accept mobile payments from Alipay. We are also able to serve the major retail destinations of Dubai Mall and Burj Khalifa through our partnership with Emaar Group.

What is driving this large uptake of mobile payments in emerging markets?

Governments are playing central role enhancing regulations as well as setting objectives to promote cashless economies, as we see in Malaysia, Singapore, Japan and the UAE. For merchants, it is about enabling them to process payments cost-effectively and efficiently. For end-users, it is about flexibility. Some consider the mobile wallet a substitute for a bank account. Others top-up their e-wallets via bank transfers, while others prefer to link their wallet directly to an existing debit or credit card.

"Governments are playing central role enhancing regulations as well as setting objectives to promote cashless economies, as we see in Malaysia, Singapore, Japan and the UAE."

How do you navigate the licensing and compliance requirements in so many markets?

As mobile payments are relatively new, regulations are constantly evolving in each market with regards to the types of PSPs, infrastructure and security requirements. That said, mobile wallets can be seen as a substitute to debit and credit cards, and card regulations have been in place for a long time. Whether you are an end-user or a merchant, the same KYC and AML processes will apply.

How do you see the future evolution of QFPay?

We are looking to expand our value-added services for merchants which could include cross-border marketing and financing solutions through our banking partnerships, but our core offering will always be about enabling merchants to accept mobile payments, and this is our focus at the moment. For UB QFPay, we are witnessing a wider adoption of mobile and QR payments in the UAE, and look forward to further expanding our network in the region.

QFPay launched its operations in the UAE in 2017 to better serve Asian visitors to the region, as it works to expand the reach of mobile payments across Asia





Industry Interviews: Sweden

Sweden has one of Europe's most advanced payment eco-systems

Claire Ingram Bogusz, a Sweden-based researcher on innovation and the digital economy, spoke to us about how Sweden established its advanced payments eco-system and cashless economy.





Claire Ingram Bogusz House of Innovation Stockholm School of Economics

What drove Sweden's transition to one of the world's most cashless economies?

There are two factors in this transition. The first is that the Swedish government invested early on in a strong telecommunications infrastructure, which provided the basis for the digital revolution. The second is the history of collaboration between Swedish banks, that have worked hard towards providing an efficient payments system.

Digital payments developed in parallel with the adoption of the smartphone, mainly through non-state initiatives. The payments application Swish, for example, was the result of a collaboration between Swedish banks. They saw the benefits of providing a platform-neutral payment solution to citizens, and that would benefit the economy. We have four major banks here and several smaller ones. In the 1990s, they collaborated to roll-out a unified ATM network, operated by a third-party service provider, Bankomat. Unlike many other countries, where there are competing ATM networks, in a small country like Sweden, with 9.9 million people, collaboration between banks is seen as the only way to deploy services at scale and in an efficient manner.

How have people adapted to a cashless economy?

We have had a gradual evolution where citizens have come to expect that all services, whether government or financial services, are accessible digitally. The Nordic countries are well-known for their "new public management" approach.This imagines government as a service provider, and the citizen as a customer, with a focus on a positive customer experience. It is encouraging to see that this approach has been adopted in the UAE in recent years as well. That said, there are some challenges. Recent immigrants cannot open a bank account until they have received their government-issued identity number, which creates some lag time before they are able to access some services. Senior citizens may also have difficulties using payment apps, but are used to using debit and credit cards, as these remain a popular way to transact payments. We also have community centers around the country that offer ad hoc support and classes in digitalization, which can also help people to adapt to new technologies.

In other European countries cash sustains the informal economy, what happened in Sweden?

Sweden has built-in financial incentives that encourage people to pay for services through official channels, even if that means paying taxes. For example, home renovations can be deducted from the sales tax on a property upon sale. Given that taxes are generally high, people take advantage of these incentives to reduce tax bills as much as possible.

"In a small country like Sweden, collaboration between banks is seen as the only way to deploy services at scale and in an efficient manner."

What risks emerge from being reliant on digital payment infrastructure?

There are concerns about security and clustering of risk. The cashless economy currently relies on a small number of payment platforms and card associations, which are often based outside the country. There is less concern about the Swedish financial system's integration into the European financial system, as both are powered by instant IBAN bank transfers, than there is about consumer reliance on commercial payment solutions like Visa and Mastercard that are centrally controlled and therefore more vulnerable than the IBAN system.

This central control—together with concerns around vulnerability—has been cited as a major motivation behind the e-Krona, a digital currency that the Swedish central bank plans to develop in the coming years. The central bank sees this as part of its mandate to provide a safe and well-functioning payment system, taking into account both Sweden's integration into financial systems outside its own borders, as well as the importance of stability and alternatives for consumers within the country. As such, one of the benefits of the e-krona is likely to be the establishment of a domestic payment network.

The cashless economy was built through collaborations between banks as well as expectations from citizens that all government and financial services should be available digitally

UAE Prepaid & Digital Payments



Industry Interviews: KPMG

Inter-operability of payments platforms should be addressed

Umair Hameed, a partner with audit, tax and advisory firm KPMG Lower Gulf Limited, spoke to us about challenges related to the cashless economy, highlighting the importance of policy to achieve wider adoption and a shift in customer preferences in the GCC.



Umair Hameed Partner, Financial Services KPMG Lower Gulf Limited



How do you see the transition to the cashless economy and payments digitalization in the UAE? Despite the continued importance of cash transactions in the UAE, we tend to forget the hidden costs associated with it. Merchants need to count cash, ensure the notes are authentic, conduct reconciliations and then deposit the funds in a bank account. With digital cashless payments, the audit trail of transactions is generally seamless.

For digital payments, three elements need to be in place. The merchant should be willing to accept a digital payment, the customer needs to have an appropriate payment instrument, and the supporting payment infrastructure needs to be in place.

In the UAE, there may not always be complete consistency in the payment channels accepted by merchants. A few retailers are concerned about service charges and interchange fees, which explains why they sometimes apply minimum limits on card payments. Also, people here are generally comfortable carrying large amounts of cash, thanks to the fairly safe environment.

This is not always the case in many emerging markets, where there is greater risk associated with carrying cash, and as a result digitalization of payments is taking place at a faster pace than in the GCC. However, the introduction of VAT in the region has resulted in an effort by regulators to promote digital payments, as this provides more visibility over transactions.

What policy areas still need to be addressed?

There may still be potential to reduce the cost of transactions and inter-operability between payment platforms. Addressing this will have a significant impact on the payment preferences of retailers, as well as end-users. Traditionally, American Express cards were not

widely accepted in the UAE, as the cost was considered relatively high. Currently, with the large diversity of payment service providers (PSPs) in the market, ensuring interoperability between platforms at point-of-sale, and online is essential if we want to see increased adoption and a shift in payment preferences. This perceived lack of interoperability has led to a somewhat fragmented payments landscape in the UAE. At government offices we are often asked to transact in edirham, though this card basically cannot be used for any other purpose. For public transport, we use the NOL card, but for retail payments we resort to cash, payment cards or e-wallets. It is important to consider the added cost for residents of having to carry multiple payment instruments.

In terms of settlement risk for merchants and security of payments for end-users, the systems and technology are widely in place. There is still a certain perception that online transactions are risky, but this can improve with communications. Other mechanisms can be adopted to promote digitalization. For example, in the Netherlands, any transaction over €1,000 must be settled electronically. In Pakistan, ATM withdrawals over a certain amount will trigger a small fee, to incentivize people to pay electronically or by cheque. These are incentive-based approaches, but inter-operability and compatibility should come first.

"There may still be potential to reduce the cost of transactions and inter-operability between payment platforms. Addressing this will have a significant impact on payment preferences."

What is driving the diverse pre-paid card offering? Access to credit cards can be limited to the more affluent segment of society. The prepaid offering is being targeted mainly at shoppers via retail incentives, as well as students, teenagers and those generally not within the formal banking system. It is potentially profitable as a volume business and may be less risky than credit cards, as users can only draw down on their pre-loaded balances. Another major driver is distribution of salaries via wage protection systems (WPS), especially for the blue-collar workforce.

What is KPMG doing in financial services advisory? We've had the chance to work with a number of leading financial regulators in the region, specifically on smartsolutions and developing the FinTech and RegTech ecosystem. Much of the work involves assisting policy-makers to develop better frameworks for greater financial services innovation in the region. We will soon be publishing our 2019 UAE Banking Perspectives report, which will have a special feature on accelerating innovation in banking.

While diversification is good, the payments landscape in the UAE is somewhat fragmented. Improving inter-operability and incentives can lead to a wider adoption of digital payments

UAE Prepaid & Digital Payments



Considerations for Future Growth

Introducing digital KYC, and addressing a fragmented payments landscape

Digital KYC and Authentication

The KYC and onboarding process to access banking and financial services in the UAE is still dominated by in-person documentation checks and signatures, and can be cumbersome. The process can be enhanced through virtual onboarding and digital ID verification, especially that Emirates ID and biometric readers are largely integrated with banking systems and various public services. In looking to enhance the process, regulators should seek to find a balance between ensuring adherence to AML and KYC standards, and the delivery of streamlined and efficient services.

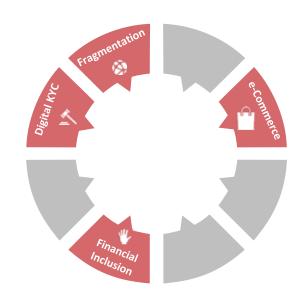
A fragmented payments landscape, banks and regulators need to collaborate for greater consistency

The diversity and excitement of the UAE payments landscape, with the presence of home-grown FinTech, white-label and international payments solutions, should not distract from the fact that it is also a cluttered landscape where there is sometimes a lack of consistency in the payment channels offered to customers at government offices, retail outlets, transport services and on e-Commerce platforms. While this can be addressed to some extent through policy, further consultation and coordination between UAE banks, public institutions and major industry sectors can help to give more coherence to the payments sector. The Emirates Digital Wallet - an initiative of 16 local banks - is an example of the type of coordination that is possible. In the current environment, some level of consolidation between payment providers may also be inevitable.

Exceptional growth potential for e-Commerce

e-Commerce revenues in the UAE for 2018 are estimated at AED 33 billion, which represents 3.6% of retail transactions, compared to a global average of 10%, 17% in the UK and 20% in China. UAE e-Commerce spend it expected to grow at CAGR 13% to reach AED 47 billion in 2022. Overall in the region, the outlook for online retail is positive. In March 2017, Amazon purchased Souq.com, while Emaar Malls Group took a 51% skate in fashion retailer Namshi. The potential of this segment has received significant attention from payment gateways and PSPs.

Digital payments considerations for the UAE



Financial inclusion: digitalization of the economy could significantly harm the unbanked in our region

The world's most cashless digital economies such as Sweden and South Korea share certain features. These include a large middle class, low levels of income disparity and almost universal access to smartphones and mobile data. Pushing too hard for a cashless economy in the UAE risks marginalizing a portion of the blue-collar population, who contribute to many sectors of the economy. It is encouraging to witness the growth of financial inclusion initiatives in the UAE, particularly from money exchanges, who have helped to provide better payroll and remittance services. We can also applaud "Now Money", a FinTech that provides workers with an innovative mobile-based payroll, current account and remittances solution. As we hope we have demonstrated in this paper, the digitalization of payments does not have to be at the expense of cash. Indeed, in most of the world, both digitalization and the cash-based economy are growing hand-in-hand.

A positive outlook for e-Commerce, but the digitalization of payments needs to also ensure that the unbanked are not left out from innovation efforts

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