



AI at Scale

AI based processing of transactions data on Big Data infrastructure

The Big Picture

A leading loyalty firm wanted to launch an online-only coalition program in a region. The plan was to establish 'a marketplace of marketplaces' set-up to offer loyalty solutions to large ecommerce platforms in the region. To this effect, the company's burning need was the efficient management of huge volumes of transaction data (~one million transactions within six months of launch). The company engaged with multiple vendor partners to design, launch, track, and execute the program.

Transformative Solution

The company worked with Fractal to implement an on-premises (Fractal) hosted SaaS delivery model for setting up the data warehouse. A big data technology stack was used to support the data hosting ecosystem. The approach included periodic data inputs from multiple sources, such as members, transactions, campaign, PCA, product, sellers, clickstream data.

The data warehouse was set up to handle multiple relational and non-relational data sources. It was built on a state-of-the-art data hosting ecosystem, utilizing cutting-edge big data technology stacks like Apache Hadoop, Spark, Hue, Ambari, and more. In line with the client's burning needs, the data warehouse servers were hosted within Fractal premises to ensure data security and a cost-effective solution. Daily visual reports were provided using Tableau for program tracking.

The solution enabled the company to:

- Understand launch, financial status, and customer profiles.
- Track merchandising trends and assess performance of scheme(s).
- Monitor overall program health and review campaign performance.
- Enable 1-on-1 personalization by combining web click data with the transaction.

The Change

As a result of the engagement, the company gained a highly scalable solution (~one million transactions within six months of launch) handling data input from multiple sources. The company unearthed opportunities to cross-sell and up-sell. The solution approach also provided foundational the building block for advanced coalition and loyalty analytics.

