

Big Data, Streaming, and Predictive Analytics For Telcos

# DATA DRIVEN TRANSFORMATION IN TELECOM



### Unlock the Power of Data

Communication Service Providers (CSPs) are in the midst of a fundamental data-driven transformation. Faced with increasing competition and commoditization of traditional services, CSPs are increasingly relying on data and analytics to help them enhance the end-to-end customer experience, optimize their network and operations, and drive new revenue streams.

CSPs are some of the largest aggregators of data and have access to a variety of data sources, including—customer profiles, device data, network and location data; customer usage patterns; apps downloaded, content preferences, clickstream data, sensor data so on and so forth. So much data is being generated every minute and with the advent of 5G and increasing adoption of IoT, the data sources and volumes continue to grow exponentially.

Cludera enables CSPs to ingest and integrate any type of data (structured, unstructured or semi-structured data), anywhere (at the edge, in the data center, or in any of the public or private clouds) to enable **real-time analytics** and **machine learning** to deliver actionable intelligence and insights—all with the robust data security, governance, protection, and management capabilities that operators require.

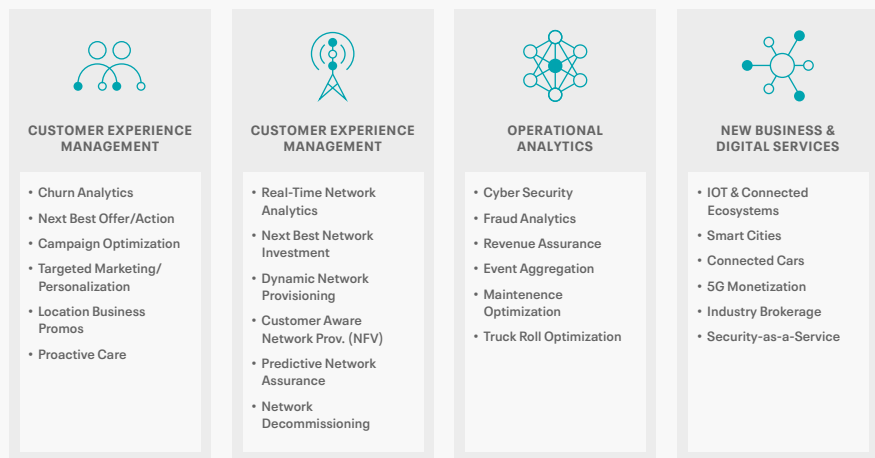
### How Cludera Empowers CSP Innovation—Key Use Cases

Cludera enables some of the leading CSPs, including 80 of the top 100 providers, to utilize the power of data, analytics, and machine learning to transform their business, to optimize campaigns, to do targeted marketing and personalization, reduce churn, effectively manage and optimize their network performance, fight cybersecurity/fraud, and to launch compelling new IoT and 5G digital services.

#### Deutsche Telekom

Using Cludera, Deutsche Telekom is able to reduce revenue loss from fraud by up to **20 percent**. They are able to build a single enterprise view of customers, which has led to more targeted campaigns, generating revenues by tens of millions of Euros while also reducing customer churn by **5-10 percent**.

#### KEY TELCO USE CASES



**Globe Telecom**

Ingesting more than **40TB/day** of streaming data, Globe Telecom's modern data management infrastructure, based on Cloudera, is helping the company enhance customers' mobile experiences and deliver a single source of truth.

*"The Cloudera Data Platform will help us manage our data, interpret analytics, and put those insights into action with customer segmentation so we can better tailor how our customers discover, buy and use our services."*

Gil Genio, Chief Technology and Information Officer, Chief Strategy Officer, Globe Telecom

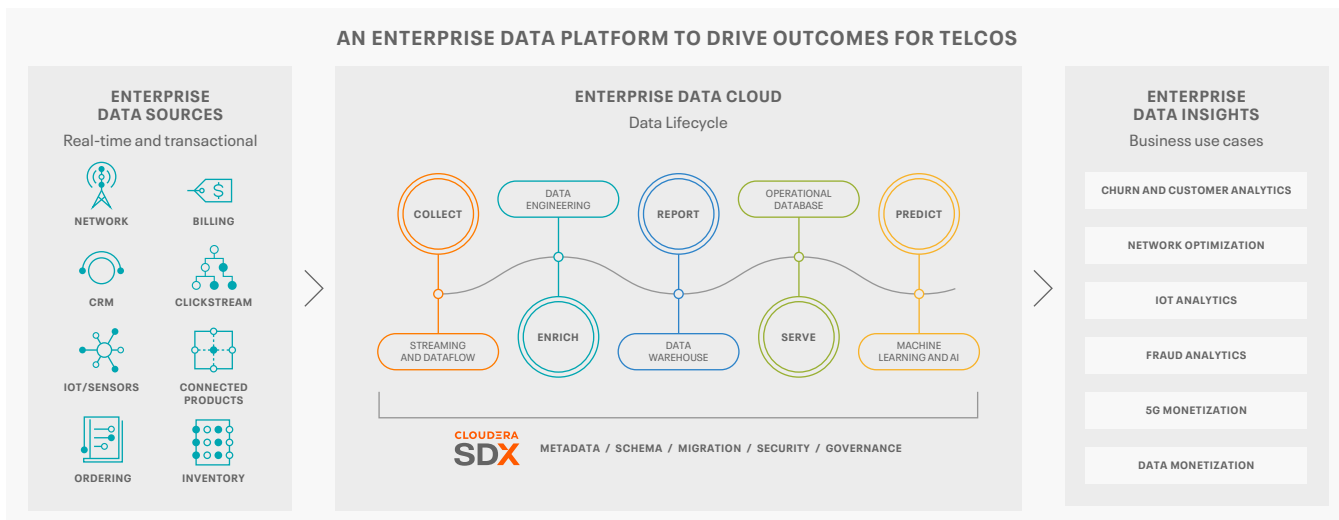
**What Cloudera Offers Communication Service Providers**

Cloudera offers an **end-to-end data management, analytics, and machine learning** platform that helps operators drive insights and action from any data, anywhere, in real-time.

- **Ingest, process, analyze** and deliver actionable insights from high volumes of real-time streaming data such as clickstreams, network logs, IoT sensors, smart devices etc. and also from traditional enterprise data sources such as CRM, billing, rating, network, inventory and other BSS and OSS systems.
- **Enable predictive analytics** or apply machine learning algorithms to petabytes of data to drive real-time actions such as real-time network provisioning, fraud prevention, and next best actions.
- The ability to **build, test, iterate, and deploy** machine learning models to enable cutting edge use cases such as predictive maintenance, autonomous driving, and other mission critical 5G applications.
- Provide **multiple analytical options** to drive insights, intelligence, and action from data at the edge, on-premise, or in any public, private, or hybrid cloud.
- Maintain strict enterprise **data security, governance**, and audit trails across on-premise and hybrid cloud environments.

**Manage and Secure the Data Lifecycle for Telcos**

Leading communication service providers worldwide are adopting an enterprise data cloud strategy using the **Cloudera Data Platform** to manage the end-to-end data lifecycle—from collecting data from multiple sources, to storing, processing, analyzing, serving, and predicting in order to drive actionable insights and use cases.



**Telefonica**

Telefónica Spain achieved a 20% increase in customer usage with a modern data platform from Cloudera.

“We can now offer customers exactly what they want; not what marketing may think interests them, but what really interests them.”

Carlos Morrás, Manager of Innovation, Big Data and Processes, Telefónica Spain

**About Cloudera**

At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. Cloudera delivers an enterprise data cloud for any data, anywhere, from the Edge to AI. Powered by the relentless innovation of the open source community, Cloudera advances digital transformation for the world’s largest enterprises.

Learn more at [cloudera.com](https://cloudera.com)

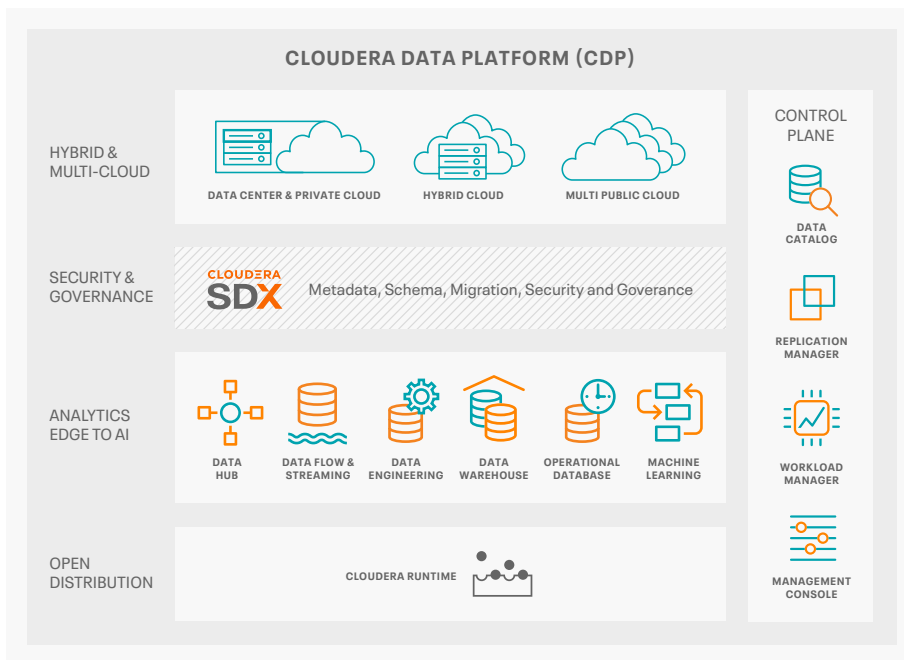
**100% Open**

A platform that is 100 percent open source, supporting your objectives to avoid vendor lock-in and accelerates enterprise innovation.

- Open source prevents vendor lock-in
- Open compute enables efficient server, storage, and infrastructure designs for scalable computing
- Open architecture mitigates interoperability concerns
- Open APIs with visualization-agnostic tools
- Open cloud enables a cloud-agnostic approach

**Cloudera Data Platform (CDP)**

Cloudera Data Platform is the industry’s first enterprise data cloud, offering a full range of analytic capabilities from the Edge to AI. CDP delivers powerful self-service analytics across hybrid and multi-cloud environments; CDP delivers a powerful platform that can collect, process, manage, analyze and model any data, anywhere to drive actionable insights and predictive analytics. And it’s built 100% on open source.



Cloudera SDX provides enterprise-grade security and governance on all data including metadata, with dedicated, integrated interfaces to manage it. Data security, governance, and control policies can be set once and consistently enforced everywhere, reducing operational costs and business risks while also enabling complete infrastructure choice and flexibility.

To learn more about how Cloudera drives outcomes for Telcos, please download our eBook on [Top 5 Data and Analytics Use Cases for Telcos](#).