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cover story

**South African CSD
goes live with
TCS BaNCS for Market
Infrastructure across
all asset classes**

Strate

**Single solution powers
Strate's operations across
markets and asset classes;
marks significant transformation
in the South African market**

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**By M Anand, Product Head, and
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**Strate is South Africa's
principal Central Securities
Depository (CSD),
managing record keeping
and custody for equities, bonds,
money market and derivatives
in South Africa.**

In this capacity, Strate supports multiple customers, including stock exchanges (JSE, A2X, ZARX, 4AX and EESE), issuers, CSD participants, lending desks, the South African Reserve Bank, and the National Treasury of the South African government.

Strate also facilitates collateral management, securities lending and borrowing, and corporate actions processing for customers in the South African capital markets.

For many years, Strate operated separate systems for each asset class (money market, bonds, and equities). Although these systems were regularly updated with new capabilities, multiple technology limitations were holding back implementation of global best practices and creating a fragmented interface to customers across asset classes. As a result, Strate made a strategic decision to replace its legacy systems with TCS BaNCS for Market Infrastructure.

cover story

The transformation journey

The consolidation onto TCS BaNCS was completed in three progressive phases, starting with money market, continuing with bonds and concluding with equities.

Equities posed the largest challenge due to high domestic trading volumes.

“Our equity market is a high-volume market relative to bonds and money markets,” says **Gregory Naicker**, Head of CSD Services for Strate. “A critical success factor was that we needed the application to perform at an extremely high optimal level.”



The key to ensuring a successful and timely launch was Strate adopting a strong change management process. Strate gave external and internal customers a six-month window within which to finalize all requirements. New requests beyond that window would have to wait.

“There were many requests that came in after the official project cut-off for that phase, but if it wasn’t a regulatory priority, we worked with our customers to include the request in a future release,” says **Beverley Furman**, Head of Operations and Change for Strate. “A major element of the project’s success was that we resolutely didn’t change the scope.”

Nevertheless, there were changes that had to be accommodated. Following the project’s commencement, the South African market went through a period of significant growth and diversification, bringing new and additional stakeholders into the picture.



“When we started collecting requirements, we only had one stock exchange,” says Furman. “However, during the various phases of the project, four additional exchanges were licensed in South Africa requiring Strate to support three new business models.”

TCS BaNCS for Market Infrastructure enabled Strate to support each exchange independently, while still being able to share common business processes. This is a huge benefit for custodians, whose customers may trade cross-listed holdings in multiple trading venues.

“We were able to come up with functionality to support the same listed company being traded on two different venues while still being managed in one place within Strate,” says Furman.

Once the requirements were set, Strate established a high bar for acceptance criteria and made the firm decision not to compromise on criteria even if the project took longer.

“That discipline put us in good stead, because it meant that when we opened it up to the market, the solution was of extremely high quality, and the experience was very satisfactory to our clients,” adds Furman.

The partnership between TCS and Strate was an essential element to the project’s success. Naicker highlights the TCS team’s excellent understanding of how the South African market works and the ease with which the companies connected and the teams understood one another.

“We worked tremendously well with TCS throughout the rollout, and we could not have done it without open and honest conversations,” adds Naicker.



“The consolidation of multiple platforms into a single standards-based solution has been Strate’s business vision. With TCS BaNCS for Market Infrastructure, we have been able to achieve our objectives. Our long partnership with TCS, complemented by TCS BaNCS’ successful track record for transformation program delivery, has been instrumental in the successful deployment and operationalization of the platform, including supporting five exchanges in South Africa. The new solution has created common reference data and uniform messaging standards across all asset classes and business processes for all the markets we service, as well as enabling us to roll out new services faster.”

André Nortjé, Chief Executive Officer, Strate



“We are proud to have partnered with Strate, our long-standing customer, in this transformational journey. The TCS BaNCS solution has delivered a lean, simplified, state-of-the-art technology stack that reduces operational risks, improves business agility and enhances customer experience. Strate has set a benchmark for market infrastructure players globally in the adoption of modern technologies to drive innovation and to future-proof operations.”

R Vivekanand,
Head, TCS Financial Solutions

Multiple testing phases

Within each phase, TCS and Strate adhered to a rigorous, five-part testing cycle comprising of Verification Testing (during development/build), System Integration Testing, User Acceptance Testing, Market Acceptance Testing and Parallel Run/Testing.

The final phase, Parallel Testing, placed TCS BaNCS for Market Infrastructure onto a pre-production environment running concurrently with the legacy production environment, enabling close observation of system behavior using actual intra-day transactions.

Demonstrating an extremely high level of diligence and care, Strate maintained its Parallel Testing environment for eight months. “We were able to get statistics and information that we would never have picked up otherwise,” says Naicker. “By tracking the behavior of customers, custodians, members, and regulators, we ingested every single type of scenario from a live production environment into the parallel environment, in ways that wouldn’t be possible to simulate with testing scripts alone.”

By comparing messages generated from the live production system and the parallel system, Strate was able to identify and address issues related to interfaces with

Strate’s clients. “The end result was that the post go-live experience was very stable, much to the satisfaction of our clients,” adds Naicker.

Parallel Testing also demonstrated the ability of TCS BaNCS for Market Infrastructure to handle the high volumes required to support equities.

“We saw early on that performance wasn’t going to be a problem whatsoever, which meant that we could focus on functionality and interfaces,” says **Rudi Steenkamp**, Head of Integration and Data Services for Strate. “Now, we are able to get settlements done faster than before, thereby improving our service to customers.”

Strate took a highly flexible approach to deployment methodologies, matching development practices to the needs of the project during each particular stage.

Deployment methodologies were backed by constant communications. Governance processes were implemented at various tiers of engagement from technology, business functionality, data migration and project management through to executive levels. This ensured progress was tracked daily, weekly and monthly. Operations staff were brought into the testing lifecycle early resulting in early system adoption by its users.



Transformation benefits

Following a successful go-live, Strate's clearing and settlement systems run entirely on TCS BaNCS for Market Infrastructure as a single multi-asset class solution, providing a full suite of CSD functions, comprehensive straight-through processing and support for ISO 15022 and ISO 20022 standards.

In addition, Strate's achievement is in providing a single digital access point to clients that drives uniformity and efficiencies in business processing and across IT operations. It also offers common reference data, uniform messaging standards, and integrated business processes across all asset classes for a wide range of CSD, settlement and corporate actions functions. (See sidebar: "Key benefits.")

Strate also now has the ability to support different settlement models, in line with BIS standards, on one platform. It paves the way for the harmonization of business processes across asset classes, improving overall market liquidity and being able to deliver faster time-to-market for new services.

With these capabilities, Strate's implementation of TCS BaNCS for Market Infrastructure has become one of the most modern, efficient, and automated CSD platforms in the world. And it has opened conversations with customers that wouldn't have been possible before.

"Strate is focused on what will grow South Africa as a market and investment destination, and TCS will be an important part of that journey," says Naicker. "TCS is part of our team, and part of everything that we do as a company."

TCS BaNCS has an extensive presence in South Africa and other major markets in Africa. Strate, running on TCS BaNCS, powers settlement for more than 90% of custody transactions in South Africa. In addition, leading banks in South Africa run on TCS BaNCS, and three of the top four markets in Africa run on TCS BaNCS for Market Infrastructure. 

Key benefits

1. Single platform for clearing and settlement across asset classes

Improves efficiency and enables new functionality for customers with different settlement models.

2. Enhanced settlement functionality

Faster settlement times with enhanced settlement functionality, including real-time settlement.

3. Economies of scale

TCS BaNCS accommodates high volumes of trades, and will scale easily to meet the expected growth of the South African market, leading to reduced operating and support costs.

4. Harmonization of systems and standards

TCS BaNCS is designed with the flexibility to accommodate new business requirements, regulations and standards, including progressive adoption of ISO 20022.

5. Straight-Through Processing (STP)

TCS BaNCS replaced outdated communication protocols with ISO standards, which better aligns Strate's stakeholders with international standards for communication and processing. In addition, TCS BaNCS has automated manual processes leading to greater efficiency and higher STP.

6. Business process improvements

The single platform enables improvements in risk management and settlement times, with capabilities such as tri-party collateral management across asset classes. Furthermore, even as common business processes have streamlined operations, specific functions for each asset class can still be managed and improved independently for maximum flexibility.

7. Risk reduction

The consolidated settlement infrastructure provides a standardized interface with customers, consistent reference data, common processes, and higher visibility during settlement, all of which contribute to lower risk. In addition, Strate's technology and operations staff can ensure adherence to international standards and best practices.

8. Application flexibility

Parameterized business processes enable quick time to market for new products, and the flexible architecture supports rapid solution development to meet new market requirements or to add additional asset classes, should the need arise.

9. Single user interface

Single interface for Strate's business operations users to access information for all asset classes together.



AT A GLANCE

Company: Strate (Pty) Ltd

Headquarters: Johannesburg, South Africa

Business Challenge: Consolidating legacy settlement systems for money markets, bonds and equities onto a single platform.

Solution: TCS BaNCS for Market Infrastructure

FAST FACTS

Strate is South Africa's principal central depository and a central collateral platform. Its purpose is to serve the financial markets and help build local and international investor trust in the South African financial system.

As the central depository to which multiple exchanges, issuers and other market participants connect, Strate safeguards the ownership rights of investors in securities and other assets using digitally-enabled processes. Strate provides electronic settlement for securities, including equities, bonds, money markets and derivatives.

Through its central collateral platform, it connects collateral givers and collateral receivers in an efficient and robust way that leads to the traceable re-use of capital and other assets as collateral for further economic activity.

Strate has served the South African financial market for over 20 years. It provides services to issuers for their investors in terms of the Companies Act (2008) and the Financial Markets Act (FMA) (2012). It is governed by the Financial Markets Act, 2012 and overseen by the Financial Sector Conduct Authority (FSCA) and South Africa's Prudential Authority.

Website: strate.co.za