

# Transform Your Telecom Business and Operations with AI-driven Data Analytics

Cardinality's Perception platform running in a Dell Technologies ecosystem can help your business become more profitable, future-ready and indispensable to customers

## Deliver amazing business outcomes with edge-to-cloud analytics

**Get into production fast** with a platform that is compatible out of the box with the most popular telco data sources

**Analyze data in real-time** with the ability to stream and process over 50 billion events per day

**Develop apps with ease** using GUI-based tools and prebuilt use cases

**Apply machine learning** to enormously complex data sets in order to implement advanced use cases

If you're a Communications Service Provider, you recognize how data analytics can help you optimize operations, improve profitability, boost customer satisfaction and enable services in next-gen technology domains like 5G and Internet of Things (IoT). It's also quite likely that you've experienced the challenges inherent in implementing successful and scalable analytics solutions—from the immense volume, variety and velocity of data to the architectural and algorithmic complexity of solutions. It is also a challenge to deal with the scarcity of the skills needed to implement analytics solutions.

The good news is that Telecom data analytics doesn't have to be so hard. Dell Technologies and analytics software partner, Cardinality, have joined forces to help you speed deployment and maximize the ROI of your analytics deployments

Dell Technologies and Cardinality have a shared vision, which is to enable customers to scale their analytics deployments as their business needs grow. Dell Technologies scalable hardware infrastructure is designed to protect your investment as you grow, and Cardinality's cloud-native software gives you the flexibility to deploy on-premises or in the cloud and to easily move data back and forth between the two.

## Benefit from analytics & AI no matter your level of technical proficiency

Cardinality brings advanced data streaming, data analytics and machine learning capabilities together with Perception, a cloud-native, Kubernetes®-based platform. Perception is designed to benefit everyone in the organization:

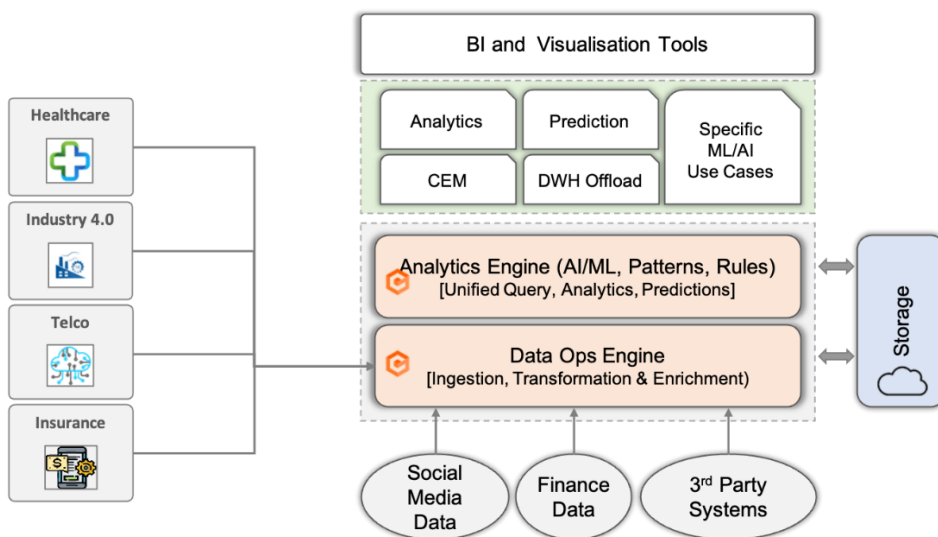
- **The data integration engineer** benefits from out-of-the-box compatibility with Telecom data sets and the ability to build massively scalable solutions.
- **The data engineer** benefits from the ability to perform large-volume, real-time analysis and to design and automate complex data pipelines with a simple and intuitive GUI.
- **The data scientist** benefits from the flexibility to use his or her preferred programming languages and applications to build applications and train machine learning models

“One of our biggest projects is NCX— network customer experience— which applies machine learning to more than 300 network KPIs.”

–Alexey Sutyagin, Head of Network Analytics, O2 (Telefonica UK)

- **The business user** benefits from the freedom of choosing their preferred dashboard and visualization tools and of driving new requirements back into the analytics engine whenever new insights are desired.

The data ingestion capabilities of Cardinality’s Perception platform are customized for Telecom data sets and provide you with everything you need out of the box, making the Dell Technologies and Cardinality solution incredibly easy to deploy. Just “plug” Perception into the network and start generating insights.



Dell Technologies provides the hardware engine on which the Cardinality Perception Platform runs. This engine is built on the compute horsepower of Intel® Xeon® processors that deliver a highly scalable compute platform capable of handling today’s analytics requirements and tomorrow’s.

Dell Technologies adds flexibility by allowing you to pick and choose the hardware components best suited to meet your requirements while delivering high reliability and performance.

### Key solution benefits

- **Telecom-specific solution** — A Telecom-focused, out-of-the-box solution that’s easy and quick to implement, helping you to reduce TCO and maximize ROI.
- **Rapid speed of deployment** — Drop Cardinality Perception into any Telecom environment and ingest data from multiple sources with little-to-no customization.
- **Blazingly fast** — With the ability to stream and operate on over 50B events per day in memory, you’ll be able to react to and predict conditions across your entire network in real-time.
- **Ease-of-use** — The Cardinality visual user interface makes it easy for data engineers and scientists to set up data pipelines for any use case, no matter how complex.
- **Ready-to-deploy solutions** — Use-case templates speed deployment, getting you up and running quickly.

## Analytics can decrease cost of retaining customers by 15%

Explore the benefits that advanced analytics offer to telcos looking to take a customer-centric view of operations. The whitepaper below highlights the benefits and quantifies the ROI for operators who choose to deploy Dell Technologies Service Provider Analytics with Cardinality.

Read the STL Partners executive briefing, "[O2 UK: Driving Customer Centricity in Network Analytics.](#)"

- **Multi-cloud ready** — Being built on Kubernetes, means you can run Perception at the edge, in the data center, or on the public cloud, and to easily move data between all three.
- **Scalability** — Start small and grow big. Deploy only what you need today with the confidence that your environment can grow with your business needs.
- **5G-ready** — Born in Telecom Perception positions any organization for digital transformation in the data-centric world of 5G, with its vast constellation of interconnected devices and users.

## Why choose Dell Technologies and Cardinality for Telecom data analytics?

Whether you're deploying a brand new analytics solution or looking to solve complexity and performance issues in an existing deployment, Dell Technologies and Cardinality can help you meet your goals with a rapidly deployable solution that can start generating data-driven insights in less time and at lower cost than most alternatives on the market today. Together, we offer unique advantages, including:

- Running Cardinality software on cloud infrastructure from the world's #1 IT vendor.<sup>1</sup>
- Rapid implementation.
- The ability to start small and scale as business needs dictate.
- Real-time analytics for speed at the edge.
- Container-based design for seamless operation in hybrid cloud environments.

<sup>1</sup> IDC Vendor Revenue, "[WW Quarterly Cloud IT Infrastructure Tracker](#)," April 2020.



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