

PROJECT FUTURE

South Africa's Digital Payment Initiative to Rival Cash

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The payments industry is in a state of flux across the globe as consistent advances in computing and telecommunications allow for expanding payment and transactional innovation. As economies across Asia lead the way in taking advantage of real-time, mobile centric payment solutions, the move towards a truly digital economy where electronic payments challenge cash's position as the "king of payments" is becoming a reality.

As India and China continue to pursue new technological and architectural payment advances to move retail payments into the digital age, an infrastructural drive has begun in South Africa to modernise it's payment network and begin the transition away from cash. In this paper, Monocle reviews recent publications and road-maps issued by the regulator with regard to digital payments in South Africa and provides insight into how banks can prepare for the anticipated changes in the retail payments industry.

PROJECT FUTURE – MODERNISED REAL-TIME ELECTRONIC PAYMENTS FOR EVERYONE

The release of the South African Reserve Bank's (SARB) Vision 2025 showcased the Central Bank's intention to address the inefficiencies in the National Payment System (NPS), while also promoting financial inclusion, interoperability, and flexibility. While South Africa led the way as an early adopter of Real Time Clearing (RTC) in 2006 with the launch of the Realtime-Retail Payment System (RT-RPS), the capability of the system to provide real-time posting and confirmation of a payment transaction has been underused, due to a slow rate of adoption. The partial uptake of RTC among banks, as well as the perceived risk of instant payments, has resulted in higher fees compared to the traditional electronic funds transfer (EFT). However, the interbank payment delay associated with EFT means South Africa is lagging behind when it comes to instant payments.

In light of this, the announcement and release of publications regarding Project Future by the Payments Association of South Africa (PASA) should cause payment stakeholders to sit up and take notice that South African regulators are looking to modernise the current payments ecosystem. PASA are mandated by the SARB to manage and regulate participants in the payment clearing and settlement systems and have outlined their vision to modernise the NPS by designing an easy-to-use, low cost, real time electronic payments platform, as well as establishing a unified payments system.

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Characteristics of the Project Future Solution

- Low transaction cost
- Easy to use
- Realtime experience
- Interoperable
- Easy to obtain
- Trust and certainty
- Universally accepted



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Project Future aims to support small business and improve formalisation of the economy through mobile enabled payment options that ultimately offer an alternative to cash. The modernisation of the payment system should encourage the adoption and development of payment innovations such as QR code, Near Field Communication, USSD payments, and e-money, which offer a viable alternative to card and cash payments. Furthermore, Project Future aims to allow third party payment providers to safely access the payment network without compromising system integrity through practices, such as screen scraping and sorting-at-source, where payments are redirected, by the third party, to remain intrabank to avoid being cleared between two banks.

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The Rapid Payments Programme (RPP), led by BankservAfrica, is the phase of Project Future where the functional system, along with key features, will be established and embedded. BankservAfrica, South Africa's authorised interbank clearing participant for retail payments, will serve as the Payment Clearing House Operator for the low-cost electronic payment ecosystem. In order to promote the commercial viability of the system and establish the functional system itself, the Rapid Payments Programme has set out key functionality and architecture required:¹

- Low-cost, instant payment capability with instant notification of payment clearing that is agnostic of the store of value (including support for both transactional bank accounts and prepaid payment instruments like e-money), while being final and irrevocable. This would include the adoption and upgrade from ISO8583 to the globally accepted ISO20022 message standard to improve standardisation of remittance data.
- 2. A seamless addressing or proxy capability such as using mobile numbers and ID numbers to allow for beneficiary registration without the need for a bank name, account number or branch code.
- **3.** A request to pay (RtP) capability to allow merchants to send payment information to the payer to promote a seamless payment experience.
- 4. A platform or layered architectural approach that will allow for separation of overlay products and services from core payment capabilities, such as clearing and settlement, and allow for payment initiation services through Application Programming Interfaces (APIs). This should enable the existing architecture to be leveraged together with new services and overlays.
- 5. Fraud and advanced analytics to drive trust in the system and promote behavioural shifts towards digital payments, especially among underserved South Africans.



1. Payments Association of South Africa, 'Modernised Real-time Electronic Retail Payments: A Case for Change for South Africa', 2019, www.pasa.org.za/ docs/default-source/default-document-library/modernisation/modernised-real-time-electronic-payments_-a-case-for-change-for-south-africa_. pdf?sfvrsn=2

PRIORITISING DIGITISATION:

THE NEED TO MOVE AWAY FROM CASH TOWARDS A DIGITAL ECONOMY

COSTS

In line with the Reserve Bank's vision of greater financial inclusion, Project Future aims to move South African consumers away from their reliance on cash for day-to-day transactions. While 80% of South Africans have a bank account, 73% of retail payment volume is cash based.² This trend is specifically pronounced amongst lower income South Africans, with the direct costs of cash having an increased proportional impact on these consumers' financial positions. To put this in perspective, South Africans pay R9.1 billion in transactional fees each year.³ Furthermore, the often-forgotten indirect costs of cash continue to leave these consumers outside of the digital economy. This trend is highlighted by the World Bank, which reported that 33% of South Africans with a bank account will withdraw all their money as soon as it is deposited while, 53% do not use their bank card or the electronic payment services offered to them.^₄

Direct Costs 5

- ATM cash transaction fees
- Retail remittance withdrawal fees
- Branch cash transaction fees

Indirect Costs

- Investment opportunity lost
- Interest forgone
- Inflation
- Time, travel and storage

South Africa's continual reliance on cash is unsustainable if the economy is to be modernised.

South African payment regulators have also raised concerns around tax evasion and illicit money flows that are facilitated through cash, and have further commented that South Africa's continual reliance on cash is unsustainable if the economy is to be modernised.

OPPORTUNITIES

A move away from cash would allow banks to further reduce maintenance of unprofitable services such as ATM and Branch infrastructure as they move towards digitising their bank experience. The modernisation of the national payment system is a unique opportunity for banks to promote electronic payments amongst their customer bases. In turn, this will also provide banks with the opportunity to expand customer engagement and promote further banking products and services to customers who currently use their accounts as intermediary stores for their funds. While Project Future looks to minimize payment fees the solution has limited risk of cannibalising other profit streams such as credit and debit card operations amongst these customers.

1. Payments Association of South Africa, 'Modernised Real-time Electronic Retail Payments: A Case for Change for South Africa', 2019, www.pasa.org.za/ docs/default-source/default-document-library/modernisation/modernised-real-time-electronic-payments_-a-case-for-change-for-south-africa_. pdf?sfvrsn=2

2. Ibid

^{3.} Genesis Analytics, 'Quantifying the True Cost of Cash in South Africa', 2015, www.genesis-analytics.com/projects/quantifying-the-true-cost-of-cash-insouth-africa

^{4.} The World Bank, 'Achieving Effective Financial Inclusion in South Africa: A Payments Perspective', 2014, www.treasury.gov.za/publications/other/ 5. Genesis Analytics, 'Quantifying the True Cost of Cash in South Africa', 2015, www.genesis-analytics.com/projects/quantifying-the-true-cost-of-cash-insouth-africa



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BENCHMARKING THE ELECTRONIC PAYMENT LEADERS

One of Project Future's aims is to provide a viable alternative to cash for South Africans and it is important to remember that the programme has been influenced and guided by the successful payment advances seen throughout Asia. In 2019, representatives from SA's major banks and regulators completed their Payments Study Tour of Asia. Stakeholders in the payment system of South Africa should take note that PASA's target state will be shaped by these payment networks and ecosystems that are setting the global benchmark.



From a socio-economic perspective, India is very similar to South Africa making it a worthwhile comparison.

The Indian payment ecosystem - developed and driven by the Reserve Bank of India - has been recognised as one of the best in the world, capable of rivaling the country's historical reliance on cash transactions in the past few years. From a socio-economic perspective, India is very similar to South Africa making it a worthwhile comparison. India's success can be attributed to the interoperability and ease of use of their payment system, which has seen adoption initially across the banking sector and now amongst non-bank prepaid payment instrument providers as well. The key to this success was the introduction of the **Unified Payments Interface** (UP) – a universal API that provides a single point of integration – on top of the instant payment network – Immediate Payment Services (IMPS). This mobile platform facilitates inter-bank transactions and decouples the initiation of payments from the bank, allowing third party mobile apps to collect and submit debit instructions directly to any of the customer's bank accounts without banks being actively involved. FinTechs and technology firms have now accessed the network that has enabled the functioning of electronic peer-to-peer payment services. PayTM, Google Pay and social media platforms like WhatsApp have brought their P2P payment services to the Indian payment environment. This all serves to promote the interoperability of the payment network. Europe and the UK has seen similar progress in banking with the introduction of the 2nd Payments Service Directive and Open Banking initiative, respectively.

The key to this success was the introduction of the Unified Payments Interface (UP) – a universal API that provides a single point of integration – on top of the instant payment network – Immediate Payment Services (IMPS).

Furthermore, payments processed through UPI do not require the exchanging of elaborate bank details but rather allow payments to be made using the customer's identity number, mobile phone number, QR codes or virtual payments address (that would be provided by their bank). Similar addressing and proxy capability have been seen in Thailand and Singapore, where payment providers and regulators have recognised that simplicity and ease of use must underpin the customer experience.

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SOUTH AFRICAN BANK PREPARATION FOR THE PAYMENT FUTURE STATE

Banks should assess their payment infrastructure with considerations to the components of the Rapid Payments Programme.

As interoperability is such a pivotal element of the Rapid Payments Programme, it would be reasonable for banks and other payment service providers to expect pressure from regulators to integrate with the new solution. A lack of adoption will undercut the required economies-of-scale and ubiquity of the system. An infrastructure review and readiness assessments should focus on payment encryption, authentication, integration capabilities, and interface security to access any open API layers in the NPS. Furthermore, banks will need to ensure they will be able to meet the NPS's real time clearing and API benchmarks for transactional volume, speed and reliability (i.e. uptime).

Partnerships with FinTechs and non-bank financial services will become increasingly important in improving a bank's digital reach, allowing their customers to use various payment methods.

An important facet of Project Future is the drive by regulators for broader participation of nonbanks. The current lack of long-term vision regarding the regulatory future of mobile money and prepaid payment instruments like ewallets, as well as restrictive regulatory requirements, has not encouraged competition in the current payments industry. Project Future and the review of the NPS Act look to address these issues and provide regulation regarding non-bank deposit taking and Know Your Customer (KYC) obligations. It will therefore be important that banks are prepared for greater competition in the payments and deposit taking industry and actively seek advantageous collaboration with FinTechs, Telecoms and Retailers.

Banks should start to prepare their marketing initiatives and adoption strategies to drive behavioural change with their customers, as well as with merchants.

While the impact of a low-value, instant payment solution may take several years to materialise, banks participation and advocacy will be critical in promoting adoption of the new payment system among their customers. While each bank's strategy will differ, considerations around simplicity, trust and accessibility are critical. One of the main drivers of electronic payments is the smartphone and internet access. However, barriers to entry, such as South Africa's high data costs and low penetration of smartphones, should be considered. Reliable but overlooked solutions such as USSD messaging should also be considered alongside smartphone mobile applications.

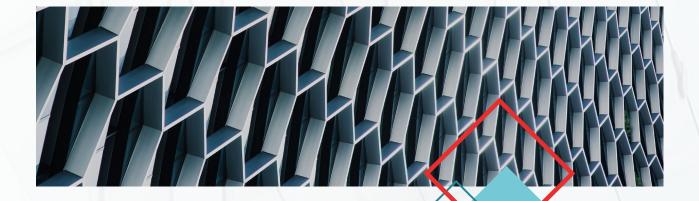


The increased volume of payments along with the data that accompanies it will provide increased opportunity to employ advanced and machine learning analytics.

Banks will also need to anticipate the increase in volume of payment transactions that Project Future hopes to capture. Robotic process automation, advanced customer analytics and machine learning have continued to prove powerful tools in banking, as large structured datasets possessed by financial institutions leverage themselves well for data mining. Advanced analytics will allow banks to build comprehensive customer profiles that enable targeted customer acquisition and retention, as well as product cross and upselling. Furthermore, this technology will need to be utilised to detect, prevent, and combat fraud and anti-money laundering activity.

Project Future's high-level flight plan for the Rapid Payments Programme looks to start the build and testing phase of upgrading the payments network throughout 2021.

The existing architecture will continue to be enhanced to allow banks to sweat out existing capabilities and drive their internal modernisation at their own pace. Monocle believes that the correct approach will be proactive engagement with regulators and other stakeholders, as well as a concerted effort to meet the challenges of instant, mobile payments to reap future opportunities. The threat of increased competition alongside the success of companies like PayTM in India and Alipay and WePay in China, are clear examples that payment innovation is out to disrupt traditional banking payments, while also providing opportunities for banks to drive stronger relationships with their customers and merchants.



ABOUT MONOCLE

Monocle is an independent, results-focused management consulting firm specialising in banking and insurance with almost two decades of experience working alongside industry leading banks and insurance companies around the world. With offices in London, Amsterdam, Cape Town and Johannesburg we service our clients across the United Kingdom, Europe, Scandinavia, Asia, South Africa and much of Sub – Saharan Africa.

We design and execute bespoke change projects, from start to finish, bridging the divide between business stakeholders' needs and the complex systems, processes and data that sit under the hood. We offer several unique capabilities to our clients, which have been forged over time through the combination of a highly specialised skillset and extensive experience working with the systems, processes and people that are at the heart of the financial services industry.

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