NTT DATA
Trusted Global Innovator

Success Stories

DaaS MLOps

Client

European Banking Institution

Industry

Financial Services

Country

Spain

TECHNOLOGIES LEVERAGED

- Azure SDK
- AzureML

HISTORY OF TRANSFORMATION

To compete in today's rapidly changing marketplace, financial firms must have the right cloud computing strategy in place. Cloud Computing is undeniably a growth driver in the fintech industry's expansion which developed immensely as a response to consumers' needs. Cloud computing provides solutions to some of the difficulties that fintech organizations face by improving flexibility, increasing the data protection and overall security, boosting innovation, and improving global scalability.

CLIENT CHALLENGE

Lack of a Data platform oriented to make the information available to the different business units, that integrated an MLOps solution to deploy several use cases based on AI/ML. The client has strong data confidentiality policies that make cloud data migration challenging. To address this situation, new policies are required.

Since the client is facing a completely innovative approach, new solutions to support the integration of MLops need to be defined.

SOLUTION OVERVIEW

Cloud-native, IA-oriented data platform on Microsoft Azure cloud, providing advanced analytical services following a Data-as-a-Service model, using accelerators/assets to simplify deployments of new use cases.

• In deployment: Car future pricing prediction; In roadmap: Business KPIs in the near real-time forecast, Online Fraud Detection.

• The model is constructed around four layers: Azure Cloud Layer, Architecture Layer, Core Teams Layer, and the Business Layer.

BUSINESS VALUE & KPIS

• First Cloud platform deployed on Azure in the bank.

• Advanced analytical services, on a cloud platform, for all organizational units in the banking institution.

• Attain the expected outcome in new deployments in efficiency and self-service.

• Efficiency gain in new information or ML use cases in more than 50% T&M.

• Differential expertise in Data & Intelligence throughout the financial organization.

TECHNICAL SPECIFICATIONS

Cloud-native, IA-oriented data platform on Microsoft Azure cloud whose goal is to provide BI and Advanced Analytics services to the entire organization.

The developed platform, known as DaaS, is divided into four layers:

1. Azure Cloud Layer: An entirely native solution in Azure Cloud that allows the client to take advantage of the following cloud benefits:
- Agility   - Scalability
- Automated Component Installation & Configuration
- Compliance with security frameworks & SCF Policies

2. DaaS Platform or Architecture Layer: The layer that performs all the designs of the platform based on:
- Tech stack
- Business use case requirements
- Security frameworks compliance
- Bank's Policies validation
- Automated Component Installation & Configuration

3. Core Data & AI Services or Core Teams Layer:
After identifying the three essential teams; Data, AI, and Visualization, all platform-level base services were implemented to facilitate and enable the development of use cases at scale. Services such as:
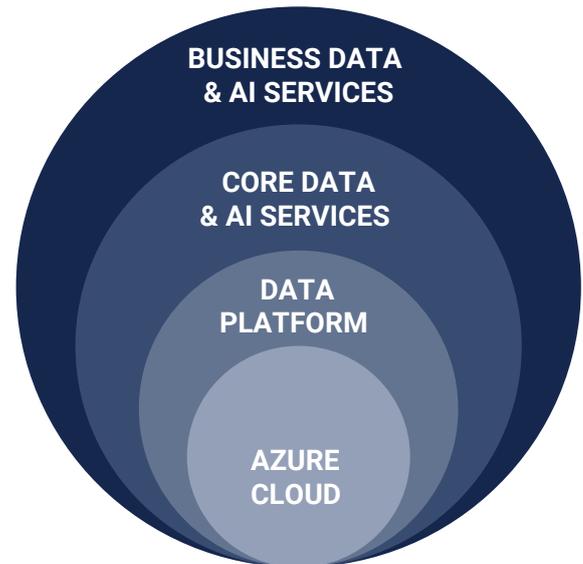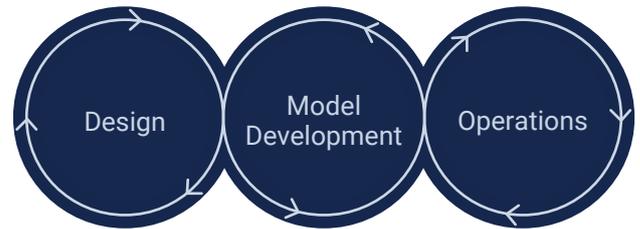- Libraries   - Lakehouse
- Data Integration
- ETL & MLOps Frameworks
- Self-service consumption solutions

4. Business Layer:
this layer is focused on developing the banking institution's use cases
- Use case development
- Business activity monitoring
- Dashboards & Reporting implementation
- Data Sharing via API
- Online & Batch AI Models delivery

MLOps

Design   Model Development   Operations

BUSINESS DATA & AI SERVICES

CORE DATA & AI SERVICES

DATA PLATFORM

AZURE CLOUD

Thanks to NTT DATA's companionship, the banking client has managed to implement its first native platform in Cloud deployed on Azure, leveraging all the capabilities it brings (security, scalability, and flexibility). Likewise, within the developments performed, the MLOps framework is generating the greatest impact being a pioneering and innovative framework never done before in the client's business.
Kenneth Lobato Lastra, Director Data & Analytics NTT DATA