APEX – Next generation analytics platform

Crisp description of the service (What & why) - APEX: Accelerates CPG Sales Using Azure Big Data, Analytics and Mobility with Store specific Assortment and Sales Recommendations

- Pools, validates and maps data from sales, stores and products, third-party data (Nielsen, etc.) and demographic data.
- Uses proprietary algorithms and performs predictive modeling for each store
- Recommends must-sell using Logistic Regression algorithm and cross-sell products using ANN and Collaborative filtering which are proven Industry standard algorithms.
- Provides "out of stock" predictions.
- Enables recommendation adjustments.
- Delivers recommendations to mobile sales force.

Customer Challenges/Pain points/Asks –

- Dependency on Sales representatives intuition to identify products to be sold
- Difficult to generate and maintain store specific recommendations
- Out of stock products lead to loss of sales
- Identifying right cross-sell for every store
- 10-15% attrition in field salesforce

Tools and Technologies

- Data Orchestration: Azure Data factory
- Data Lake: Azure Data Lake Storage
- Data Catalogue: Azure Data Catalogue
- Data processing: Spark scala
- Data Storage: Azure Synapse
- ML & Ops: Spark Mlib
- Big Data Environment: Azure HDInsight, Mapr Hadoop distribution

Benefits/Differentiators

Although APEX is platform since 2015 and is based on real work that Mindtree has done behind the scenes with a Top 3 global CPG over the last three years.
Across eight different countries, we have used bigdata, analytics and mobility to boost FMCG sales.

The results have been smashing:
- $40 million in incremental revenue thanks to smart cross-sell recommendations at the store level.
- 17% increase in repeat purchase rate 4.5 million out of stock recommendations.
- 26% increase in unique lines sold per store.

For new partners, we predict a minimum 10% increase in lines per call and a 15% increase in average store order value after a one-year period with APEX. And because it's a cloud-based solution, you can expect the onboarding process to take five to six weeks rather than five to six months.