Boubyan Bank finds the right Path to fuel its digitalisation strategy

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Boubyan Bank, originally established as a Kuwaiti Public Shareholding Company in 2004, is a full-fledged Islamic bank in Kuwait and GCC with KWD 4.6 billion in assets as of Q1 2019 results. It is the first Islamic bank of Kuwait that was listed on the Kuwait Stock Exchange in 2016. Boubyan offers banking services to both private and corporate customers, dealing specially in Islamic transactions like Digital Murabaha service, Ijara Finance and Wakala Investment. The bank managed to record an 16% growth rate in net profits in Q1 2019, continuing its growth trajectory since 2010.

In order to maintain this growth trajectory and to implement its digitalisation strategy, there was a need to upgrade the bank's Core Banking system. The bank is known for offering innovative digital banking services and the current two-tier Core Banking architecture was limiting the bank's ability to deploy new digital channels. Additionally, as the bank kept growing, the system in its current state lacked the processing power to handle the growing number of resources and multiple transaction requests.

In light of the above, the bank wanted to initiate a 'digital transformation' process in its overall operations. According to Mr. Sherif Fouad, head of information technology group at the bank, "The aim was to include provisions for performance enhancement and scalability by taking care of the locking issues, reduce the HST size and deploy a multi-thread scheduler for batch processing (EOD)". The bank also wanted to migrate from a two-tier architecture to a service-oriented architecture (SOA) that could seamlessly integrate the bank's channels with third-party systems and develop into a customised engine system that would reduce time-to-market, especially for new products. "Therefore, a decision was taken to upgrade the system", Fouad said.

Implementation

Mr. Fouad explained, "For the first phase of the implementation project, the bank followed the roadmap set by consulting firm McKinsey & Co., and due to its comfort level and past experience with Path Solutions, it directly approached the supplier for the system upgrade. Path Solutions has completed the digital transformation of more than 130 Islamic financial institutions and offers a comprehensive range of financial technology for mobility, risk management and compliance. Other offerings of the fintech company include strategic consulting, data migration, project management and support services. The bank was already on *i*MAL system deployed by

Sherif Fouad, head of IT group, Boubyan Bank

Path Solutions in 2005, and the only way to meet its aforementioned aggressive target was to upgrade the system to the most recent version of *i*MAL R14.1 across all its branches."

The process of upgrading the bank's Core Banking system was not an easy one, due to the tight timeline. The project kicked off in March 2018 and the system was rolled out within eight months, with go-live announced in November 2018. A Stage Gate strategy approach was followed to implement the system. Under this approach, the system was under constant scrutiny of the Boubyan Bank team at every stage of its implementation. This essentially meant that the project team was constantly reviewing and validating the outcomes from the system, right from the product customisation stage to final test run so that changes are made at intervals as and when they were needed, rather than at the time of system delivery. Twenty members from FTE Boubyan Bank and 10 from Path Solutions were assigned to the project, with a few temporary resources helping across various phases of the project cycle. The project was fairly complex as it involved not only moving from a PowerBuilder two-tier architecture to a Java-based three-tier one, but also upgrading the database from an older Sybase 15.7 version to version 16. The operating system also had to be migrated completely from the older Unix system HP-UX to Linux.

During the implementation process, the biggest challenge that the team faced was that of an aggressive timeline. As mentioned above, the rollout took place in a stipulated time of eight months. This tight deadline was a conscious decision by the bank based on its digital strategy, and a confederated team was prepared to handle

High-Level Functional Modules Implemented
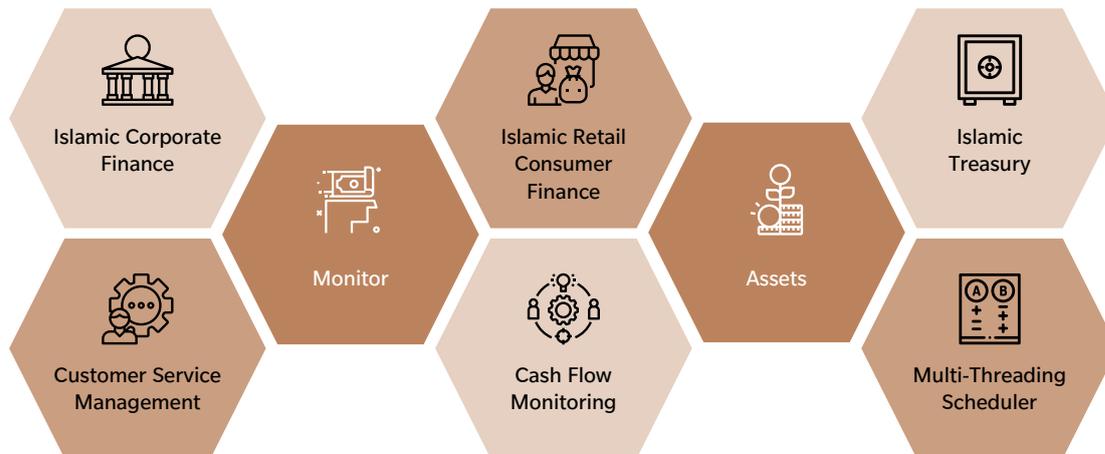
it efficiently. From the bank's side, the entire project was driven by the leadership, with close involvement of the CEO of the bank, Mr. Al Majed. All general managers were also part of the steering committee, which met bi-weekly to make the transition quick and smooth.

Managing the onboarding team and dealing with the change in the scope of work was effectively tackled through detailed planning and constant monitoring at each step. A separate war room was dedicated to Path Solutions for disturbance-free communication and the executive management were directly involved to ensure healthier control and pragmatic progress as per the requirements of the bank. It also accommodated bank customisation requests, the most important one being to allow for a multi-threading system so that it could run multiple tasks in parallel. Eventually, the system was tested and implemented with complete compatibility. One of the challenges faced during this phase was to achieve database tuning and data warehouse migration from the old to the new system. The system was put through rigorous tests via an external testing vendor that helped in automating the script. It undertook multiple performance tests such as Integration testing (with 30+ systems), Performance & Security testing, Data Archive test, Business Intelligence and Reporting tests, Web services testing in addition to the conventionally followed system Functional tests.

The rollout of the system was finally carried out using the Big Bang approach, rather than a modular approach. This was done because the bank was changing its database and, unlike under the modular approach where the system goes live in parts over a period of time, limitation in the bank's legacy system did not allow running the new and legacy systems simultaneously until the full rollout.

Result

The end-to-end time period of implementation was eight months, and the system went live in November 2018. The highlight of the successful implementation was that the downtime required during the go-live for switching from the old system to the new one, which usually takes 2-3 hours, was not more than 15 minutes. No major issues were detected during or after the go-live. The bank has benefitted from the upgrade in many ways. It has improved the efficiency of processes, with the reduction in end-of-day processing

time from seven hours to just 30 minutes. The file processing time is also reduced drastically from two hours to less than 20 minutes. The wait time on database is now less and transactions are faster at the database level. Moreover, since the new upgrade is based on a new and secure application server, it does not give direct access to users thereby reducing the risk of data breach. Unlike the previous system, the new web display is now capable of showing all the required screens available for the entire omni-channel network. This new concept, known as dynamic file display, is one of the most important features of the new system that enhanced the operational functionality of the bank. Another milestone achieved is that it enabled the bank to go live with the SWIFT gpi upgrade, which was previously limiting the bank's expansion plans.

With phase one being successfully accomplished, the bank is currently implementing phase two of the project. Phase two will comprise of regular upgrades and functionality improvements in mobile banking, internet banking and so on, pertaining to the bank's strategy of accelerating digital transformation.

Conclusion

Boubyan Bank was happy with the time discipline with which Path Solutions was able to complete the project. The pinch of a system upgrade was not felt by customers due to the methodological planning and competent execution. The detailed planning and effortless execution was the result of the teams from both sides – bank and supplier – meeting weekly and bi-weekly and undertaking rigorous pilot tests before the final go-live. This system overhaul was almost like implementing a new Core Banking system at the bank, which was pulled off with great efficiency by both parties.

KEY FACTS

Bank: Boubyan Bank
Headquarters: Kuwait
Supplier: Path Solutions
Solution : *i*MAL R14.1
Timeline: 8 months