# TELCO
## Zoomdata & Cloudera

Solving the Patient Insights Puzzle with Zoomdata
and Cloudera for Healthcare and Telecommunications

### Industry
Data Analytics & Visualization

### Website
www.zoomdata.com

### Company Overview
Zoomdata is the leading provider of Next Generation, Big Data Analytics software to Global 1000 enterprises. The Zoomdata interface allows users to easily connect, visualize, and interact with data on browsers and mobile devices. Once deployed, users are able to create interactive D3.JS based dashboards, fuse disparate data sources from across the enterprise into a single user experience and create a corporate data quilt that lets business users collaborate on the data that drives their business.

### Product Overview
Zoomdata's Next Generation Data Analytics and Reporting platform integrates with Cloudera's Impala and Search products to support big data implementations with streaming analytics and unstructured search. With a tactile experience, users can interact with data using a Data DVR (RW/FF/Pause), conduct drill downs and employ complex algorithms to share insights with their colleagues.

### Solution Highlights
_ Stream Processing

_ Pre-Built Connectors

_ Native Source Access

_ Big Data Implementations

## The Growing Need for Customer Insights

Increasingly, telecommunications firms are gaining a competitive advantage by consuming and taking action on customer data. More data is available than ever before about every aspect of the customer journey. Those businesses who use this data to gain a 360-degree view of their clientele stand to see returns on their investment by leaps and bounds. However, getting there is easier said than done. Analysts are faced with a number of challenges, such as managing the size and variety of data and anticipating privacy and security concerns. There are numerous opportunities to step ahead of the competition for those who overcome the challenges and turn customer data into customer insights.

## Navigating Patient Data in Telco

Telecommunications providers sit on more customer data than businesses in just about any other industry. Device and network data, customer usage and location data, application data, customer profiles, all present a substantial opportunity to fully understand and engage the customer. Not surprisingly, data volumes available to telecommunication organizations are massive and require technologies that can handle increasingly large sources and streams without breaking the bank.

To capitalize on the vast amount of customer information that is available to them, providers need a way to pull together user, device, network, and social data into one manageable data platform. Each of these data sources is massive and structured differently from the next, providing its own unique challenges when it comes to extracting and loading the data into analytical tools. As if building the data schema were not difficult enough, loading the data quickly enough to drive customer insights makes the process even more challenging. And with the volume of data increasing so quickly, everyone from the business user to the data scientist struggles to make future predictions based on the customer information. Those who are unable to capitalize on the vast amount of customer data available stand to lose ground to competitors while suffering from misplaced marketing spend, inefficient operations, lost revenue and customers, and decreased market share.

## Seizing the Opportunity

The mountain of data available to telecommunications providers presents an array of opportunities to decrease operational costs, improve the customer experience, reduce customer churn, and attract new customers. With the right technologies, telecommunications providers can join together user, device, network, and social data to better understand the customer and seize these opportunities. However, with such high volume and variety of data, they will only be able to do so with a full stack data solution that can provide a single source of truth in a way that the data can be analyzed efficiently.

## Cloudera Enterprise Benefits

STORES AND ANALYZES ANY TYPE OF DATA

_ Leverage the full power of your data to achieve pervasive analytics, increase business visibility, and reduce costs

_ Bring diverse users and application workloads to a single, unified pool of data on common infrastructure; no data movement required

ENTERPRISE APPROACH

_ Compliance-ready perimeter security, authentication, granular authorization, and data protection through encryption and key management

_ Enterprise-grade data auditing, data lineage, and data discovery

INDUSTRY-LEADING MANAGEMENT AND SUPPORT

_ Best-in-class holistic interface that provides end-to-end system management

_ Open platform ensures easy integration with existing systems

_ Open source to achieve stability, continuous innovation, and portability

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Perhaps more than any other area, customer insights necessitate a focus on big data and present problems that could not previously be addressed with traditional tools. By combining Cloudera with Zoomdata, businesses can establish the single source of truth that is needed to seize the massive opportunities presented by a better understanding of their customers.

For more information, check out the Customer Insights Solution on the Cloudera Solution Gallery.

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### About Cloudera

Cloudera delivers the modern platform for machine learning and advanced analytics built on the latest open source technologies. The world's leading organizations trust Cloudera to help solve their most challenging business problems by efficiently capturing, storing, processing and analyzing vast amounts of data.

**Learn more at cloudera.com**

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## Customer  Insights with Cloudera & Zoomdata

### Customer Insights Delivered by Leading Edge Technologies

The combination of Cloudera's customer insights stack and Zoomdata's visual analytics platform is ideally suited for analysis of customer data. By providing a dynamic and flexible data platform, Cloudera empowers the business to digest any volume and variety of data while adapting to changing business needs. Zoomdata then takes that power directly to the business user with intuitive visual analytics based on the freshest data available. Zoomdata optimizes the connection to Cloudera by querying directly on each of the data technologies without replicating or moving the data. Cloudera's real-time data processing capabilities feed directly into Zoomdata to instantly make streamed data available for ad-hoc exploration, data discovery and analytics dashboards 365 days a year, 24 hours a day, 7 days a week.

### Data Storage & Processing with Cloudera

Consuming customer information requires a robust and powerful way to store, and process, and serve different types of data. Cloudera allows businesses to consolidate customer data of all volumes and varieties into a single data platform. The platform was also built with data flexibility in mind, allowing engineers to easily grow and alter the customer record as their needs change. Cloudera's Analytic Database, powered by Apache Impala, enables analysis of extremely large data sets with SQL-like capabilities. For streaming data, Cloudera's Operational Database and Apache Spark and data stores like Apache Kudu are ideal for processing data that must be made available to end users in real-time. Cloudera Search helps you discover your data to best build you analytics practice around.

Creating a data-driven organization starts with Cloudera. It combines data sources into one platform while giving data engineers the flexibility to adjust models according to changing needs and the ability to grow the data to any scale. With Zoomdata, this allows for self-service analytics on big data using the same high-performance SQL and Data Science tools that analysts are used to on traditional data sets. Its full range of data storage platforms allows for optimized performance for all types, sizes, and structures of data. Access engines like Apache Spark allow for a mix of stream processing and scalable machine learning so businesses can learn about key behaviors, engage with their customers in real time, and improve the overall customer experience.

### Analysis & Interpretation with Zoomdata

While Cloudera provides a robust and powerful stack to store and serve the data, analysis and interpretation of the customer data becomes much easier with fast, intuitive visual analytics. Zoomdata extends Cloudera's platform by bringing self-service business intelligence to business users and allowing them to intuitively interact with the data themselves. It was built from the ground up to allow a direct connection to data sources while allowing IT to maintain control and governance over the data. The simple, intuitive, and collaborative tool makes it easy for business users to create a full range of data visualizations, from exploratory data analyses to dashboards. By allowing for self-service analytics, Zoomdata enables business users to actively engage with the customer rather than waiting for assistance from IT. Customer insights generated through stream processing and machine learning in Cloudera become even more apparent through visualizations with Zoomdata.

Zoomdata's visual analytics platform allows businesses to visualize and interact with customer data of all sizes and varieties. Its Smart Connectors optimize the connection to the data by taking queries directly and individually to each data source, rather than first pulling them into a secondary data store. Zoomdata Fusion allows for seamless joining across data sources so they can be viewed as a single source of truth. When viewing real-time and streaming data, users can turn to Live Mode where they can pause, rewind, and fast forward the data visualization using  Zoomdata's DataDVR.

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## cloudera®

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