DATASHEET

The Telco Al Platform

Al-driven operational efficiency and growth with Cloudera





As companies across industries and geographies grapple with the current Al boom, telecommunications (telco) service provider operations teams are under pressure to deliver value and efficiency with data. To fully realize the potential of 5G, deliver an exceptional customer experience, and leverage Al to uncover new revenue streams, operators must move from bolt-on Al point solutions to embed Al within the operator as a core capability.

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Telcos are already using Al for customer service and support. According to Cloudera's "<u>The Future of Enterprise Al Agents</u>" survey, 49% of telcos are exploring agentic Al to support the customer experience.

At a Glance

- Telco operators are exploring opportunities to leverage advanced analytics and AI to improve operations and customer experience.
- Traditional approaches that rely on bolt-on AI solutions have failed due to the scale and complexity of operational data.
- Cloudera provides a hybrid platform for ingesting, processing, and analyzing a unified view of operational data, and leveraging that data to build, train, and deploy Al natively into OSS/BSS environments.
- Telcos can leverage Cloudera to deliver private Al infrastructure to enterprise clients who lack the resources to operationalize Al themselves.

Although initiatives like the <u>AI-RAN</u> Alliance are gaining traction, very few telcos have successfully implemented AI for network operations. Automating the network requires telcos to overcome several barriers to entry, including:

- The volume and velocity of network data requires a highly scalable platform capable of ingesting and processing data in near real time.
- Al has often been implemented as an after thought, rather than as an integral and embedded part of the BSS/OSS design.
- Data is often siloed across legacy systems, vertically integrated applications, and cloud and on-premises infrastructure, making it difficult to integrate and analyze.

Cloudera's hybrid platform for data, analytics, and Al enables telcos to overcome these obstacles and deploy intelligence and automation as part of the core data management function of BSS/OSS. By unifying data across cloud, on-premises, and edge environments, Cloudera ensures consistent, secure access to the full spectrum of telco data. Real-time ingestion and processing enables operators to detect anomalies, optimize performance, and automate decision-making as part of the data management function. Cloudera provides the capabilities necessary to build and deploy Al natively within the operational fabric, rather than integrating it after the fact.

Additionally, the AI-native telco can use Cloudera to deliver AI infrastructure as a service to enterprise customers. With built-in support for private AI, telecom operators can offer high-value AI and data services (such as GPUaaS, inference, workbench, and model aggregation) on the customer's network, behind their firewalls, so enterprise organizations who lack the resources can get started with AI safely, securely, and locally.



Network intelligence in action: On the Cloudera platform, telcos unify streaming data across the network, apply Al and ML to automate network operations, and power Al-augmented reporting and insights to teams across the organization.

Benefits of Cloudera for Telco Operations Intelligence



Unify network data

Integrate structured and unstructured data from legacy systems, cloud platforms, and edge devices into a single, trusted data layer, eliminating fragmentation and enabling holistic Al insights across the network.



Process data in real-time at scale

Ingest, process, and analyze massive volumes of network telemetry and operational data with a platform built for high-throughput, lowlatency workloads, that supports proactive, automated decision-making and network optimization.



Embed AI directly into OSS/BSS operations

Treat AI as a native workload alongside streaming, storage, engineering, and analytics, enabling operators to train, deploy, and infer with models directly on the same platform that stores and processes their network data.



Enable AI as a Service for Enterprise Customers

Offer private, secure Al infrastructure to businesses so they can experiment with and deploy Al models behind their own firewalls.

Learn more at www.cloudera.com/solutions/telecommunications

CLOUDERA

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Cloudera is the only true hybrid platform for data, analytics, and AI. With 100x more data under management than other cloud-only vendors, Cloudera empowers global enterprises to transform data of all types, on any public or private cloud, into valuable, trusted insights. Our open data lakehouse delivers scalable and secure data management with portable cloud-native analytics, enabling customers to bring GenAI models to their data while maintaining privacy and ensuring responsible, reliable AI deployments. The world's largest brands in financial services, insurance, media, manufacturing, and government rely on Cloudera to be able to use their data to solve the impossible—today and in the future.

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