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WHAT WILL DRIVE THE JOURNEY TOWARDS CASHLESSNESS AND DIGITALISATION?

Finextra

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INTRODUCTION

Market dynamics and infrastructure vary greatly per country and region but the direction of innovation and change is converging on the same outcome: digitisation and cashlessness. As the world adopts digitalisation in all sectors and societies, there is greater demand for unbanked communities to be banked and for digital banking to enable better choice and control for consumers, greater opportunities for merchants and business, increased cross-border trade and benefits for governments.

The reasons for the transition away from cash and towards digital include enabling connection between unbanked consumers, merchants and services through mobile money; greater visibility and view on liquidity for merchants, including real time confirmation and settlement; reduction in fraud and crime by implementing a digital trace and, hence, audit system; financial inclusion; for banks, greater volumes and transactions are welcomed also.

System integration and standardisation are the crucial factors on this journey to grow the ecosystem and the key tenets of interoperability and ubiquity, each of which drives the other, are becoming the focus for any serious mobile money or digital financial provider.

QR codes have been instrumental across the Middle East, Africa and Asia to facilitate mobile and digital payment services and they could provide a gateway to unified and integrated financial offerings, countrywide, region-wide and even worldwide.

As digital payments become pervasive, API infrastructures are providing the basis for interoperable systems, but these can be supported also by third party aggregators or, often in developed markets, switch technology. The expansion of API infrastructure and the proliferated services it enables depends on standardised and harmonised interaction and integration, as well as collaboration between private and public firms.



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MENA SMARTPHONE INTERNET AND SMARTPHONE PENETRATION AND THE BENEFITS IT BRINGS

Acceleration of mobile money, digital finance, and indeed cashless initiatives firstly comes down to mobile network and internet infrastructure.

According to a 2020 GSMA Mobile Economy MENA Report, 2020, 45% of the population was projected to be connected to mobile internet by 2021 and \$70bn tipped to be spent in the region on infrastructure rollouts between 2019 and 2025. Furthermore, 5.7% of GDP in MENA in 2019 was generated by mobile technologies and services.

Interestingly, it has to be said that while the Coronavirus pandemic somewhat curtailed the development of 5G in non-GCC markets, it might have intensified methods by which mobile operators and policymakers can collaborate more effectively, which in the long run can only prove beneficial. Ultimately, the trajectory and ideology of mobile and digitally-connected banking and commerce systems will converge upon a borderless network, hence efforts to engage and work together from country to country and region to region will prove the building blocks for the future global economy.

GSMA indicated such combined efforts afforded temporary spectrum provision in countries such as Jordan, Tunisia and Saudi Arabia, in the grip of COVID-19 restrictions. In a similar way, organisations need to think about the interoperability of systems and networks as they grow their product offerings and customer base, expanding across countries and global regions.

Small and Medium Enterprises (SMEs) account for two thirds of global employment and half of global GDP. It is in everyone's interest, from consumer to corporate bank to protect them and help them flourish and grow.



03

HOW MOBILE MONEY SUPPORTS MERCHANTS AND INCREASES TRADE

Greater visibility of cashflow and increased trade due to swelling numbers getting banked or conducting commerce online, are a couple of the benefits of digital payments for merchants large and small, and indeed all financial services providers.

Real time confirmation and settlement results in reduced risk, greater credit ratings, and overall more certainty. Markets need certainty to thrive, it means they can make more accurate projections and forecast their growth, and hence make plans and evolve their business accordingly.

Alongside a reduction in cash of course comes a reduction in certain types of fraud. An audit trail becomes a much easier endeavour when done digitally.

As McKinsey stated, in a June 2020 article, Small and Medium Enterprises (SMEs) account for two thirds of global employment and half of global GDP. It is in everyone's interest, from consumer to corporate bank to protect them and help them flourish and grow.

In the same article, McKinsey states that in the US, the average small business has only 27 days of cash flow and two thirds of SMEs in China reported having enough cash to cover fixed costs for no more than two months. It highlights the precarious balancing act that small businesses manage and the importance of having more certain and instant visibility of cash-flow.

Mobile money providers should aim to be interoperable and available at a minimum of ten other providers' outlets, in order to be reasonably confident in achieving ubiquity.



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INTEROPERABILITY AND UBIQUITY- EQUALLY IMPORTANT FOR FINANCIAL PROVIDERS LARGE AND SMALL

Ubiquity and interoperability go hand in hand, and these are the drivers for financial and mobile money service providers, and ultimately the metrics of success. As mobile money services proliferate and demand for them increases, however, so it becomes tougher to compete for customers in the busy space, hence ubiquity becomes ever more challenging and interoperability ever more important.

Ubiquity is what will begin to change and solidify habits in a new customer base, and interoperability is what will sustain the growth. According to CGAP (Consultative Group to Assist the Poor), to gain perspective on how to reach ubiquity and achieve interoperability, it is helpful to consider the number of ATMs against the number of POS machines in circulation. As a guide, this gives an idea of the numbers that represent ubiquity, and therefore what is required “to get mass market uptake of digital payments”. Taken from CGAP figures in developed global markets, a rough average indicates that there are ten POS machines for every ATM.

Translating this into a guide for mobile money providers, it can be taken that for each ‘outlet’ of its services, it should aim to be interoperable and available at a minimum of ten other providers’ outlets, in order to be reasonably confident in achieving ubiquity.

Given that it is a common goal, however, merchants may seek to work together with other competing merchants on achieving this. Examples can be seen in the development of cards schemes, initially in the US, whereby competing banks realised it made more commercial senses to invest in a shared nationwide scheme rather than have smaller proprietary regional networks. A similar case study can be found in the UK with the LINK scheme, whereby the largest banks invested in a shared ATM network, opting for interoperability to achieve ubiquity for the greater benefit to both organisation and end user.

In Tanzania in 2014 the four largest mobile money providers collaborated on a set of standards facilitating P2P payments across several networks. Agreement and development were achieved with the support, both consultative and financial, of the International Finance Corporation (IFC) and the Bill and Melinda Gates Foundation, respectively.



The standards included detail on clearing and settlement principles, dispute handling, interchange principles, interparty risk and membership and participation criteria. And crucially, the main means by which they operate, was to be across bilateral API connections.

Once the scheme had been developed, one of the four, Vodacom (with the largest market share), opted out of participation. Less than two years down the line, however, Vodacom joined, when it became clear that participants were enjoying 15 per cent more P2P transfers as a result of interoperability with other providers.

There is strong and validated belief that mobile money schemes can and will follow the same trajectory as the growth of card schemes. In more developed markets, switch technology is used to host interoperable transactions. Switch technology represents a costlier investment and is only worthwhile once growth of transaction volumes can be safely assumed and, hence the greater cost for the infrastructure will be worth the greater scalability it affords, both in terms of resilience, routing efficiency and risk.

Third party aggregators are another way of hosting several providers on one platform, and this example can be best seen in China, where merchant acquirers such as Wowoshijie facilitate transactions through both mobile giants Alipay and WeChat (themselves not interoperable). This is done via Quick Response (QR) codes.

The next level of interoperability, as a payments market matures, will be the acceptance of different types of payment from different types of issuers, for example both banks and mobile money providers, including P2P as well as online payments, using different technologies such as QR codes, NFC (Near Field Communication) and the cards standard, EMV (Europay, Mastercard, Visa).

Equally, QR codes have in some markets become the vehicle for harmonisation of payments from different sources, such as in Ghana, for example.

In Nigeria, interoperability standards were introduced and overseen by the regulator from 2012, as opposed to the dynamic market change that was brought about in Tanzania. In Nigeria, the standards are yet to be fully operational and fully beneficial for all concerned.



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STANDARDISATION, QR CODES, AND CASHLESS SOCIETY INITIATIVES

In the 2019 Mobile Money Report by GSMA, the Mena region was stated to have 21 mobile money services live, with transaction volume up 24 per cent on the previous year reporting period, and transaction value up 37 per cent on the previous year. These figures reflect a perfect storm of appetite for digital money as a means for faster and more efficient financial inclusion, availability of services, greater technology resources to develop such services, and the aforementioned combined focus on interoperability and ubiquity. Much of this is propelled and augmented by financial inclusion and cash reduction drives, and in some part accelerated by the Coronavirus pandemic in 2020.

In 2007, Ghana's central bank established the Ghana Interbank Payment and Settlement Systems Limited (GhIPSS) with a view to fostering and promoting interoperable infrastructures between banks and non-banking providers in Ghana. QR codes have become integral to this initiative, and a harmonised offering was introduced in 2020, enabling payments from various sources to be made by customers to merchants via one QR code, nationwide, if their money or banking provider offers it.

The Dubai local government has estimated that increasing cashlessness would create \$2.2bn growth in the local economy, due to eliminated costs of cash handling, improved tax collection, and greater control and visibility of liquidity and cashflow for business owners.

Many cashless initiatives have been progressed throughout the Middle East and Africa in recent years, and the focus has intensified.

Saudi Arabia's central bank set out a '2030 vision' to reach a 70 per cent cashless society by 2030. In July 2019, the number of cashless transactions stood at 36 per cent. A payment infrastructure entity was established to execute the interoperability and standardisation requirements to facilitate such a transition, and QR codes were chosen as the technology of choice with which to achieve this.



In 2019 the Saudi Capital Market Authority (CMA) approved 12 fintech trading licences for companies operating in payments and lending, and eased the regulatory restrictions on debit card use for ecommerce, boosting the epayments sector in line with its 2030 goals. The region is well on track to meet its goals, having already overshoot the target of epayment proportion of all payment types as of November 2019, when it stood at 36 per cent, according to the Saudi Arabian Monetary Authority (SAMA), the target having been 28 per cent by 2020.

Work remains to be done making bank-to-bank transfers faster and real time, increasing POS ubiquity country-wide and hence, encouraging whole swathes of the population in rural areas away from cash. There are cultural attitudes to be taken into account regarding reluctance to stray from cash use and according to KPMG Saudi Arabia, trust needs to be fostered, as well as a familiarity with using trusted platforms. Cross-border payments and highly reported incidences of cybercrime contribute to a reticence on the part of some to go fully digital, and in Saudi Arabia, the reliance on oil and the threat of fluctuating prices thereof also plays to the preference of holding onto cash.

Cashless society initiatives bring greater transparency to governments, including better-regulated tax systems and stronger control on fraud, albeit new vulnerabilities to cybercrime are also ushered into the fold.

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Visa is working on the development of QR codes at its technology centre in Dubai to allow shoppers to scan and pay for items in-store without the need for a cashier.

Despite cybercriminality concerns, up to 53 per cent of respondents said they were comfortable sharing personal data with banks, telcos and government bodies and 63 per cent deem biometrics secure as well as 55 percent deeming biometrics convenient to use.



With digital payments must come digital authentication and security, of course. Biometric measures are tipped to bridge the gap here. According to Juniper research, roughly 90 per cent of smartphones worldwide will have a form of biometric capability by 2024, to enable authenticated mobile payments. Juniper's research also forecasts \$2.5trn in mobile payments, facilitated by biometric data, by 2024, compared with \$228m in 2019.

There is no doubt the pandemic has been a catalyst for digital transformation, both in terms of speeding up projects as well as initiating new ones, and simply being a global case study for the benefits of digital payments, which have arguably outweighed any disadvantages or concerns around converting to digital.

In a 2020 PwC survey, 53 per cent of Middle East respondents said they were shopping more on their smartphone in response to the pandemic, compared with the average of 34 per cent for all territories in the survey, and interestingly, an overwhelming 92 per cent of these said they would likely continue purchasing online once the pandemic subsides.

Equally, Mastercard research showed an increase of 100 per cent, Q1 YOY, in contactless payments from 2019 and a joint report published by the Dubai police, Dubai Economy and Visa indicated 42 per cent of respondents believed they will continue their now-increased use of contactless payments in store following the pandemic, and 48 per cent opting more for online payments and commerce, as a result of increased use during the pandemic. Recent developments have served to instil new habits.

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Merchants are among the new wave of digital money converts in 2020. First Abu Dhabi Bank said it had seen merchants, driven by customer demand, to take up card, mobile or ewallet capabilities, such that even Baqalas (mobile grocery service providers) have incorporated the humble POS into their household delivery routine.

Furthermore, a survey of UAE consumers by Standard Chartered, found that two thirds expect the country to become fully cashless by 2030.



CONCERNS REGARDING DIGITAL DATA AND ENHANCED PROTECTION MEASURES THEREOF

On the data issue, it must be acknowledged that there do remain significant concerns. A 2020 ZAWYA survey found 27 per cent of UAE respondents to be concerned about data collected by downloaded apps and 31 per cent of users said their personal and families' details are publicly available.

A separate study conducted by Kaspersky in the UAE, evidenced enhanced awareness on the part of citizens with regard to the protection of their personal data and concerted efforts to reduce their data trail, with 84 per cent of internet users having tried to remove certain information from online sites or social media. This shows awareness and wariness on the part of digital consumers, which in turn will drive stronger governance and greater data protection efforts by authorities and financial providers alike. It also serves as a measure of digital awareness, which could be taken as a positive in terms of taking control and demanding a better digital offering in all areas, not least financial services.

The Egyptian government, for example, ushered in a data protection law in July 2020, giving businesses new guidelines on the processing and storage of their customers' data. It is hoped this will prove an additional stimulus for online banking growth.

Likewise, Saudi Arabia and UAE are supporting the increased roll-out of digital finance services with augmented privacy and banking guidelines being issued in 2020. The World Bank has recognised what it deems significant potential in the MENA region to emulsify its digital economy, with the provision of support from policymakers on multiple fronts to create a robust, resilient infrastructure to accommodate a thriving surge.



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CONCLUSION

Developments in the drive to digital are increasing by the month, and the pace of change in the Middle East and Africa brings many angles under focus. Regions have individual cashless initiatives in train, and collaboration between telcos, banks, digital finance start-ups and policymakers has been unprecedented.

There are huge benefits to be gleaned from increasing the amount of digital transactions and reducing the cash element in society- the transparency and auditability factors alone bring greater control and business growth potential for small and large businesses as well as increased revenues, to say nothing of costs saved in eliminating the handling of cash, improved tax revenues for governments and a reduction in cash-related crime.

With digital expansion, a focus on ubiquity is imperative and as such, interoperability is paramount. Without these, no single solution can prosper and grow. There are different ways to become interoperable, be it through an aggregator or a joint-party scheme, through APIs or switching technology.

QR codes are a means by which to achieve success here, and use thereof has grown significantly to facilitate digital payments and interoperability in several Middle Eastern, African and Asian countries.

Cashless initiatives bring huge populations into the banked community and stimulate trade. The infrastructure needs to be robust and secure, and agile for future scalability, particularly to host increased cross-border trade. Protection of data is an equally evolving space, and any cashless drive must be supported by the relevant privacy protocols, processing and ownership rights, as well as cybercrime and anti-fraud measures.

The 2020 Coronavirus pandemic has shone a light on financial inclusion and proved a tipping point for those who were on the verge of 'converting' to digital money and commerce, be they consumers, merchants or banks. What's more, it seems that for those who have transited, digital is now a habit of a lifetime rather than an interim band-aid measure.



08 ABOUT

FINEXTRA

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Over the last decade, HPS has been a pioneer in the mobile payment ecosystem, whether it is with NFC technology or QR codes – HPS always drives innovative payment solutions that matters to the market. As a matter of fact, HPS was one of the first companies to launch Apple Pay in Japan. Concerning the QR codes, some achievements include the launch of a universal and unified QR code platform for countries like Saudi Arabia (with Saudi Payments) and Ghana (with GhIPSS). HPS has also been a key player on the design and launch of a mobile payment interoperable solution in Morocco.

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