One of a kind

Tinkoff Credit Systems Bank (TCS Bank) has a unique place in the Russian market. The brainchild of a well-known entrepreneur, Oleg Tinkov, it was originally modelled on the Capital One bank in the US and is the only bank in Russia today that specialises in credit cards. In the six years of its existence, this direct banking entity has grown to be one of the top four credit card issuers in Russia by market share, with over three million cards in circulation. The bank's CIO, Viacheslav Tsyganov, talks about the technology that underpins its operations.

Tinkoff Credit Systems Bank (TCS Bank) came into being in mid-2007 from a small, unknown Moscow-based corporate bank, Khimmashbank. The concept was based on the Capital One financial institution in the US, famous for pioneering credit card distribution in the US via direct mail. The TCS Bank model has evolved since, says the bank's CIO, Viacheslav Tsyganov, and although it is still exceptionally strong in the cards and payments space, the bank has also now ventured into the retail deposits sector, drawing on the example of the success story of ING Direct. It continues to be a pure-play direct banking entity focused on the retail sector.

In six years, the bank's value increased seven-fold. Goldman Sachs is among its shareholders (13 per cent). TCS Bank's founder, Oleg Tinkov, continues to be a majority stakeholder with 60 per cent of shares.

'We are now actually starting to move away from associating ourselves with the banking sector and are positioning ourselves more as an IT company or a company that monetises its clients by providing them with various information and financial services,' says Tsyganov. 'So our major focus and strategy is based on the development of IT. We are striving to be at the forefront in this field. If you look at any area of business these days, it is the technology that is setting the pace.'

As an example, Tsyganov cites the bank's volumes of operations and the number of people it employs. The bank has issued over three million cards, making it one of the four largest card issuers in the country. The number of staff on its payroll (including call-centre personnel) is around 370 people, the majority of whom are in the IT department comprising developers, programmers, system administrators, technologists, analysts, process centre specialists and so on. This was not instantaneous, but has evolved over time: when the bank was launched, the main focus was on direct mailing, but its set-up today is more similar to an e-commerce or a mobile company than Capital One, he comments.

As TCS Bank is a branchless entity, all interaction with customers is done via channels (call-centre, online and mobile devices). This business model has proved successful and the bank has been doubling its business every year, comments Tsyganov, but such rapid growth means that the technology must be scalable.

The bank applies a 'best of breed' approach to its IT set-up. 'Every year, we test all our systems to see if they are suitable for our current business needs and whether there are other solutions that can add value,' says Tsyganov.

For CRM, it uses Oracle's Siebel. It was implemented at the bank from the outset and has been heavily customised since by the bank's own team. The internet banking platform is another example of the team's bespoke development. It is based on a product of the Netherlands-based portal software vendor, Backbase. 'We have nurtured in-house teams of experts in all areas at the bank, and our own specialists are now just as, if not more, competent and knowledgeable as any system integrator out there working on similar projects,' Tsyganov states. 'I can say this with confidence as we have invested a lot in people over the last few years.' In 2012,

Global Finance magazine recognised TCS Bank as the 'best consumer internet bank in Russia', he comments.

For business process management, the bank runs the IBM BPM stack, which includes the Lombardi BPM engine and ILOG's business rule management system (Lombardi and ILOG were acquired by IBM in 2009/10). When TCS Bank started the BPM roll-out, both companies were independent entities, says Tsyganov, and the ILOG deployment was the first in Russia. The current version of the BPM solution at the bank is much broader in coverage than the original products, he adds. The ILOG component, for instance, has been expanded under the IBM ownership to include the event-based engine, so it is used for fraud detection, monitoring payments and flagging unusual/uncharacteristic activities. IBM's stack underpins the complete loan origination process, from the application form to issuing a credit card. The volumes that the solution can handle are high (tens of thousands per day) and the average target speed of a full application processing cycle currently stands at 30 seconds (when the project began a few years ago, the goal was two minutes).

The bank is now completing the project of introducing real-time collection scoring and working with debtors, also based on the IBM stack, says Tsyganov. The end-date is planned for May this year. 'We are moving all our services to real-time,' he says. 'Our collection scoring model will be applying rules based on the up-to-date events, rather than done in batches overnight. This will give us a more accurate course of action to deal with a debtor, e.g. a text message, a phone call, an email and so on. Perhaps this customer has just called us or perhaps the money has just been paid. Furthermore, we are now also looking into the area of legal collection and collaborating with bailiffs.' Collection scoring is not yet established in Russia, observes Tsyganov, and when it comes to the real-time aspect of it, to his knowledge, TCS Bank is the only bank in Russia applying it.

For core banking, TCS Bank uses the Bank 21 Century banking system from a domestic developer, Inversia. It is a recent implementation that was initiated in 2011 and took about eight months to complete. As mentioned earlier, the bank's systems are scrutinised on a yearly basis, and the previous core banking product, Va-Bank XL from a local supplier, Fors Banking Systems (Fors-BS), was increasingly standing out as a prime candidate for replacement. There were a number of factors, says Tsyganov. The quality of service was quite poor, partly due to the recurring changes of ownership of the vendor over the last few years, which resulted in several changes of direction for the system and its future. 'We found ourselves spending more time discussing and revising the service contract provisions than actually developing the product,' he comments. Another complication was that the bank's version of Va-Bank was not 'mainstream' but heavily customised for TCS Bank (and the retail banking sector in general). It was perfectly fine for the bank in the beginning, when all focus was on just one product, he explains, but as the product line grew, so did the demands for the system's functionality capabilities, flexibility, reliability and user-friendliness. The bank was faced with a choice of continuing to develop the legacy system internally, moving to a standard version of Va-Bank that receives the vendor's investment and attention, or installing a new platform altogether.

It went to tender and evaluated all main domestic providers, including Diasoft, CFT, Inversia and the incumbent supplier. No international offerings were considered as the requirements for a new core system were limited to the GL, accounting and regulatory reporting (as of late, a retail deposits module has also been added). These functions, believes Tsyganov, are best served by a domestically-developed system. 'As strange as it sounds, a core banking system plays a secondary role in our set-up,' he says. 'Our main systems are those that are customer-centric and deliver end-to-end business processes. Our product engine is based on the TSYS Card Tech card management system [the bank is now running the latest version, Prime 4]. So the requirements for a core banking solution are straightforward.'

All divisions of the bank were involved in the selection process. 'We did not treat it as a purely IT project. It was imperative that all other areas contributed,' he emphasises. 'Everyone was keen to change. Discontent with the

'We are now actually starting to move away from associating ourselves with the banking sector and are positioning ourselves more as an IT company or a company that monetises its clients by providing them with various information and financial services.'
Viacheslav Tsyganov, TCS Bank

'As strange as it sounds, a core banking system plays a secondary role in our set-up. Our main systems are those that are customer-centric and deliver end-to-end business processes.'

Viacheslav Tsyganov, TCS Bank

old system had been brewing for the last three years.' This venture has also shown that the bank has become a truly well-developed and established institution, with mature business processes, he observes.

Inversia was selected based on the price/quality correlation of its offering and technological similarity of Bank 21 Century to Va-Bank (both are Oracle-based). The latter aspect promised concise timeframes and a less painful transition, all the while continuing business growth and development, comments Tsyganov. Also, Bank 21 Century offered 'additional benefits' of integrated functionality such as interbank payments and e-document archiving required by the Central Bank, as well as a number of turnkey modules that the bank might apply in the future (for instance, cash loans and various retail deposits). In addition to the software and licences, TCS Banks also acquired the system's source code, so it is free to modify it if deemed necessary (although there are no plans to do so at present). This was not the case with Va-Bank, notes Tsyganov, the codes were proprietary and closed to any amendments by the bank, 'so everything had to go through the vendor'. He feels that the agreement with Inversia is 'more like an open dialogue'. He believes that there is no danger in modifying the core of the system provided that there is a clear, well-constructed development process which includes detailed documentation, thorough oversight, and quality assurance at every stage. 'It is then no different to

the system development process at any vendor. There is no need to be wary. After all, nobody will do it better for you than if you do it by yourself for yourself.'

The implementation timescales were slightly pushed back from the original estimation, says Tsyganov, but 'our goal was not to observe the timeline no matter what, but to make the transition as painless as possible. I think we succeeded as not a single customer noticed it.' The big-bang switchover took place in April 2012 and the old system was fully shut down.

'We are very pleased with the project and with our new supplier,' says Tsyganov. 'Of course, there were difficulties, as such projects without them simply do not exist.' At the start, there was, perhaps, certain underestimation by Inversia of the volumes of TCS Bank's business, he observes, but this was quickly rectified. Furthermore, the vendor took on board ideas and suggestions of the bank, including on the architecture and reporting, and incorporated them into the system. 'What I liked was the promptness with which Inversia's team reacted to the requirements and changes we sent their way,' he says. No support or assistance, however, came from the legacy supplier in the course of the project.

The key to success was rigorous testing, believes Tsyganov. 'Around 40-50 per cent of the entire project was devising and carrying out all kinds of tests, comparisons and reconciliations.' Realising the importance of testing, the bank has set up a dedicated testing

unit, which specialises in the full test lifecycle, he adds. There are now around 130 people working full-time on software development and testing. The team has built up competencies in beta and alpha testing and is now growing expertise in load-testing. Nothing gets a green light until the bank is satisfied with the testing results, states Tsyganov. 'Quality assurance is vital.'

Of other recent projects, Tsyganov cites the implementation of Fraudguard from TSYS, a real-time credit card fraud detection system. US-based TSYS is a long-standing supplier for TCS Bank. As mentioned earlier, its solution underpins card processing at the bank and serves as a main product engine. The bank also offers outsource services based on the TSYS platform, and already has some of its co-brands as clients. Among them is Yandex.Money, a popular e-commerce payment system in Russia, set up by the creators of the Yandex search engine (and acquired by Sberbank in late 2012). TCS Bank issues Yandex cards on a white-label basis.

Russia's payments market is sill developing, observes Tsyganov. Virtual wallets and e-commerce offerings, such as Yandex.Money, Kiwi and Webmoney, are already quite established, with Yandex.Money ahead of competitors with a market share of around 15 per cent, and Kiwi and Webmoney holding a ten per cent share each. Paypal is lagging behind with six. 'There is a lot of competition,' acknowledges Tsyganov, 'but there is still plenty of potential. It is a very promising market.'