Deloitte.





The future of payments in South Africa Enabling financial inclusion in

Enabling financial inclusion in a converging world

September 2019

Contents

Foreword Introduction The buzz around financial inclusion Why does cash continue to dominate?..... Importance of innovating for the customer..... Levers for change Where to from here?.... Endnotes Contacts

••••	••••	• • • • • •	••••	•••••	•••••	•••••		. 1
••••	•••••	•••••	•••••			•••••		.3
••••	•••••	•••••	•••••			•••••		.4
							•••••	
••••	•••••	•••••	•••••	•••••	•••••	•••••		12
••••	••••	••••		••••		••••		14



Digital technologies have given rise to new market entrants and solutions from adjacent industries that are actively playing in and shaping the payments space. These technologies have had the ability to disrupt more traditional business models, blur the boundaries of previously disconnected sectors, such as banking, telecommunications, retail, while at the same time enabling financial inclusion.

Foreword

In its 2012 National Development Plan, government challenged the financial sector to achieve 90% financial inclusion by 2030. Great progress has been made since. 80% of the population is banked – a substantial increase from 46% in 2004. However, financial inclusion and its ability to catalyse more inclusive growth in South Africa remains constrained as many people are not using their access to financial services, or rely on informal channels and continue to transact in cash.

At the same time, financial services sector transformation is unabated. The industry continues to embrace modernisation both through plans like Vision 2025 as well as through rapid developments in digital technologies, disrupting but also enabling change. Digital technologies have given rise to new market entrants and solutions from adjacent industries that are actively playing in and shaping the payments space. These technologies have had the ability to disrupt more traditional business models, blur the boundaries of previously disconnected sectors, such as banking, telecommunications, retail, while at the same time enabling financial inclusion.

Indeed, the entrance of adjacent industries into financial services, which has historically been the domain of banks, is resulting in a convergence of sectors within payments and other financial products. This is broadening the distribution of financial services products, and increasing the potential for financial inclusion.

The area where this is most notable is the convergence between telecommunications and banking. The rapid adoption of mobile phones and resultant high mobile penetration rates has played a vital role in delivering digital financial services to those still unbanked or underbanked, at more affordable prices. Mobile network operators (MNOs) have seen the potential to capitalise on their large customer bases to offer financial services on top of cellular services. This convergence between telcos and banks does not only provide payments solutions, but importantly increases consumer utility.

Convergence is also happening in the retail sector; many retailers are offering a range of financial services products including money transfer services, lending and insurance products, and seeking to deepen customer loyalty in the process. A further example is the convergence between social media and retail, with payments being the enabler for social media-driven ecommerce.

and digital-first fintechs.

Technology is also setting the scene for other capabilities for disruption and enablement. A key area which is seeing substantial growth is the use of data, where advanced analytics and artificial intelligence are being used to unlock actionable insights to deliver more personalised services to consumers and better serve them, as well as to better manage risk.

In light of the drive towards payments modernisation, and the continual advancements in technologies, the convergence across industry sectors and new partnerships become key to deepening financial inclusion, and driving the shift away from cash.

South Africa is poised for notable change. Digital convergence is allowing consumers to avail services that they traditionally have not had access to in a user-friendly way. This has the potential to create meaningful opportunities for South Africans. Yet, to achieve this, greater collaboration across the payments industry is required. Only by working together to meet the needs of all citizens will a digitally-enabled and more inclusive growth path for South Africa be realised.



Akiva Ehrlich Partner, Risk Advisory **Deloitte Africa**



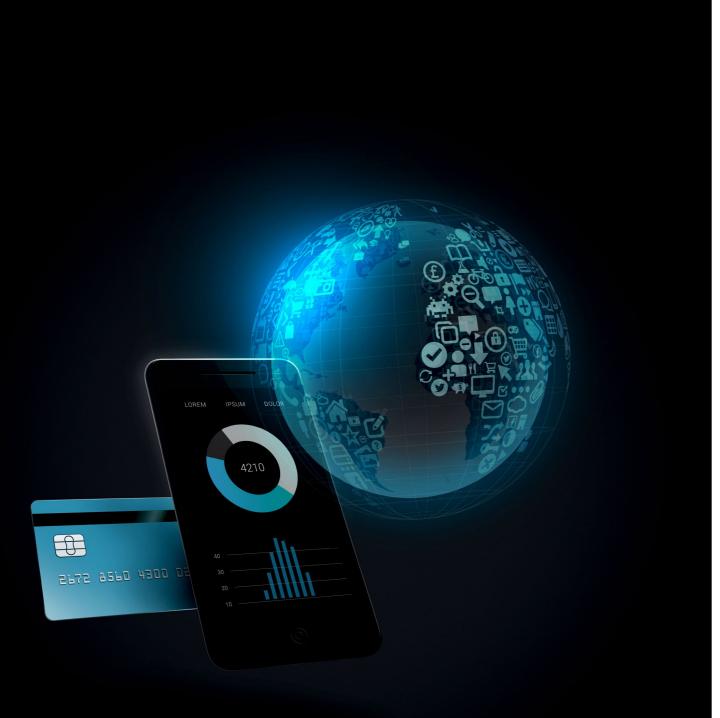
Mark Elliott Mastercard

Fintechs are playing a key role in bringing financial services to the underserved. With their agility and responsiveness to market needs, fintechs have been able to offer some of the most innovative and customer-first payment offerings. As the payments ecosystem opens up to these new players the incumbent financial services companies are working with and learning from these more agile





Division President of Southern Africa



Without solutions that go to the heart of customers' needs and that provide a seamless customer experience, digital adoption will be constrained and the cash reliance cycle will continue.

Introduction

The global payments landscape is rapidly changing and South Africa is set to face a period of unprecedented change over the coming years. Historically, South Africa's payments system was rated amongst the best in the world. More recently, the country has recognised the need for continuous payments modernisation to support the national imperatives outlined in the South African Reserve Bank's (SARB) *Vision 2025*.¹

Financial inclusion is one of the main priorities of the SARB's *Vision 2025*, particularly in terms of digital inclusion. Although 80% of South Africans have a bank account,² most consumer transactions are still cash-based.³ Already a lot of progress has been made to broaden and deepen financial inclusion in South Africa. *Vision 2025* furthermore sets out the imperative for the private and public sectors to collaborate to deepen financial inclusion, reduce the reliance on cash, and encourage the use of digital payment methods to achieve more inclusive and sustainable economic growth.

However, current efforts to improve the informal market's trust in digital financial services have not led to a reduction in cash usage. Cash usage continues to grow in the South African economy, at a rate of 6-10% per annum, ahead of inflation.⁴ This suggests that there is still a long way to go in educating people about the risks of cash and the benefits of electronic payments. Without solutions that go to the heart of customers' needs and that provide a seamless customer experience, digital adoption will be constrained and the cash reliance cycle will continue.

Payments modernisation according to the Payments Association of South Africa's (PASA) *Project Future* is the process of establishing and implementing the target state architecture for the future payments landscape.⁵ The process is defined by goal setting, consultation, and clear management. The payments landscape comprises multiple participants who are inherently interconnected. Therefore, effective modernisation efforts need to touch all ecosystem players. Increasingly, this ecosystem is opening up to new players and previously disconnected industries are converging, largely around payments offerings which serve clients better.

Once the domain of banks, the payments landscape has expanded to include telecommunications companies, retailers and fintechs, with innovative new technologies being employed to offer services that increase customer utility, and that deliver a rich customer experience. The broadening of players within the ecosystem expands the distribution net for payments offerings, with a range of services on offer from payments, money transfers, remittances, insurance to lending products.

The buzz around financial inclusion

The World Bank defines financial inclusion as "individuals and businesses having access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way."⁶ The World Bank further notes that financial inclusion "is a key enabler to reducing poverty and boosting prosperity".

Globally, empirical evidence shows that access to financial products and services such as (but not limited to) payments services, can contribute to less unevenly distributed gains from growth and sustainable economic development.⁷ Simply put, through the adoption of digital business models of firms, and by using technology as an enabler, the poorest in the world are able to tap into the benefits of economic development.

In South Africa, financial inclusion for consumers has shifted from an access issue to a digital adoption and usage issue. For example, there are more than 80 million bank cards in circulation, assisted by the approximately 17 million South African Social Security Agency (SASSA) cards, and a mobile penetration rate of 157%. Yet there is a decline in the use of these accounts and an increased utilisation of cash in the informal market. For informal merchants the challenge remains acceptance of electronic payments, which in turn is restricting growth on the consumer side.⁸



"Financial inclusion is not about having a bank account, it's about financial deepening; it's about a transition away from cash."

John Anderson, Head of Payments, Standard Bank South Africa⁹ Studies show that a bank account is often a condition of employment or a requirement for receipt of social payments. However, many people withdraw money as soon as they receive it, using notes and coins for day-to-day transactions. For example, a survey conducted with social grant recipients who receive funds digitally, found that 90% of fund recipients withdrew all funds from their bank account as soon as they became available.¹⁰ Considering that for 2019/20 the National Treasury budgeted R175bn for social grant assistance, this alone equates to the potential opportunity

to digitise almost R158bn cash in the market

per year.¹¹

The imperative for digital adoption is based both on the cost and risks of using cash. A 2015 Mastercard study entitled *Mastercard Cost of Cash for Consumers in South Africa Study*¹² determined that the cost of cash for consumers is R23bn per annum or 0.52% of South Africa's gross domestic product (GDP), with the majority of this cost carried by lower income earners. Despite an increase in the number of banked adults from 63% in 2011 to 77% in 2015, cash transactions still accounted for more than 50% of the total value of all consumer transactions in the country.¹³

Another Mastercard study entitled *Insights* into the Informal Economy Report¹⁴ further noted that while over 51% of South Africa's informal enterprises had encountered strong customer interest in card payments, around 90% of them remain cash-only businesses. This loyalty to cash often hinders the growth of these small, informal businesses. It also has been well documented that this persistence of cash usage causes material costs to society, ranging from lost tax revenues and direct cash handling costs to being a major obstacle to fostering financial inclusion. Not only is cash often the backbone of the "shadow economy", but its associated illegal activities in turn impose serious societal costs in the form of crime and corruption.



"Cash is a huge risk. Shoprite had 400 armed robberies and SPAR 150 during 2018. Retailers need additional security and have become the front line of the banks."

Rick Wheeler, Group Retail Systems Manager, SPAR¹⁵

Why does cash continue to dominate?

Cash offers many benefits and consumers' attachment to cash will not change significantly until digital payment alternatives can compete with these perceived benefits.¹⁶ For most consumers, cash is immediate, simple to use and easily understood, accepted almost everywhere, with no apparent hidden fees, and can generally be trusted. In addition, using cash requires neither digital literacy nor access to the internet through cellular data or WiFi.

Digital alternatives to cash need to be able to offer the same perceived features in order to compete successfully. According to Mastercard's *Cost of Cash Study* the use of cash comes with security risks and high costs, both direct (ATM, branch costs and cash-back at Point of Sale) and indirect costs (travel costs, time-related costs, foregone interest and theft) for consumers.¹⁷

Deloitte Africa research, which included interviews with 34 payments experts from 22 different institutions within South Africa, found that key inhibitors to digitising the informal economy included not only inadequate data connectivity and high data costs, but also a lack of trust in cash alternatives and low levels of financial literacy.¹⁸

The consumer's relationship with cash is a complex and multifaceted issue, one which may not be fully understood. It includes the perception among customers such as informal traders that their small businesses do not warrant a bank account, or may not qualify for one; or their wariness to enter the financial system due to bank charges and the risk of being known for tax purposes.¹⁹

"I don't think there is fundamentally an unbanked problem. There is a trust problem, a debit order problem, a loan problem. Until this is addressed by the banks, an individual who gets paid on the 25th will continue to withdraw their salary and their loan money in full. They need the reassurance that they have all their money up front so that they can survive the month."

Peter Berry, Founder of Flash²⁰

The lack of digital adoption has often been attributed to high bank fees; however, with new innovative banking entrants and increased competition in the lower income market, many banks now offer accounts at low to no costs, as well as free transactions. Nonetheless, customer behaviour has not changed.

Some big questions remain. These include: What can be done to change behaviour in the informal sector? What education about alternative payment methods is required to change consumer behaviour? What product innovation is required? What can different industry players do to drive this change? A further inhibitor to financial inclusion through digital financial services relates to the lack of acquiring infrastructure in the informal sector. Payment acceptance points are limited. Although cards are widely accepted in the formal market, this is not the case in the informal market. Smaller informal traders do not accept card or mobile payments, thereby restricting their customers to cash transactions. Traditional acceptance channels, such as physical Point of Sale (POS) devices, are perceived as expensive, especially by micro enterprises. For example, although rural and township residents were found to use cards for 60% of their transactions at formal retailers, only 4% of transactions were card-based at informal retailers.²¹

Cash is still king in the informal economy. This is given the perceived costs of accepting mobile and digital payments; a lack of knowledge and awareness about solutions and the benefits of going cashless; a lack of formal banking facilities; the belief that cash is simpler to budget and handle (for small amounts); but also given that it facilitates the evasion of tax payments; and as still a relatively high share of consumers (45%) receive cash salaries.²² The latter too highlights the need for innovation in the disbursement space.

Importance of innovating for the customer

Learnings from other markets show that solutions that place the customer at the centre of product and service design have been particularly successful. This is true where the customer experience is one of seamlessness and ease; and where the focus is not on the payments mechanism but on the service itself. The payment becomes virtually invisible in the process of a transaction and simply enables the transaction.

The trust relationship between customer and service provider is also crucial to ensure customer adoption. Fintechs tend to be superior in customer experience, whereas the traditional banks still hold the trust relationship. Yet fintechs and non-banks can play a vital role within the ecosystem in driving the adoption of digital payments and financial services solutions.23

Meeting customers' needs and offering them a superior experience is key to driving usage of digital payment products. Products that answer specific customer challenges around making or receiving payments in a seamless and easy way offer interesting options for increasing digital adoption. Whilst the industry is already working hard to introduce new and appropriately designed products for the underserved population, such as Quick Response (QR) code payments, more can be done to understand the needs of these customers and design products that really speak to their requirements. Add to this enhanced education on and usage of electronic payments, and greater adoption of digital products is likely to be seen, thereby reducing the reliance on cash.



"Our highest priority is around improving the consumer experience either in the speed of the transaction or by removing friction."

Mark Elliott, Division President of Southern Africa, Mastercard²⁴

South Africa is not short of innovative payments product offerings.²⁵ However, much of the innovation is taking place within silos. Banks are using application programming interface (APIs) within their own environments, building an array of interesting products including geo-payments, social media payments, and mobile money sending. In contrast, Mastercard's Masterpass solution, is among one of the few interoperable innovations (see case example 2).

Outside of the banking network other players are equally innovative, with retailers bringing money transfer services to the market at very low fees, remittance fintechs operating mobile-only crossborder services, and various e-wallet offerings finding foot across retailers and telcos.

An important area of innovation, and core to the payments modernisation journey, is the move towards instant payments. Instant payments systems are being implemented across many geographies as part of their payment modernisation processes, replacing daily batch processing with real-time systems. Instant payments can contribute meaningfully to financial deepening as the implementation of these systems has been shown to coincide with a decrease in cash in the economies where they have been rolled out. Instant payments begin to challenge cash most effectively when combined with various overlay services, such as proxy services and request to pay.

The prospective availability of these digital overlay service solutions to customers could rival cash as an attractive medium of exchange.²⁶ For consumers, this means being able to execute a payment instantly, at any time of the day with the confidence and knowledge that it has been safely received by the recipient.

Case example 1: Instant payments²⁷

Instant payments with proxies enable a person-toperson payment to be made on a mobile phone, in real time, without the need for the recipient's bank account number. A proxy identifier is used instead, such as a cell phone number. Also, the payment receiver (e.g. a small business owner) can access an app on their mobile phone to send a requestto-pay invoice to a client on completion of the job. The client can then respond immediately with authorisation of the payment, which is then made

This demonstrates the sweet spot that can be achieved when innovative technologies like instant payments with overlays combine with mobile technology, bringing in fintech players with customer-serving front-end applications, connecting to traditional banking services through APIs, and accessing the real-time payment system to deliver the payment instantly. This brings speed and efficiency into everyday transactions, building trust and reliance on alternatives to cash and ultimately supporting financial deepening.

Success thus must include not only appropriately designed products, but also education and acceptance infrastructure that enables the consumer's seamless experience and builds trust in the system.²⁸

Successful service providers also recognise the importance of using data to surface relevant insights about their customers. The use of this data adds significantly to the potential to innovate and provide customer-first solutions. One such example is how Standard Bank, through its acquisition of fintech firm Nomanini, is looking to use pre-paid airtime spend, for example, as a data proxy for assessing risks associated with a particular merchant and developing credit scores. With the use of such data, this simple financial track record could assist with overcoming the perceived lack of creditworthiness for smaller merchants.²⁹



Levers for change

It is evident that the modernisation of payments is more than just a payments industry issue, and requires a broader government and financial industry focus. The following areas as enablers to drive change in the industry should be considered by ecosystem players:



1. Regulation

Governments and central banks with a strong focus on open, competitive, and, consequently, more innovative payments ecosystems are proving to be successful in driving growth and expansion of their digital economies. Regulators need to create an open and competitive market where all players compete on a level playing field and where the regulatory burden is not too heavy, whilst not jeopardising the safety and stability of the financial system. Regulation is both an enabler of change but may be perceived to hinder or slow the pace of change, such as the ability of industry players to offer payment solutions and to innovate.³⁰

The South African National Payment System (NPS) Act 78 of 1998 is currently under review, and the proposed changes will bring about the development of the payments landscape. One of the recommendations would allow non-banks (e.g. telcos and retailers) to issue e-money and perform clearing and settlement of transactions without needing to partner with a bank.³¹ There is a belief that the lower end of the market trusts telcos and retailers more than banks, which creates a great opportunity for these players to leverage this trust and offer more payment services, addressing some of the reliance on cash.

Interchange plays a critical role in balancing the two-sided card market (issuing versus acquiring) and also in driving strategic growth. It is in the card market that much innovation is being seen. This is particularly the case with the introduction of QR scanning and Near Field Communication (NFC), and the growth in wearable devices linked to card.

To leverage these types of new and innovative digital payments, there is a need for more flexible interchange rates structures to incentivise investments in growing access to and

usage of electronic payments. The SARB will need to consider updates to the card interchange rates and structures to ensure these remain relevant to the current and future market needs.

Ļ	

2. Interoperability

Interoperability is a SARB Vision 2025 goal and core to the success of payments modernisation in South Africa.³² The goal states that improved communication and interoperability between payment systems will help to prevent fragmentation and lead to a more harmonised and competitive payments ecosystem.

Whilst there has been innovation in digital payments, it is often seen in silos and the lack of collaboration between the banks has stifled innovation at an industry-wide level. The lack of interoperability in the South African market is furthermore notable, with many of the banks offering innovative services such as geo-payments, but all in a closed loop environment. It is also seen as one of the key challenges for adoption of mobile payments in South Africa. Mastercard's Gabriel Swanepoel believes that interoperability can be improved through the implementation of QR codes.



"We are crossing the bridge between established traditional payment ecosystems and new payment technology. We recognise that we need to provide the rails to bring true interoperability for all communities."

Gabriel Swanepoel, Vice President -**Business Integration, Mastercard³³**

A lack of industry standards is one of the key reasons for poor interoperability. In non-card payment offerings, the industry has multiple deployments of varied technologies. For example, multiple QR code standards and integrations are required at POS, with multiple NFC standards. Each deviation from standards or new integration causes immense roll-out delays in implementation and leads to costly integration and deployment. Despite a lack of QR code standards, Mastercard's Masterpass enables scanning of different QR code formats, which has created interoperability in the QR code ecosystem.



Case example 2: Mastercard's Masterpass³⁴

As more consumers and merchants are interested in innovative ways to transact, Mastercard research revealed that 73% of banked consumers are ready to pay with their phones, and 44% of informal merchants are interested in mobile payment apps.

In order to improve access to digital payment channels in rural and peri-urban areas, Mastercard launched Masterpass – a digital payment service – in 2014. Masterpass enables consumers to transact with any bank card through a secure mobile app by scanning QR codes or entering Unstructured Supplementary Service Data (USSD) codes. QR-code based technology has several advantages for both consumers (ease of access, convenient, safe, seamless) and merchants (easy to implement, low-cost).

Mastercard acted as a market organiser and enabler for the adoption of QR code technology, partnering with all the major banks, MNOs, PSPs, billers, merchants and major mobile and digital payments providers - namely SnapScan and Zapper – to create an interoperable QR code ecosystem. The platform further enabled the creation of more robust service offerings for consumers, while incrementally expanding the country's infrastructure to bring more people into the formal economy.

Mastercard is focusing on specific verticals that show a heavy reliance on cash usage, specifically bill payments, data and airtime top-ups, as well as payments in the face-to-face environment; and on solutions that mimic cash in their ease of use.

A possible additional solution within the payments ecosystem would be to create a standards-setting body, determining and enforcing standards across the industry





"The lack of interoperability between store of value mobile operators and varied standards is preventing the growth in mobile payments as tender. As Shoprite, we keep on needing to build over and over again. Each little project takes six months, costs millions and the return is not justifiable."

Tremaine Hechter, Previously General Manager of Financial Services, Shoprite³⁵



3. Infrastructure

It is critical that the correct infrastructure is put in place to enable digital payments, thereby reducing cash usage and improving financial inclusion. South Africa has a well-established payments infrastructure, although there is acknowledgement at industry level that it requires improvement.³⁶ Innovation is increasingly important across both card and electronic fund transfer rails, especially considering services that make payments faster and safer.

As already mentioned, many consumers rely on cash because the infrastructure that would support alternative payment mechanisms is not currently in place. The time taken for deployment of NFCenabled devices or QR codes may hinder scope for broad-based national uptake of mobile payment services, keeping the need for cash in the system. Although penetration of mobile is high in South Africa, the use of mobile for banking purposes is not.

There are several reasons for this, which point to a need for infrastructure enhancement. Data costs are high and network connectivity is not ubiquitous across the country. Connectivity is still biased towards metropolitan areas and, even so, the cost of access is too high for many to utilise mobile for payments purposes. And, although mobile phones are used widely, many of the phones in use are feature phones, rather than smart phones, which do not support the applications required for mobile banking. Innovative payment and financial services offerings are needed which will operate using USSD technology, a simpler format for sending transaction instructions, and which is widely used on feature phones across the country.

The future infrastructure for payments in South Africa needs to be flexible, inclusive, low cost and scalable. These are key imperatives for infrastructure design as laid out in PASA's **Project Future**.³⁷ The objective is to establish a target state architecture for the future payments landscape. The concept aims to achieve the goals set out by the SARB's **Vision 2025** policy document, as well as key industry goals. A low-cost, fast payment system, overlaid with mobile payment services could be the answer to addressing a wide variety of current cash-dependent use cases.

٥٠

4. Customer needs and financial education

Current banking products focus on payments and transactions, whereas the needs of customers, particularly lower income communities, are more complex. Versions of insurance (beyond funeral savings), savings, remittance and borrowing products all exist in informal formats, but can have high risks and costs attached.

Service providers need to understand what drives consumer behaviour, and design solutions and products to truly meet these needs and contexts. A Deloitte publication *Payments Disrupted*³⁸ noted that non-bank payment providers (e.g. fintechs) are often able to offer a simpler, swifter user experience, for example, by using mobile apps. In contrast, banks, with their heavier compliance obligations, have traditionally invested more in security and resilience. Fintechs are often praised for their ability to address a specific customer need, rather than trying to be everything to everyone.

Furthermore, financial consumer education and consumer protection play a critical role in encouraging the sustainability of financial inclusion. Improved understanding of the benefits, costs and risks of financial services increases the likelihood for the beneficial use of appropriate financial services. Numerous studies point to a lack of understanding of the benefits of digital payments. Work needs to be done to clarify some of the misconceptions around electronic money, including cost, security, and ease of access.

Building on basic financial literacy, there is a need to empower consumers and drive education initiatives around credit, access to financial tools and how to use them, as well as specific products, and new emerging digital solutions.

Where to from here?

Achieving financial inclusion relies on several factors that this paper has addressed. It is critical to establish mechanisms to drive cash out of the system, through improving digital adoption. Adoption will be enabled through product solutions that truly answer customer needs. In addition, infrastructure must be in place – whether through traditional rails or newer mobile-enabled technologies – to support the widespread roll-out of technologies that underpin adoption.

There is a continued trend of industry convergence with non-bank players entering the payments landscape. Large retailers are launching their own payment services and credit cards, using customer data to offer products that meet customer needs and deepen brand loyalty. At the same time, telcos are looking to offer a range of financial products to their customer base, and have had great success in targeting the underbanked segments in developing countries through mobile banking. Additionally, fintechs are entering the landscape with niched products that answer very specific customer needs, with great success.

It is evident that industry convergence in the payments space is inevitable and will become further enabled by regulatory change, if European and United Kingdom examples of open banking are followed. But payments ecosystem players need to rethink how they both compete and collaborate. The convergence across industry sectors requires new partnerships – partnerships that put the customer first. These will need to be partnerships that create one-stop-shop type solutions that recognise the needs and solve for the pain points of the consumer, i.e. a payments solution to pay anywhere, rather than across multiple apps or mechanisms. This requires the financial service industry to rethink their business models with a keen focus on industry partnerships.

If the converging industry players can move towards greater interoperability and partnerships, the end result must be an increase in payments offerings which answer customer needs with greater effect. This in turn will have the benefit of improving the customer experience, increasing adoption of digital payments, thereby reducing cash dependency, and ultimately leading to an increase in financial inclusion in South Africa.



0000 0000 0000 0000

Endnotes

¹ See South African Reserve Bank (SARB), not dated. "The National Payment System Framework and Strategy – Vision 2025". Available [Online]. https://www.resbank.co.za/RegulationAndSupervision/NationalPaymentSystem(NPS)/Documents/ Overview/Vision%202025.pdf. This vision aims to address a number of the challenges and proposals towards a more sustainable and inclusive growth path as identified in South Africa's 2012 released National Development Plan 2030.

² Finscope, 2019. "How South Africans are leveraging informal and formal financial markets", FinScope SA 2018 Fact Sheet. Available [Online]. http://finmark.org.za/wp-content/uploads/2019/01/FMT_Fsc_Leavebehind_CB4.pdf

³ For example see Deloitte Africa, 2019. "Regenesis of SA payments: What needs to change?", July. Available [Online]. https:// www2.deloitte.com/za/en/pages/risk/articles/regenesis_of_south_african_payments.html; also see Van Zyl, G., 2017. "Cash still king in SA as coins, notes make up 50% of consumer transactions", 4 May 2017, BizNews, Available [Online]. https://www. biznews.com/ wef/wef-africa/2017/05/04/cash-king-sa-coins-notes

⁴ McKane, J., 2018. "ATMs and cash here to stay in South Africa". Mybroadband, 13 December 2018. Available [Online]. https:// mybroadband.co.za/news/banking/289202-atms-and-cash-here-to-stay-in-south-africa.html

⁵ Project Future is a PASA initiative to establish a target state architecture for the future payments landscape. The concept aims to achieve the goals set out by the SARB's Vision 2025 as well as key industry goals. See Payments Association of South Africa website, "Project Future", Available [Online]. http://www.pasa.org.za/resources/project-future

⁶ World Bank website. "Financial inclusion: Overview". Available [Online]. https://www.worldbank.org/en/topic/ financialinclusion/overview

⁷ Demirguc-Kunt, A., Klapper, L., Singer, D., 2017. "Financial Inclusion and Inclusive Growth A Review of Recent Empirical Evidence". World Bank Policy Research Working Paper 8040. Available [Online]. http://documents.worldbank.org/curated/ en/403611493134249446/pdf/WPS8040.pdf

⁸ Deloitte Africa, 2019.

⁹ Ibid.

- ¹⁰ Finmark Trust, 2016. "Why Use Accounts? Understanding account usage through a consumer lens", Available [Online]. https://cenfri.org/wp-content/uploads/2016/11/Why-use-accounts-understanding-account-usage-through-a-consumerlense_FinMark-Trust_2016.pdf
- ¹¹ National Treasury, 2019. "2019 Budget: Estimates of National Expenditure", Available [Online]. http://www.treasury.gov.za/ documents/National%20Budget/2019/enebooklets/Vote%2017%20Social%20Development.pdf
- ¹² Mastercard, 2017a. "Cash costs South African consumers R23 billion a year Mastercard study", December, Mastercard Press Release. Available [Online]. https://newsroom.mastercard.com/mea/press-releases/cash-costs-south-africanconsumers-r23-billion-a-year-mastercard-study/

¹³ Van Zyl, 2017.

- ¹⁴ Mastercard, 2017b. "Low Card Acceptance at Informal Enterprises Despite High Consumer Demand Mastercard Research", 12 December, 2017, Mastercard Press Release, Available [Online]. https://newsroom.mastercard.com/mea/press-releases/ low-card-acceptance-at-informal-enterprises-despitehigh-consumer-demand-mastercard-research/
- ¹⁵ Deloitte Africa, 2019.

¹⁶ Ibid.

¹⁷ Mastercard, 2017a.

¹⁸ Deloitte Africa, 2019.

- 2017. "Improving Financial Inclusion in South Africa". Available [Online]. https://www.bcg.com/publications/2017/ globalization-improving-financial-inclusion-south-africa.aspx
- ²⁰ Deloitte Africa, 2019.
- ²¹ Mastercard, 2017b.

- ²³ See for example Deloitte Africa, 2019; and Harvard Business Review Analytic Services, 2019. "In the game: Traditional Financial Institutions Embrace Fintech Disruption", Pulse Survey, Harvard Business School Publishing; and Rand Merchant Bank, 2019. "The SA Fintech in Motion Report". Available [Online]. https://www.rmb.co.za/files/pdf/other/fintech-report.pdf
- ²⁴ Interview with Mark Elliott, Division President of Southern Africa, Mastercard on 12 August 2019.
- ²⁵ Deloitte Africa, 2019.
- ²⁶ Ibid.
- ²⁸ Mastercard, 2018. "The Next Frontier in Financial Inclusion: Moving Beyond Access to Usage". Available [Online]. https:// newsroom.mastercard.com/wp-content/uploads/2019/02/The-Next-Frontier-in-Financial-Inclusion Access-to-Usage-Final.pdf
- ²⁹ Rumney, E., 2019. "Standard Bank targets its smallest shops in fintech deal", Moneyweb. Available [Online]. https://www. moneyweb.co.za/news/tech/standard-bank-targets-its-smallest-shops-in-fintech-deal/
- ³⁰ Deloitte Africa, 2019.
- ³¹ SARB, 2019. "Review of the National Payment System Act 78 of 1998", July. Available [Online]. http://www.treasury.gov.za/ publications/other/NPS%20Act%20Review%20Policy%20Paper%20-%20final%20version%20-%2013%20September%202018.pdf
- ³² SARB, not dated.
- ³³ Interview with Gabriel Swanepoel, Vice President Business Integration at Mastercard on 31 July 2019.
- ³⁴ Mastercard, 2017b and also Mastercard, 2019. "Vodacom launches VodaPay Masterpass app for safe, convenient digital payments". 8 July 2019. Available [Online]. https://newsroom.mastercard.com/mea/press-releases/vodacom-launches-vodapay-masterpassapp-for-safe-convenient-digital-payments/
- ³⁵ Deloitte Africa, 2019.
- ³⁶ Ibid.
- ³⁷ See PASA website.
- ³⁸ Deloitte, 2015. "Payments Disrupted: The emerging challenge for European retail banks." Available [Online]. https://www2.deloitte. com/uk/en/pages/financial-services/articles/payments-disrupted.html

¹⁹ See for example Deloitte Africa, 2019; and see also Kessler, K., Ikdal, A., Naidoo, E., Portafaix, A., Hendrickson, J., Boje, A., and Rabe, D.,

Contacts

Akiva Ehrlich

Partner, Risk Advisory Deloitte Africa akehrlich@deloitte.co.za Tel: +27 11 806 6175

Paula Buchel

Associate Director, Strategy & Operations Deloitte Africa pbuchel@deloitte.co.za Tel: +27 76 020 1009

Albertus Nel

Senior Manager, Risk Advisory Deloitte Africa anel@deloitte.co.za Tel: +27 82 359 2398

Dr Martyn Davies

Managing Director: Emerging Markets & Africa Deloitte Africa mdavies@deloitte.com Tel: +27 11 209 8290

Hannah Edinger

Associate Director, Africa Insights Deloitte Africa hedinger@deloitte.co.za Tel: +27 11 304 5463

Mark Elliott

Division President for Southern Africa Mastercard mark.elliott@mastercard.com

Birgit Deibele

Communications Director, Southern Africa Mastercard birgit.deibele@mastercard.com Tel: +27 11 780 3958



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms or their related entities (collectively, the "Deloitte network") is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

© 2019. For information, contact Deloitte Touche Tohmatsu Limited. (Vee)