

ENABLING AN END-TO-END DIGITAL TRANSFORMATION, AND MORE PERSONALIZED CUSTOMER EXPERIENCE

\$14M

EDP expected revenue over five years

Impact

- \$270 million digital transformation to extend its competitive advantage
- Expected to deliver a total benefit of USD \$14 million over the next five years
- Enables end-to-end digital transformation and a personalized customer experience

Emirates NBD is a leading banking Group in the UAE and a key participant in the global digital banking industry with over 90% of all financial transactions and requests conducted outside of its branches. The Group has operations in the United Arab Emirates, the Kingdom of Saudi Arabia, Egypt, India, Singapore, Turkey and the United Kingdom, and representative offices in China and Indonesia.

Emirates NBD’s partnership with Cloudera focuses on building a world-class Enterprise Data Platform (EDP). By using big data in banking to provide data-driven analytics and operational intelligence, the bank aims to enhance the customer experience through deeper, more personalized customer insights.

Embarking on a Digital Transformation

In 2017, Emirates NBD embarked on a USD \$270 million digital transformation to extend its competitive advantage across the Middle East and its expanding international operations. The bank knew that accelerating its digital capabilities and providing the right technology infrastructure for emerging innovation like Artificial Intelligence or Machine Learning, required a superior information architecture for collecting, managing and analyzing the bank’s growing data sources across its seven trading entities.

This needed to include real-time data flows, deep analytical capabilities and most importantly, the ability to leverage such analytics to enable increasingly personalized customer experiences and actionable strategic insights.

On a practical basis, this meant building an end-to-end EDP and thanks to the bank’s ambitious transformation timelines, it needed to be delivered in just 12 months with stringent security standards too.

Leveraging an Enterprise Data Platform

Emirates NBD wanted to leverage the best technology in the market to custom-build its EDP. Following an extensive review, it defined and rapidly built its target architecture with Cloudera selected as the big data platform. This formed the foundation for the bank’s EDP, providing data-driven analytics and operational intelligence.

Launched in November 2018, the Cloudera platform provided a highly scalable EDP foundation with flexible architecture to store and analyze the bank’s growing data in a single, open source platform. This provided ease of integration with Emirates NBD’s systems and applications, with data rapidly moved in and out of the platform through bulk load processing.

"Today's information-driven economy means data is one of our most critical assets. Aligned with our digital strategy, we are committed to harnessing the power of data to drive deep customer insight, accelerate our time-to-market for emerging digital innovation that is reliant on such data, and to leverage advanced analytics to enhance business performance."

Abdulla Qassem, Group Chief
Operating Officer, Emirates NBD

Emirates NBD leveraged a data integration tool from Informatica; a Cloudera partner, to load data in batch mode, while changing data capture for real-time data streaming with Kafka, Flink and Beam. An enterprise data catalogue for meta-data management and data lineage was established, and a big data quality toolset for data quality enhancement. Ranger was also utilized for masking and encryption capabilities.

Together, Cloudera and Informatica delivered a proven set of solutions for rapidly curating data into trusted information. Built-in big data governance and big data security made this comprehensive suite of management solutions fast, flexible, and enterprise-ready to turn big data into trusted insights.

Achieving Significant Benefits

With such a strong foundation in place, Emirates NBD successfully achieved its 12 month time-to-market deadline for its end-end EDP solution. In doing so, it joins the ranks as one of the few large-scale banking institutions both regionally and globally with an enterprise-wide EDP.

The EDP is expected to deliver a total benefit of USD 14 million over the next five years. These financial benefits will be realized through a combination of:

1. Increased productivity derived from having a single source of data, ingested once and made available for use across the entire organization
2. Storage cost reductions, with Hadoop providing a central repository for data in comparison to more expensive storage platforms
3. Hardware cost reductions underpinned by the cloud-based solution.

This new world-class Enterprise Data Platform, built on Cloudera and leveraging Informatica, is now enabling instant customer and operational insight, plus fraud detection. All trusted data is available centrally and securely to users via the platform with automated reporting functionality. The big data enterprise platform enables an end-to-end digital transformation delivering innovation across the bank, and a personalized customer experience.