Future proofing banking technology

Banking technology is progressing at a rapid pace, but there are still concerns around costs. Through using the latest innovations, banks have been finding an operational balance

Haytham Kaddoura, CEO, SmartStream

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The profound changes wrought by the Covid-19 pandemic on how financial institutions (FIs) operate have helped to progress some technologies or given them new momentum, says Haytham Kaddoura, CEO of fintech SmartStream. The unprecedented changes also have had a knock-on effect on the financial technology vendors that supply the industry.

"From the back-office setup all the way through to the front-office, many banks were not ready for some of the changes that occurred," he says. On very short notice, he adds, "everybody" – including vendors – had to adapt and work out how to best manage under the circumstances.

The sudden shift to remote working required changes in how employees were managed and raised data security issues. In the front-office, FIs relied more heavily on their digital channels as consumer spending behaviour suddenly changed and digital payments soared, creating huge volumes of payments data.

From a technology perspective, two trends arose during these changes: FIs were rethinking how their technology was being run and were also looking again at the technology itself.

"Many FIs were pushing greater volumes through managed services, looking to third-party services suppliers to become part of their operations teams, running systems seamlessly with as few interruptions to their activities as possible," he says. At the same time, the expedited adoption of cloud technologies and an increased desire to create data lakes reflected how FIs wanted to better monetise the data they provide to deliver greater value to their customers.

NEW TECHNOLOGIES

The significant changes in FIs' operating models have led to a "mind boggling" number of technologies being revisited, including big data, artificial intelligence (AI), machine learning and cloud services, says Mr Kaddoura.

While many of these technologies have been around for several years, FIs have tended to take a cautious approach, restricting their use to set environments for specific use cases. But that has now changed, with clients approaching SmartStream with new, innovative use cases, notes Mr Kaddoura. For example, data lakes are being combined with AI and machine learning to significantly increase FIs' understanding of their customers. This combination can help an FI to answer many questions, such as how customers shop, why some transactions fail, and why brokerage fees are higher on specific transactions. Armed with such knowledge, FIs can better understand their clients and create more meaningful services.

Another technology that is gaining renewed momentum are distributed ledgers, where "solid use cases" exist at a multitude of banks, either in consortia or in vendor partnerships. "The value in distributed ledgers is increasingly evident and the technology is definitely heading in the right direction," he says.

AI and machine learning provide strong use cases for institutions and SmartStream is working with FIs to understand where the technologies can be implemented and how their value can be maximised in the banking environment.

VENDOR PERSPECTIVE

For a vendor such as SmartStream the change in approach at FIs has not gone unanswered. The vendor has streamlined deployment of its cloud solutions to clients, enabling implementation within hours, often directly by users without the involvement of a bank's own IT department. "Users can directly communicate their needs on a very intelligent platform," says Mr Kaddoura. "An institution can be up and running very quickly."

The vendor is also launching more advanced technologies such as Affinity Plus, which adds matching functionality to its Affinity AI, an application that automatically learns how records correlate to one another and can mimic and learn from actions made by a user. "This brings a new edge to AI, so systems not only understand what a user is

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doing, but will try to interpret why a user may not be doing something in a particular way," he says. For example, the solution will discover why transactions are not being matched by a user. "This expedites the value an institution is trying to leverage," he says.

On distributed ledger technology, SmartStream is working with specialist companies to leverage the technology for collateral management. The company has also deployed the technology in fees and expense management, where users can very quickly identify anomalies in data from two sides of a transaction. "This technology has proven itself repeatedly and literally saved institutions millions of dollars. The returns on investment for our client base are becoming much more profound and faster with these digital technologies," he adds.

In big data, monetisation of the data is a key goal for banks. Better transaction forensics and quicker handling of exceptions is an area of focus. "SmartStream is looking at the fees and expense management area, helping institutions to work closely with their counterparties to identify anomalies."

COST FACTORS

Any discussion about technology and banking must consider the cost pressures FIs face. One of the biggest pressures on FIs during the pandemic was cybercrime, an area that had already been of increasing concern during the past five years. A recent survey of financial institutions by BAE Systems, The COVID Crime Index: What was the true cost to financial services and consumers? found that 74% of FIs had experienced pandemic-related cybercrime losses and 51% were forced to adapt their security strategies as a result of the shift to distributed working.

Focus on the cost of compliance and protecting against cybercrime has picked up momentum, but this area has not distracted FIs from the conventional cost pressures in, say, areas of liquidity management, says Mr Kaddoura. "Banks understand their liquidity positions relatively quickly, whether that's because of regulatory requirements or operational needs and get fast feedback on their global exposures. But they also need a better understanding of their cost structures and where they can be more efficient and proactive." FIs are working hard to progress beyond an automated solution and towards an enhanced liquidity management ecosystem, bringing people and technology together to deliver more efficient solutions.

Mr Kaddoura believes it is possible to reduce the costs associated with rising levels of transactions and digital payments. New payments technologies such as ApplePay and GooglePay are putting pressure on FIs and taking a greater share of consumer payments revenues. FIs that wish to continue in the digital payments space, says Kaddoura, need to put in place more efficient cost structures, utilising forensic systems to detect potential leakages from fraudulent transactions, improve business models and move closer to their consumer base with options such as mobile payments solutions. "I think these issues are on the agenda of every financial institution today. They want to know how to get closer to their clients and capture the increased volumes of digital transactions," he says.

PANDEMIC RESPONSE

According to analysts at Deloitte, the pandemic accelerated FIs' digital transformation programmes. Moreover, banks that had invested in digitisation demonstrated higher agility and resilience in adapting to the changes wrought by the pandemic. "In many institutions, digital inertia has faded: There is now more appetite for technology-driven transformation, especially in core systems," says Deloitte.

Mr Kaddoura believes FIs will increase their technology spend as they seek to keep pace with the speed of changes in market conditions and with new regulations that may have been delayed due to the pandemic. "There is a lot of focus on value-added solutions beyond automation," he says. "FIs are looking at how they can build a more efficient and cohesive ecosystem that not only serves their clients but allows them to operate much more efficiently, addressing various aspects of their operations."

Some of SmartStream's clients are looking to realign future technology roadmaps so that they can work in tandem with the vendor over the next three to five years on bringing in new technologies. "It is no longer just a short-term agenda, with budgets set for one year. FIs and vendors need more cohesive, longer-term strategies to address some of the challenges that FIs face today," he says.

In many cases, FIs have "barely touched the surface" of some of the technologies that are emerging, he adds. "There are still questions to be answered about how an FI maximises the value of technologies, how to monetise and better use AI, distributed ledger and big data technologies. How can FIs use technologies to address client churn, to meet regulatory challenges that increasingly demand instantaneous responses?"

On the consumer side of the financial industry, FIs face huge growth in digital payments, which bring significant cybersecurity challenges. FIs need to address fraudulent transactions cost effectively while also ensuring disputes are resolved in a timely manner. This will require a "fine balance" between adopting newer technology, maintaining customer satisfaction and managing internal rates of return.

"Ultimately, the focus for FIs is on the customer because that is where the pressure is going to be. There are new competitors coming into the space, including pure technology banks and digital banks, as wells as external players including technology vendors that are bringing fresh solutions to the industry. Established FIs must continue to invest in technology to keep their growth rates heading in the right direction."