Mashreq Bank

Partner: Oracle
System: Oracle FLEXCUBE

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In collaboration with

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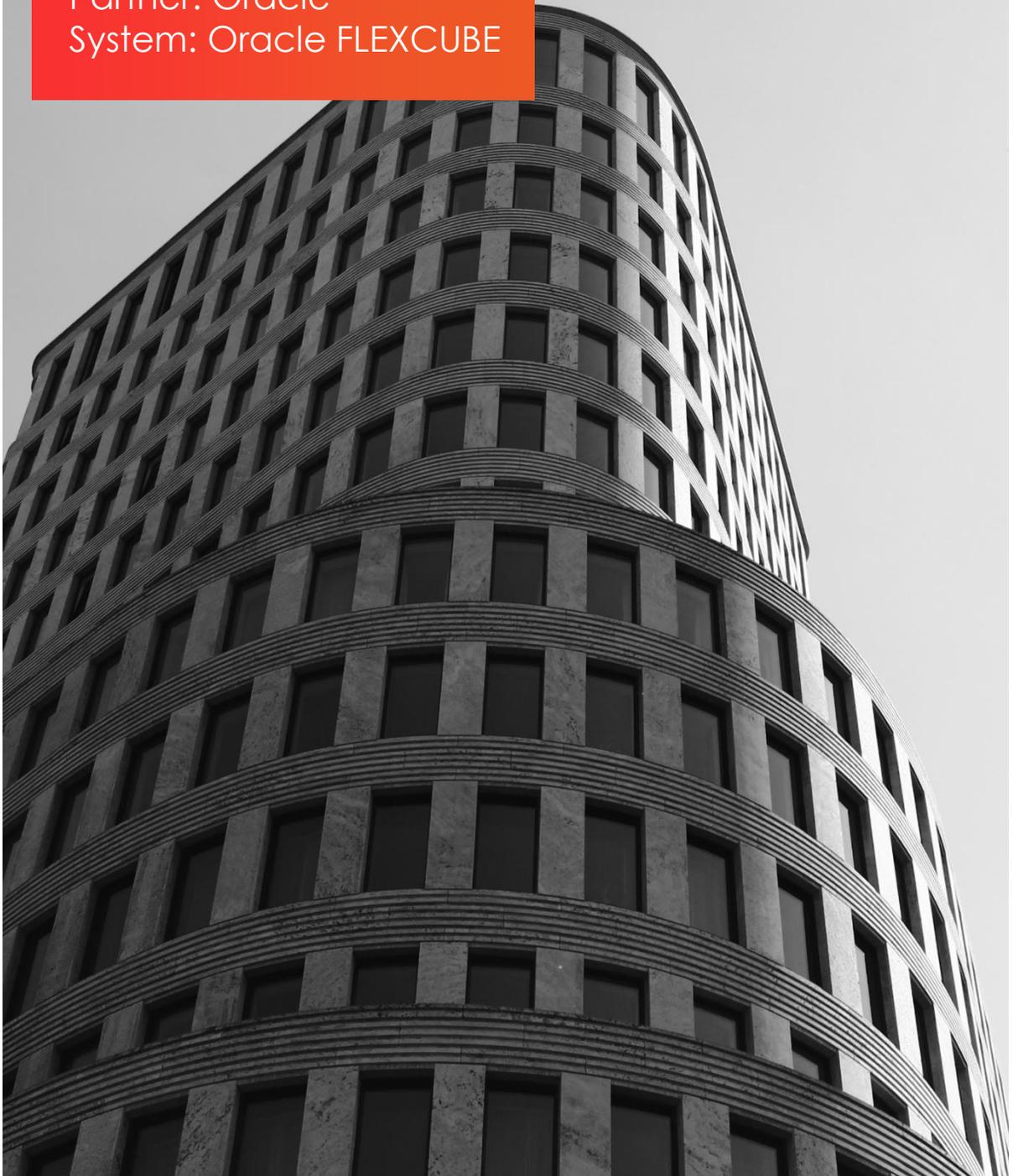
Summary

Type of Financial Institution: Universal Bank	**System/Partner Installed:** Oracle FLEXCUBE Universal Banking (Core Banking) and Oracle FLEXCUBE Direct Banking (Internet Banking)
Headquarters: Dubai, United Arab Emirates	
Assets: USD 34 Billion (2017)	**Selection Team:** Bank
Branches/Representative Offices: 64	**Implementation Team:** Oracle
Project Scope: Core Banking & Internet Banking Solutions Replacement	**Installation Time:** 24 months
	Level of Satisfaction: High
System/Partner Replaced: BankSys (Core Banking) and MOL (Internet Banking)	

Overview

Mashreq Bank is the oldest privately-owned bank in the United Arab Emirates. Founded as Bank of Oman in 1967, Mashreq has been at the forefront of banking technology innovation in the Middle East.

Mashreq was the first UAE bank to install ATM cash dispensers, the first to issue debit and credit cards and the first to introduce consumer loans. Today, the services provided by Mashreq include commercial and investment banking; retail banking; treasury and capital markets; international banking and Islamic banking.

Including UAE, Mashreq has a strong presence in Egypt, Qatar, Kuwait, and Bahrain and has offices in US, Europe, Asia and Africa.

In continuance to Mashreq's transformation journey, the legacy core banking replacement program was a major undertaking for the bank which benefited more than a million customers and about 3,500 bank users. It helped streamline the bank's processes and solution landscape by integrating 160 legacy applications into a modern core banking platform. Through careful evaluation, Oracle FLEXCUBE from Oracle Financial Services Software was chosen as the best-fit solution for the bank.

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Change Overview

The primary objective of the project was to replace the bank's existing core applications with a modern core banking platform. The bank wanted to build digital capabilities, shorten the time-to-market, achieve straight-through processing, reduce manual intervention, enhance processing efficiency and minimize operational costs. A modern core banking platform would help future-proof the bank's technology landscape and augment its regulatory and cross-border compliance capabilities.

The scope of the program included the replacement of legacy core banking applications in five countries (UAE, Qatar, Bahrain, Kuwait and Egypt). Most of these countries were running their operations on home grown legacy systems or systems from BankSys (Core Banking) and MOL (Internet Banking). Additionally, not all the countries were running the same instances of these applications. Oracle FLEXCUBE Universal Banking & Oracle FLEXCUBE Direct Banking – Internet Banking were chosen to be implemented as part of the bank's legacy core banking transformation program, across the five countries in a sequential manner. The total timeframe to complete the implementation was 24 months. The program commenced on February 2010, after the award of the mandate to Oracle. The pilot implementation in Qatar was completed in 13 months, followed by the UAE implementation which was completed within a 11-month timeframe.

Along with the replacement of core banking and internet banking systems, additional dependent streams under the program included:

- **Middleware:** Replacement of legacy middleware with new IBM Middleware.

- **Maintaining compatibility with retained legacy systems:** All retained legacy systems (Legacy Forever – L4E) were impacted due to the replacement of the core banking system. The nature of changes to these retained systems (L4E) included field expansions, additional fields, process revamps and building new interfaces. Fifty to sixty such systems were impacted due to this replacement.

- **Interfaces:** Mashreq Bank generated 150+ outgoing batch interfaces across various applications which were to be replaced by Oracle FLEXCUBE and these interfaces had to be generated using Informatica as the ETL tool.

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Drivers for Change

To align with Mashreq's strategic objectives of growth, expansion and improved customer experience, there was a need for the bank's technology landscape to support its objectives and help meet changing customer and business needs as well as evolving local regulations and compliance. The bank's legacy in-house developed core banking application – Banksys, which was in use for 15 years was unable to support the bank's new requirements and objectives.

Over a period of 15 years, the legacy Banksys system had undergone numerous transformations based on the changing needs of the bank. However, numerous limitations began to surface and were profound as banking became more dependent on technology and as the needs of Mashreq continued to evolve.

Listed below are the key drivers for the replacement of Mashreq's legacy core banking system:

- **Branch and Accounts Addition –** The legacy system limited the number of branches to 99, of which 91 were already allocated. Also, allocation of accounts was emerging as a significant challenge as the numerical range of accounts was nearing exhaustion.

- **Integration Challenges -** With more than 135 surviving applications and interfaces, enterprise integration became a big challenge with the legacy system. Easier integration with external systems arose as a key requirement too.

- **Lack of Key Features –** Unavailability of key features that were critical to evolving business requirements was another major driver. These key features included stop payments, group limits, value dating, customer segment level pricing, multi-country/institution/language/GL capabilities, KYC updates, customer screening and a host of Islamic banking functionalities among others.

- **High Enhancement and Customization Efforts –** Changes to the legacy system for complying with regulations or to add new products required significant effort in development and testing. The resulting long time-to-market for the bank gave competitors an edge in launching similar products faster.

- **Adoption of New Tech. –** The bank needed to catch up with the latest market and technology developments and leverage the benefits offered by more contemporary solutions. This was essential to support the future focused outlook of the bank, both from a functional and technology perspective. Additionally, the legacy system also faced a lack of skilled talent in the market.

- **Short Lead Times for New Product Launches –** The bank required minimal customizations for new products launches. The bank needed a core banking system which supported advanced product processing capabilities like bulk parameterization changes.

Supplier Selection Process

The process of selecting a technology partner was initiated in 2007-08 and completed in January 2010 after multiple rounds of scoping and negotiations. Through multiple rounds of careful evaluation, the bank shortlisted four potential solution suppliers for final evaluation:

- Oracle FLEXCUBE from Oracle Financial Services Software,
- Finacle from Infosys,
- T24 from Temenos and
- Intellect from Polaris.

Oracle FLEXCUBE Universal Banking and Internet Banking solutions were finally selected by the bank for its legacy core transformation program. Oracle's solutions were selected due to their good performance in the market during that year (measured by # of deals). Additionally, a strong regional presence, long-term support commitments, competitive rates in on-going customizations and annual maintenance were critical components of the solution - a best-fit solution that allowed Mashreq to embark on its strategic objectives of growth, expansion and improved customer experience.

Governance and Implementation Support

A central governance team comprising of Mashreq representatives and Oracle representatives along with an independent partner to provide program health checks and advisory services was formed to drive the program governance.

Mashreq Program Participation

Mashreq had formed a core team of 70 members comprising of their Technology, PMO, Business and Operations groups to manage the program.

Business Involvement: To ensure active involvement, business resources from various departments were brought on-board to participate in the program right from the project inception phase with the following objectives:

- Obtaining direct feedback from users representing concerned departments during scoping, design, development and functional testing. This provided critical insights for improving the system.

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- The department representatives gaining expertise on the new system and acting as ambassadors of the program to their respective departmental colleagues, propagating skills, expertise and ideas within their respective departments. Additionally, the user-friendly features of the solution enabled the department representatives to adapt quickly and reduce their learning curve.

- A Technical-Business handshake, creating a sense of ownership among all stakeholders. This sent out a positive message that the program's success was equally dependent on Business, Operations and Technology and not an isolated effort of certain teams.

Branch Champions: The bank nominated one to two branch champions - resources who had been recognized for their efficiency and good quality work - from each branch. These branch champions would act as single points of contact for branch staff helping them understand the system during implementation & post-production support. This initiative helped the overall program immensely especially after go-live, as 45% of issues logged from branches pertained to user understanding. Close to 80% of these issues were filtered at the branch champion level saving significant amounts of time and effort of L2 support resources and in turn helped in avoiding customer inconvenience at branches.

Oracle Program Participation

It is commonly felt that a project is mainly owned by the bank and rarely do we see ownership being shared with partners. During the UAE implementation, a new forum was formed that involved the partner's senior management to discuss key challenges, risk mitigation and industry best practices. The program governance framework also included an independent third-party partner firm that ensured tight controls across departments. This approach resulted in the following advantages:

- Reduction in potential gaps between partners and the bank's senior management. A high degree of transparency was established with representatives from the partners presenting project status updates in the presence of their own senior management.

- The forum acted as a perfect platform for partners to share insights from their past experiences with other banks.

Other Partners Who Participated in the Program

Listed below are the other partners who supported the program during different phases as per their respective scope:

#	Partners	Scope of Work
1	IBM	Online Middleware
2	ThinkSoft	Functional Testing
3	Mahindra Satyam	Performance Testing
4	Cedar Management Consulting	Independent Project Health Check & Advisory

Implementation

Roll-Out Approach

The roll-out approach was planned based on the size of each country/market and potential business risks. Qatar had a set up similar to UAE with a smaller number of branches and lower risk outlook and hence was chosen as the pilot market for roll-out. In order to ensure that the bank did not lose out on business opportunities and benefits of the new core banking system, the UAE - the largest business for Mashreq - was chosen as the next market for roll-out. This approach also ensured that all best practices and learnings from Qatar were successfully leveraged for the largest roll-out in the UAE. A sequential roll-out approach was adopted for all the markets in order to mitigate risks and efficiently manage the dependency on available resources to support the roll-out.

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The table below provides details on implementation timelines for all countries in scope.

#	Country in Scope	Go Live Date
1	Qatar	Nov 2011
2	UAE	Nov 2012
3	Kuwait	Mar 2013
4	Bahrain	Mar 2013
5	Egypt	Sep 2013

Design and Build

The scope of implementation for all the five countries remained same. Post kick-off, the design phase was completed in June 2010. A single code base was used since a copy of the same instance of the solution was to run across all five countries. The product build was executed in three phases.

▪ The first two phases were from the product team as part of the base product.

▪ The last phase included changes suggested over the base product and included the bank's own customizations.

Testing

Testing was meticulously planned to be executed in phases as per the rollout schedule. The bank and the selected third-party testing service providers performed the testing exercise. Multiple rounds of SIT, Pre UAT, UAT, performance, security testing was planned for each phase. The initial functional testing of the base product was done by bank representatives and Thinksoft. The first two rounds of testing were executed without actual data and subsequent rounds were executed with data.

Listed below is a summary of the testing conducted for the major rollout in the UAE:

- Systems Integration Testing (SIT) - 3 rounds
- Pre-User Acceptance Testing (Pre-UAT) - 4 rounds
- User Acceptance Testing - 5 rounds
- Performance Testing - 3 rounds
- Security Testing
- Business Simulation - 3 rounds

Data Migration and Reconciliation

Data migration steps of Extraction, Transformation and Loading were performed in parallel to the testing exercise. This was an important part of the program as data had to be extracted not just from the legacy core banking instances of each country, but also from other surrounding systems which were impacted due to this implementation. In the UAE alone, 16 rounds of data migrations and 4 rounds of financial reconciliation exercises were carried out. Mindscape IT (MIT – Mashreq's in-house development arm) supported the data migration extracts for some of the systems being replaced by Oracle FLEXCUBE. For cases where MIT was not involved, support from other partners was taken.

Financial reconciliation was performed post migration of 90% of the data. Automated financial reconciliation tools were also used by the bank. Multiple rounds of financial reconciliation helped in reducing downtime. Zero difference was also achieved between data post cut-over.

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Training

Training for internal bank users was well planned and multiple iterations of computer-based and classroom training were conducted across different teams and locations, as required by the bank.

Post Implementation Impact

Post implementation of the new Oracle FLEXCUBE core banking system which satisfied 88% of the bank's total requirements based on the services which were used, the bank witnessed significant positive impact and benefits as evidenced by list below:

- Unhindered growth for Mashreq where the bank increased its customer base from 1.15 million to 1.75 million (a 52% increase) and increased the number of customer accounts from 320K to 713K (a 122% increase). As there were no restrictions on the number of customer IDs and branches, Mashreq was able to rapidly increase its customer base, unhindered by technology constraints.

- The new system allowed Mashreq to create different types of products and variants for different target customer categories as well as roll-out differential pricing and charges even within a category. Mashreq was also able to increase revenue by monetizing fee-based services which were not possible in the earlier legacy systems.

- Mashreq was able to reduce operational SLAs (across both the front office and back office) by its target of 50%, despite a rise in customer base and transaction volumes. Oracle FLEXCUBE enabled this by automating most of the processes, integrating with various third-party systems, enabling the launch of an automated teller registry, integrating with the Emirates Identity System etc. to name a few.

- Mashreq was able to increase its customer's usage of digital channels. It also launched multiple digital services and engagements post rollout. Some of them are listed below:
    - Internet Banking
    - Smart Branch
    - Credit Card Origination
    - Banker on the Go
    - Interactive Teller

- - Self Service Kiosk

- - Process Automation

- - KYC Updates

- Mashreq's earlier legacy systems faced significant scalability and performance issues. As part of the core banking transformation program, multiple core banking systems were unified into a single Oracle FLEXCUBE system and technology stack across five countries. Approximately 160 applications were interfaced seamlessly into Oracle FLEXCUBE helping the bank scale up with the addition of peripheral systems and solving the scalability and performance issues faced by it.

- Mashreq was able to significantly reduce operational inefficiencies with the centralization of operations and consolidation of approximately 120 applications. Mashreq was able to lower the TCO of its core banking infrastructure and operations.

Challenges

Replacing legacy core banking systems is akin to a "heart replacement" surgery while keeping a person alive. A program of such importance goes through multiple challenges. Some of the key challenges faced are detailed below:

- Large transformation programs sometimes result in cost and scope creep. To address this, a strict Change Control Board (CCB) was brought into effect with support from the project Steering Committee and Working Committee.

- Apart from the legacy core banking transformation, many other transformation programs were being implemented by Mashreq in parallel. For each of these programs, a change impact analysis was carried out to check for dependencies.

- Data migration from the legacy core systems and trade system was a key challenge and the migration time window was monitored from the start.

- Excessive customization requirements were addressed by process changes matching the new system and using bulk parameterization changes.

- The use of multiple vendors required the bank to set up a Vendor Steering Committee to help streamline implementation.

Conclusion

For Mashreq Bank, the replacement of legacy core banking systems with a modern core banking platform was a major milestone that helped it align its IT strategy with its long-term business strategy and contemporary business needs. Mashreq bank has significantly benefited from its modern core banking system and the bank strongly believes its legacy core banking transformation program is a core building block for its future roadmap to growth and success.

Customer Quotes

"With Oracle FLEXCUBE, Mashreq was able to achieve significant milestones as part of our vision for being the region's most progressive bank. FLEXCUBE core banking helped us achieve these key milestones:

- Opened the region's first fully automated branch.
- Integration with Mashreq Neo - UAE's first full-fledged digital bank which can onboard a customer within minutes using mobile application
- Launching Automated Teller operations in Branches (TCR)
- Integration with the Emirates Identity System (EIDA) for KYC verification
- Helping integration with robotics and AI systems for automation and reducing overall Turn around Times of key business operations
- Ability to integrate with 160 applications using FLEXCUBE's real-time integration capabilities to meet the growing needs of our digital initiatives
- Helping grow revenue with real time exchange rates
- Enabling compliance with the Central bank regulatory and automated STP process from with-in FLEXCUBE.
- Helping Mashreq become the region's first bank to comply with SWIFT GPI essentials (Global Payments Innovation)

With FLEXCUBE's product-centric approach & relationship pricing capabilities, Mashreq is able to offer different product offerings meeting a wide range of customer categories with variant charge/fee options and thus help in increasing our revenue."

- Gautam Kumar, Head of Core Banking, Mashreq Bank

Partner Profiles

Head Office: Mumbai, India

Ownership: Public

Founded: 1993

Number of known sites for Oracle FLEXCUBE: 650+

Number of Staff: 8,000 – 9,000

Example Clients:
- Abu Dhabi Commercial Bank
- Aliz Islamic Bank
- Allied Irish Bank
- Citibank
- Ecobank
- Finca
- Nedbank
- Unicredit
- Wells Fargo

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