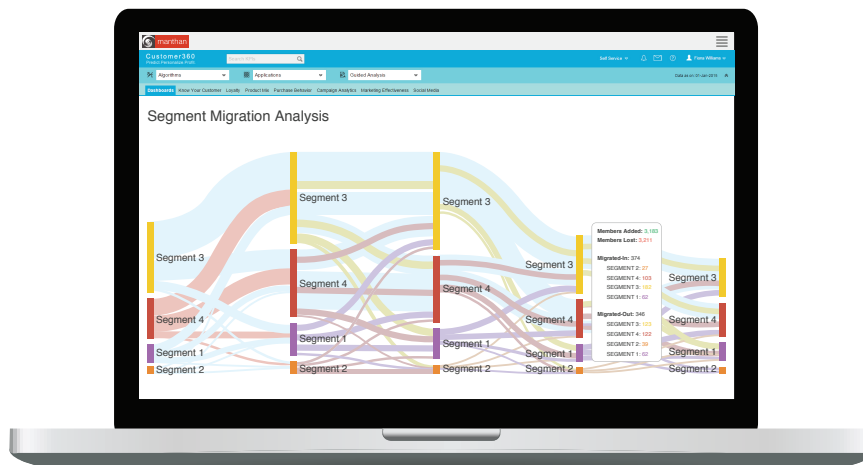


# Manthan Customer360 on Hadoop



Customer360 improves marketing ROI by helping the marketer understand customers better, predict their behavior and identify the best engagement opportunities.

## Built for the Marketer, Data Scientist and IT

- Marketers are able to identify personalization opportunities for real time engagement based on data-driven understanding of customer behavior.
- Data scientists get a set of rigorous and sophisticated algorithms out-of-box, while retaining the flexibility to explore data and manage custom algorithms.
- IT teams acquire a customer data warehouse and methods to process structured and unstructured data.

## Bolt-On app for rapid time to value

Customer360 is the fastest approach to monetize your Big data. The pre packed marketing use cases, processing, models and ready to go configurations enables marketers and analysts to run algorithms in a few hours. Customer360 is architected to be bolted onto your existing Hadoop investment and to deliver immediate returns on investments by leveraging the data that is already present in the data lake.

## Certified for popular Hadoop distributions

Manthan partners with technology leaders in Cloud Infrastructure and Hadoop to enable a new class of analytics applications that work seamlessly on top of them.



## Pre-built Customer Analytics

Customer360 helps businesses derive actionable insights from raw data from multiple enterprise and external sources.

**Achieve Single View of Customer** by aggregating information about customers from multiple channels – online, stores, marketplaces; devices – mobile, desktops, beacon; Interactions – purchase, post, like, feedback, service.

**Run Algorithms at Scale** to analyze large amounts of time-sensitive and disparate data by leveraging Big Data technologies like Apache Spark for cluster computing.

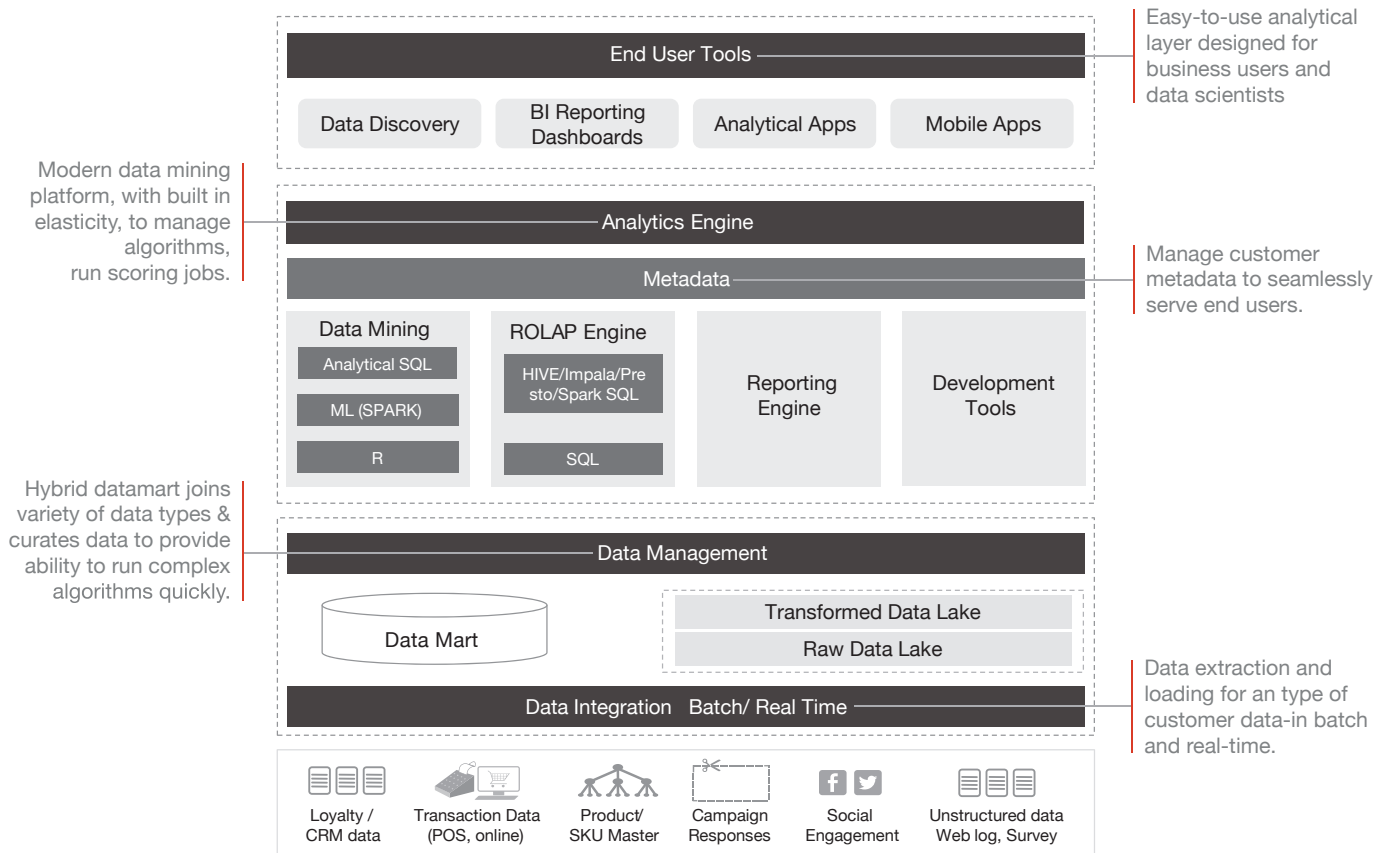
**Real time visualization** by consuming information from your operational systems in real time, processing it and publishing insights on to dashboards using high throughput distributed messaging systems like Apache Kafka and Amazon Kinesis.

## Key Capabilities

**Customer data model** which unifies data from multiple sources to achieve a single view of customer and is a source of curated customer data for analytical and reporting applications.

**Advanced Analytical Models** including all must-have customer analytic algorithms, with easy to use modeling tool that translates marketing hypothesis into models. Analytical outputs are designed for easy consumption by business users and analysts. Also manages multiple models concurrently to support diverse marketing programs.

# Customer360 on Hadoop Data Sheet



## Hybrid Data Architecture

**Custom model import & management** to import and score PMML models, the output of which can be leveraged for marketing execution through advanced list management and in business user dashboards.

Customer360 leverages a hybrid data architecture that enables data extraction from multiple enterprise and external sources. Customer360 stores unstructured and semi structured data sets like social, click stream, promo response cost effectively in Hadoop data lakes. The structured and frequently accessed information is stored in well optimized relational systems.

Customer360 empowers the users to seamlessly leverage both data sets for analysis and the query engine will transfer the queries to the underlying systems.

This hybrid approach helps businesses leverage the power of Hadoop while not losing the responsiveness and governance gained from data warehouses. With this architecture Customer360 addresses multiple customer marketing use-cases while avoiding data duplication, which reduces the overall cost of data warehousing.

## Scalable Analytics Processing

Customer360 analytics algorithms run on Spark, a flexible in-memory processing and analytics framework. With Customer360 you no longer need to use sample data for analytics, you can model complete data sets with every single customer interaction from multiple years.

Customer360 can deliver personalized product and offer recommendations by analyzing data of 25 million customers with 3 Billion transactions at the product level within 20 minutes. And this is possible because the cluster size required to process the data is optimized to benefit from parallelization, while limiting data movement among nodes. The machine configurations used in the clusters are also optimized for performance.

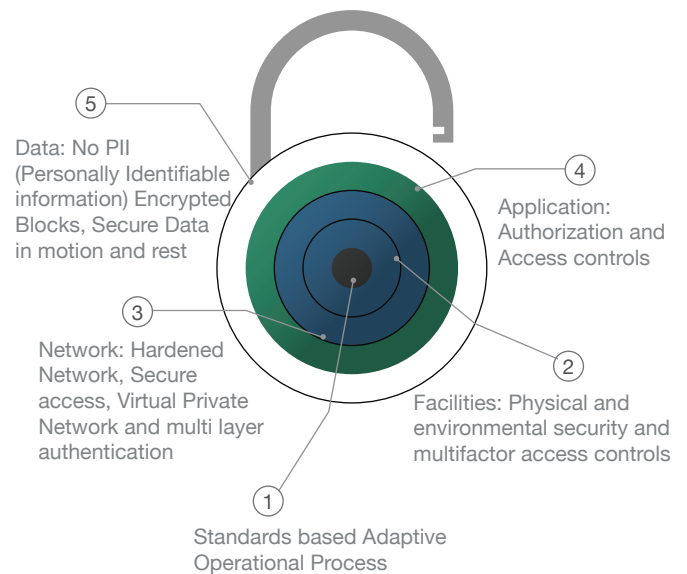
## Real-time Visualization

Customer360 powers real-time dashboards to provide time sensitive updates on campaign performance, ecommerce funnels and path to purchase. Customer360 can ingest real-time data, analyze with context and then showcase critical metrics instantaneously.

Customer360 enables real-time visualization by managing all aspects of data ingestion, analysis and publishing. It leverages scalable listener to robustly gather and process real time data, filters noise and remove unwanted data from incoming streams and leverages configurable analytical views to publish metrics.

## Secure Cloud Application

Customer360 is deployed behind your enterprise firewall on a virtual private cloud. The application works with a single tenant data warehouse, ensuring highest level of customer data security.



Customer360 is stress tested and certified against cyber threats and is compliant with SOC 1/SSAE 16/ISAE 3402, SOC 2, SOC 3, ISO 27001, ISO 9001, FIPS 140-2, PCI DSS Level 1, MTSC T3 IRAP standards.



### About Manthan

Manthan serves as the Chief Analytics Officer for global consumer industries. Manthan's comprehensive portfolio of analytic products and services enable marketers and their partners to understand and activate the customer's path-to-purchase journey. Architected with deep industry expertise, Manthan's solutions combine advanced predictive analytics, actionable insights and unmatched customer knowledge to help marketers identify and drive incremental growth opportunities.