# Born Digital . Born Agile

# **Big Data Analytics for Retailers**

The global economy, today, is an increasingly complex environment with dynamic needs. Retailers are facing fierce competition and clients have become more demanding - they expect business processes to be faster, quality of the offerings to be superior and priced lower. Consequently, the quantum of data stored is at an all-time high as retailers generate large volumes of data from various customer touch points across channels. According to Gartner, the volume of data is set to grow 800% over the next five years and 80% of it will reside as unstructured data.

Big Data Analytics is the inevitable next step in the evolution of the Retailers – leveraging granular details from data, in making better decisions. Granular level data includes unstructured data from sensors, devices, third parties, web applications, and social media. By using advanced analytics techniques on this kind of data, the Retailers can make the smartest business decisions possible.

Our Big Data - Advanced Analytics solutions and techniques combined with deep domain expertise assists in solving dynamic & complex business challenges across Operational, Tactical and Strategic levels.

Our Offerings for Retail Industry enables you to take faster and smarter business decisions.



- Customer Segmentation
- Loyalty tracking & retention
- Customer Churn(RFM)
- Customer Life Time Value

Marketing **Analytics** 

- Cross Sell & Up sell (Product Groupings)
- Campaign Analytics
- Media mix modeling
- Catalogue planning (Product & Customer Segmentation)

Merchandizing/ **Category Analytics** 

- Brand/Product Loyalty
- Demand forecasting
- Catagory Reviews
- Assortment / Range **Planning**
- Shelf & Space Utilization (Planogram Metrics)

Store Analytics

- Trade Area Analysis
- Store Layout **Optimization**
- Store Profitability
- Labor/Workforce Optimization

Web / E-commerce Analytics

- Conversion & Search Analytics
- Recommender Systems
- User Personalization & Multi-variant testing
- Online Campaign & Ad-analytics

**Analysis Techniques** 

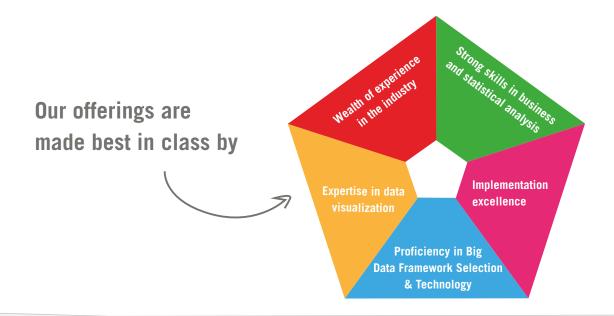
- KPI based analysis Logistic regression Factor Analysis
- Linear regression
  Correlation analysis

**Analysis Techniques** 

- Time-series forcasting
- Discrete Choice modeling Decision Tree analysis
  - Association rule mining
- Clustering (Hierarchical, K-means)

We believe that every organization, regardless of its current capabilities, is ready for Big Data Analytics. We prescribe a four step Big Data landscape i.e., Capture, Store, Process & Analyse.





## **Success Stories**

Real time Big Data Analytics for a K12 Education Provider.

#### Business Challenge:

To have a scalable solution that can support up to 100,000 messages/sec, provide 9 million users with real time analytics using message data Ingestion and Analytics on Stream data from various sources.

#### Approach:

Built data pipeline using real time messaging system i.e. Kafka. Implemented Runtime schema resolution (Camus) and distributed data store (HDFS).

Used Mongo DB (No-SQL) for Real time view of data & R for Real Time Analytics.

#### Solution Offered:

Segmentation based Pricing Strategy and Engagement Stratergy, Revenue Leakage Analysis, Market Basket Analysis, Personalization, Content Evaluation, New Revenue opportunities & online behavioral patterns.

Customer Segmentation and Online Promotion for an ecommerce company:

## Business Challenge:

Data ingestion of massive unstructured weblogs

#### Approach:

Data ingestion in HBase (NoSQL Columnar Database) Conversion of session data into customer data

Customer Segmentation and profiling Product recommendation

#### Benefits:

Fast and scalable processing of source feeds Enhance customer targeting

# **About Happiest Minds:**

Happiest Minds, the Mindful IT Company, applies agile methodologies to enable digital transformation for enterprises and technology providers by delivering seamless customer experience, business efficiency and actionable insights. We leverage a spectrum of disruptive technologies such as: Big Data Analytics, AI & Cognitive Computing, Internet of Things, Cloud, Security, SDN-NFV, RPA, Blockchain, etc. Positioned as "Born Digital . Born Agile", our capabilities spans across product engineering, digital business solutions, infrastructure management and security services. We deliver these services across industry sectors such as retail, consumer packaged goods, edutech, e-commerce, banking, insurance, hi-tech, engineering R&D, manufacturing, automotive and travel/transportation/hospitality.

Headquartered in Bangalore, India; Happiest Minds has operations in USA, UK, The Netherlands, Australia and Middle East.

