

# Improve Customer Service and Satisfaction

**SKYTREE**<sup>®</sup>  
THE MACHINE LEARNING COMPANY

Telcos Do Hadoop



Telecommunications providers process millions of services per second, from phone calls, text messages and email to web browsing, streaming video and music. These growing datasets must be fully captured economically in a powerful and flexible repository allowing for rapid advanced analysis, insights, discovery and actionable intelligence. To accommodate this rapid growth in data, telecom operators are using Apache<sup>™</sup> Hadoop<sup>®</sup> to turn their burgeoning storage liabilities into strategic information assets.

Deep analytics and insights powered by Skytree's Machine Learning running on Hadoop enable telecom operators to economically take advantage of their growing datasets to improve service quality and customer experience thereby reducing customer churn and overall operation costs.

## Applications in telecommunications include:

### Network Analysis

Telecom operators perform regular analysis of their networks and machine learning on Hadoop can help them to predict network equipment failure, manage network capacity/congestion, establish usage based pricing models and optimize their repairs and service calls.

Telecom operators can predict, prevent and recover from operational disruptions using predictive maintenance and machine learning from Skytree.

### Customer Service

With the advent of big data and machine learning, telecom operators can now provide more proactive customer service by correlating call center process analytics with historical data to create a holistic view of the customer.

Product services and offers are more accurately targeted to customers so that telecom operators can prevent the loss of customers.

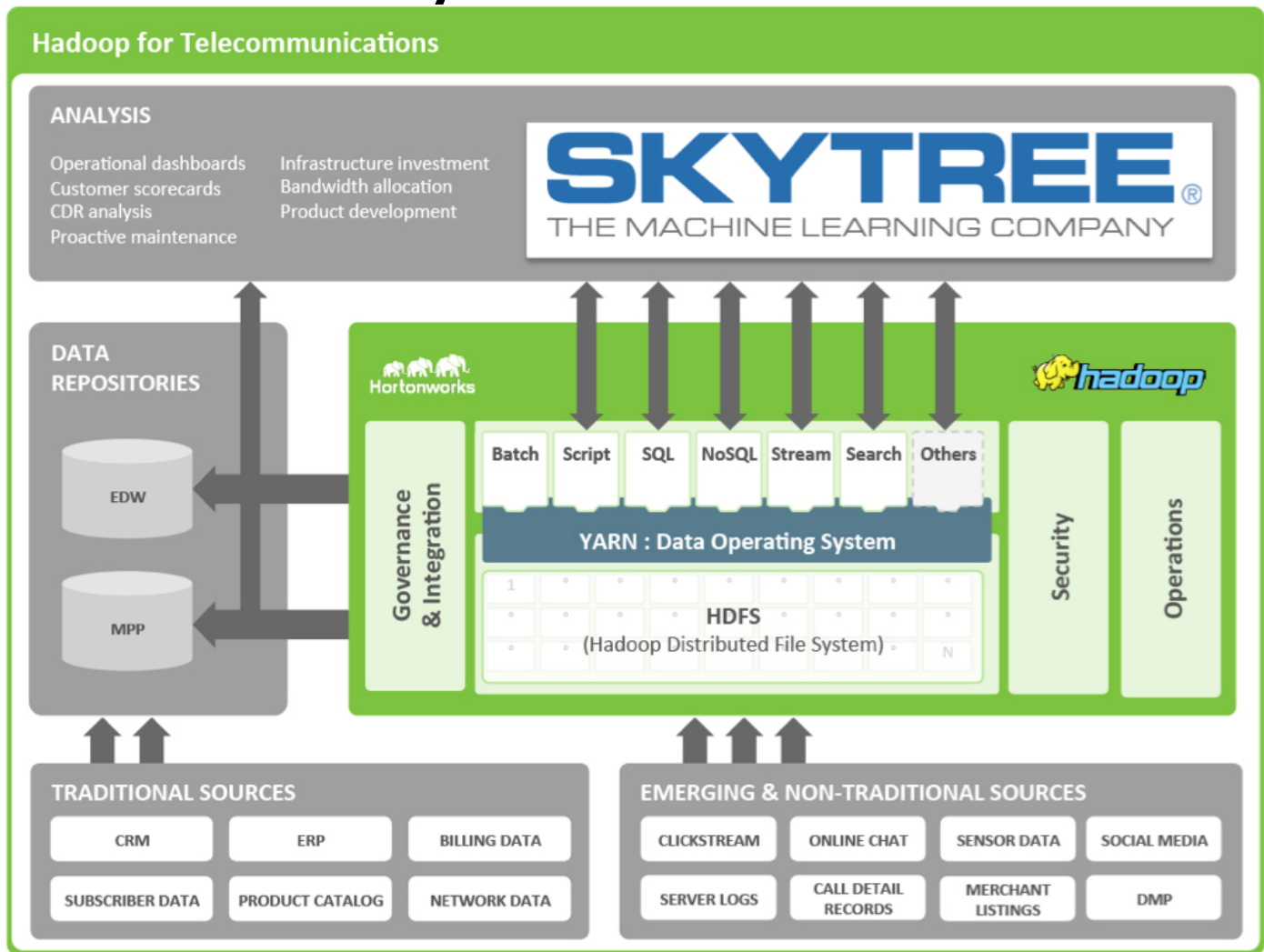
With in-depth analytics, telecom operators have the ability to predict and prevent customer churn.

### Security

The threat of cyber attacks is very real for telecom operators. With machine learning and big data, threat detection is more accurate and can be done quickly to determine the source of the attack.

Fraud detection and prevention is also enhanced with detailed information stored and analyzed by HDP and Skytree.

# HDP and Skytree for Telecom



## Apache<sup>™</sup> Hadoop<sup>®</sup>: Enterprise-class, Enterprise-ready

Apache<sup>™</sup> Hadoop<sup>®</sup> has evolved significantly to meet enterprise requirements, and now encompasses the functional areas that are foundational to any platform technology.

### Data Management

Store and process vast quantities of data in a scale-out storage layer.

### Data Access

Access and interact with your data in a wide variety of ways—spanning batch, interactive, and real-time use cases.

### Data Governance and Integration

Quickly and easily load data, and manage according to policy.

### Security

Address requirements of Authentication, Authorization, Accounting and Data Protection.

### Operations

Provision, manage, monitor and operate Hadoop clusters at scale.

## Hortonworks. We do Hadoop.

Hortonworks is a leading commercial vendor of Apache Hadoop, the open source platform for storing, managing and analyzing Big Data. Our distribution of Apache Hadoop, Hortonworks Data Platform, provides an open and stable foundation for enterprises and a growing ecosystem to build and deploy Big Data solutions.

Hortonworks is the trusted source for information on Hadoop, and together with the Apache community, Hortonworks is making Hadoop an enterprise data platform. Hortonworks provides unmatched technical support, training and certification programs for enterprises, systems integrators and technology vendors.

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HDP