



EDW from Inception to Reality

Royah Optimiza Implements a Comprehensive Customer Analytics and BI solution for a leading mobile and telecommunications company in Yemen

Due to the growing competition in the telecom sector generally and the Yemen mobile market particularly, a leading mobile and telecommunications company in Yemen wanted to gain insight into customer segmentation, loyalty and churn. That's when it started searching for a comprehensive customer analytics and BI solution that would address the following areas:

- Customer Segmentation
- Customer Churn Analytics
- Customer Loyalty

Royah Optimiza stood in the forefront of companies who carefully studied and analyzed the business requirements and proposed a comprehensive solution that will fulfill all the company's needs and requirements. After Royah Optimiza was selected to implement the required solution, Royah Optimiza's professional team members conducted meetings with various departments, collected and analyzed the requirements along with the source systems, and accordingly prepared a state-of-the-art Logical Data Model (LDM) reflecting the requirements, architect design, infrastructure and mappings from legacy systems to the target model and BI subject areas and interface.

After the completion of the design, Royah Optimiza developed the ETL (Extracts, Transform and Load) jobs and process flows to pull out the data from legacy systems to the target BI users, BI subject areas were also developed. Moreover, Royah Optimiza's Oracle-based BI application for Telecom customer analytics integrates data for analysis and reporting from a pre-built integration of data from various source systems in the company (e.g. IN, Billing system, activation system, CDR files, etc.) into an integrated data warehouse optimized for analysis.

The solution provides user-friendly analytic model of enterprise information and metrics, and delivers personalized performance dashboards through pre-built dashboards, reports, and alerts by business function and role, and role-based user access security.

The project however faced a number of challenges in addition to being a new technology, such as: logistics of working offshore, lengthy user sign-off process, getting a timely response from other IT vendors, inadequate hardware to handle the workload, source system and business rules issues. All challenges were professionally resolved, and at the completion of the project, the telecommunication's enjoyed many business benefits through the successful implementation of the solution, such as:

- Reduction of churn
- Anticipate churn by Dormancy analysis
- Tracking of Returned Churn and Dormancy Analysis
- Hourly Level Interconnect Traffic Analysis
- Detailed Revenue Analysis
- Deep Services Analysis

- Automation of IT tasks for complex Reports like Market Share, Interconnect, Marginal ARPU, Monthly ARPU, Key Performance Indicators (KPIs) etc.