Information technology report

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Brenda Niehaus / Group chief information officer

Overview

We have achieved a number of milestones in the implementation of our IT transformation programme, which is designed to create a digital financial services group able to adapt continuously to client demands for increased availability and higher levels of flexibility and agility.

In response to the speed at which client demands are changing, we are enhancing our client interfaces and introducing digital products and services, while simultaneously replacing our legacy systems.

The transformation of our IT is replacing aging legacy systems with new technologies that position us competitively in the changing world of financial services. Implementing a programme of this magnitude would not have been possible without also changing the way we work in IT and the way Standard Bank staff interact with the new systems.

The group chief information officer (CIO) is a member of the group management committee. The business unit CIOs report to their chief executives as well as to the group CIO to ensure that the IT strategy is aligned and integrated with the business strategies. The group CIO and IT executives are suitably qualified, have access to the board and executive management, and serve as a bridge between IT and the group. A number of key executive appointments have enhanced our IT operating model.

We continue to strengthen the group's IT governance structures, achieving significant value and alignment through robust executive and non-executive oversight and support for IT. Independent subject matter experts are co-opted standing invitees to the group IT (board) committee. They submit an independent review of our IT governance domains to the board for its consideration. Key observations are that significant progress has been made in governance, management and IT operations improvements, and that the group is well on its way to becoming a mature, well-run and leading IT organisation.

In the rest of Africa, subsidiary boards have delegated the authority for IT governance to either board IT committees or board risk committees. IT steering committees have been established in Kenya, Ghana, Namibia, Nigeria and Zimbabwe. The remaining countries will develop fit-for-purpose IT governance structures during 2016.

Strategy

Our vision is to radically reshape our IT capability to deliver an exceptional client experience. The client is at the heart of everything we do and the primary aim of our IT transformation journey is to ensure the stability, availability and efficient functioning of our banking systems to protect our client franchise and underpin the sustainable future of Standard Bank. Our aspirational IT offering to our clients is for them to know that the group is secure and stable, that what they need works all the time, that it is simple and easy to bank when and where they want, and that we anticipate their wants and needs.

The four pillars of our IT strategy

1 **Quality of service through brilliant basics:** achieving continuous improvements in the quality of service to clients in terms of availability, reliability and security.

2 **Responsiveness to market:** leveraging innovative technology and new ways of working to achieve higher levels of agility, flexibility and responsiveness.

3 **Affordability:** managing costs by driving a lean IT operation and by embedding commercial pragmatism.

4 **Sustainability as the foundation of client excellence:** making Standard Bank IT an aspirational destination for IT professionals and embracing our diversity, social and ethical responsibility.

In executing the strategy, we measure our progress against delivery and budgetary commitments. There are opportunities to simplify and rationalise our IT landscape, reducing complexity and enabling innovation. We have developed clear architecture principles to accommodate the duality of a fast-moving competitive environment and the need for a standardised, stable core. A key principle is the remodelling of our IT to accommodate social, mobile, data analytics and cloud technologies.

Underlying our ability to execute our strategy in a digital financial services environment is the modernisation of our core banking platforms in South Africa and the rest of Africa. We have invested heavily in transforming our IT platforms from a complex legacy estate to a simplified and standardised ecosystem. Competitive pressures, regulatory requirements and a conservative approach to deployment risk have influenced our multi-year implementation journeys.

Cloud computing is becoming a global commodity that is increasingly utilised by a wide range of industries including financial services. We are adopting cloud-based solutions where appropriate and within regulatory guidelines. Current initiatives include hosting employee productivity applications in the cloud, using Amazon web-services to host test systems, implementing a private cloud for several countries in the rest of Africa, and building our new generation infrastructure to be cloud-enabled.

In 2015, we continued to make good progress in our four-year transformation journey, as detailed in the business unit reviews. The modernisation of our overall platform is in its final phase, with all programmes on track to be completed in 2017.

Service delivery
In 2015, we successfully processed a record number of transactions, in terms of both volume and value. A certain amount of instability is unavoidable during periods of significant change to IT systems and

there were two high-profile outages in South Africa, resulting from hardware failures. These outages impacted customers as a number of online services were not available for several hours. Our response confirmed that our business continuity measures are sound and that we have the resilience to recover from major system failures. The group sets recovery and business resumption priorities, and contingency procedures are tested and rehearsed so that interruptions are minimised.

Ongoing focus was placed on ensuring stability and reliability in the rest of Africa in 2015. While there were service interruptions in some of our operations as a result of failures in telecommunications, power or IT systems, our ongoing focus on stability has resulted in improvements across the continent.

Specific remedies in response to the outages and ongoing resilience initiatives have led to an improvement in system stability. In keeping with our quality of service objective, system availability, reliability and security are a

top priority for executive management within IT and we remain confident that our initiatives are having the desired outcomes.

People

A digital enterprise requires a significant shift in the skills required within IT. Several initiatives support our strong drive to change the culture in Group IT to make it a great place to work, including continuous improvement initiatives and innovation campaigns. Our ambition is to ignite our people to a common purpose (the client) and to re-skill them in relation to emerging technologies and new ways of working.

Standard Bank chaired the first DevOps community day hosted in Africa. DevOps emphasises collaboration and communication between software developers and other IT professionals. The event included South African banks, telecommunication companies and universities.

Significant focus is placed on understanding and influencing university curricula to align to the changes in the IT environment. Certain IT executives sit on university IT advisory boards and meet regularly with the universities to discuss any gaps between academia and business relevance. We have sponsored 10 honours students at the University of the Witwatersrand for an Honours Data Sciences Programme, and Group IT has met with the University of Pretoria to develop a masters level IT degree that will be conducted onsite for talented employees who qualify and wish to further their studies.

Internally, a number of development programmes are in place to build a pipeline of IT skills. These range from leadership development programmes

> " Our investments in IT are delivering substantial value by strengthening our ability to adapt to rapid change and to continuously improve client service. "

and an IT graduate programme, to IT learnerships for matriculants and graduates enabling them to gain work experience. In addition, 40 employees have been enrolled in Hortonworks Online University focusing on open source data ecosystems, and a further 10 employees have been selected to participate in an onsite IT boot camp programme.

Mitigating risk

We consider our top IT risks as those that could have an adverse impact on the achievement of our IT and business objectives. These include risks arising from cybercrime, excessive rate of change, disruptive technologies, organisational health, availability of quality data, third parties, business disruption due to system failure and any reputational impact.

These risks are mitigated through various controls, which are implemented by management and closely monitored by the group IT risk and compliance committee. We continuously review and invest in our security systems and risk management processes to ensure that our clients and the group are well protected.
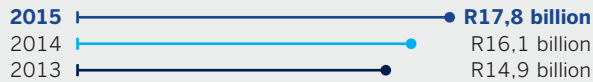
Expenditure

The costs of our platform modernisations and transformation into a digital financial services group are an investment in long-term competitive advantage, value creation and the sustainability that they will afford the group.

Following a benchmark of IT performance and costs performed by McKinsey in 2014, we continue to focus on improving efficiencies in 'run the bank' costs and delivering more for less in 'change the bank' costs to bring IT expenditure within global benchmarks by 2017.

Our new IT platforms represent a significant capitalised software asset on the group's balance sheet. This asset is amortised at rates appropriate to the expected useful life of the asset. The amortisation impact is expected to peak in 2018.

GROUP IT CASH SPEND[1]

Year		Amount
2015		**R17,8 billion**
2014		R16,1 billion
2013		R14,9 billion

[1] Includes capital and operating expenditure.

Regulatory environment

A significant amount of IT expenditure is allocated to ensuring compliance with regulatory requirements while at the same time driving business value. An enhanced anti-money laundering capability was deployed in South Africa in February 2016, built on the modernised core banking platform. Good progress has been made in implementing the IT changes required to meet the Basel Committee of Banking Supervision requirements and requirements of IFRS 9 on finance instruments.

As an integral part of the business within the group, IT adheres to the relevant group governance frameworks, standards and policies.

Looking ahead

The long-term benefits of our modernisation and digital journeys will continue to strengthen our competitiveness, resilience and agility in support of the group strategy. As we enter a more fast-paced and in some cases a more complex era of IT, we are well positioned to partner with the group on its journey to realising its vision in the medium term.

Key objectives in 2016 and 2017 will be to conclude the platform modernisation programmes. We will also continue to leverage the benefits of this transformation, integrating our systems across the group to serve the full range of our business and client needs to drive business value.

The foundation has been established to enable us to become a first-class digital bank in Africa.