



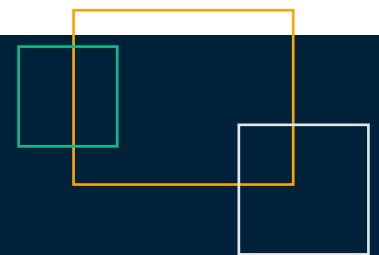
# FROM INFRASTRUCTURE TO ORBIT: HOW ADITI ENGINEERED A DATA-LAKE SOLUTION FOR GLOBAL SATELLITE NETWORKS

## INTRODUCTION

A global tech giant finalized plans to launch thousands of communication satellites into low-earth orbit to expand access to broad-band internet access, effectively placing cell-phone towers in space. To ensure success, the project requires large-scale ingestion and management of data using cutting-edge data management technologies. The Aditi team has initiated the creation of data-lake infrastructure as the foundation for a secure management system for data ingested from the myriads of projected satellites.

## THE CHALLENGE

Our client is in the beginning stages of creating a new constellation of communication satellites in low-earth orbit to expand broadband internet and other communication technologies. The complex process of mass-producing thousands of communication satellites, launching them into orbit, and managing the massive deluge of data resulting from this project, both as it gets off the ground and after it is up and running, requires the creation of a robust data management system using VMware and AWS resources.



## OUR SOLUTION

Aditi was hired to create this data engineering solution first by creating a data-lake infrastructure to support the backend for the ingestion and management of data coming from satellites. As this project is getting up and running, they have initially hired an Aditi software-development team specializing in data engineering and managed by a team leader.

## THE RESULT

As this project continues to progress, the Aditi team has been developing database solutions for data ingestion and management, while concurrently developing work processes and documentation necessary to drive project success. This includes developing personnel security screening, checks and electronic design automation (EDA) systems and workflows. Because of the sensitive nature of much of this project, Aditi will also take care of hiring personnel that will meet these stringent security and clearance requirements.



## BUILDING DATA INFRASTRUCTURE FOR THE FUTURE OF TELECOMMUNICATIONS

Discover unparalleled IT solutions with Aditi's specialized focus in the larger telecommunications space, data and analytics, and application modernization. We create dedicated teams of professionals that deliver innovative solutions to drive efficiency and growth for your business.



We understand the unique challenges of the telecom industry and provide tailored strategies to meet specific technological, software and business needs. With our advanced data and analytics services, we transform your data into actionable insights, empowering informed decision-making. Partner with us to leverage cutting-edge application and data + analytics services that enhance your technological capabilities and propel your business forward. Contact us today to ensure your next project's success.

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# ADITI CONSULTING

Aditi is a leading digital engineering services company. We partner with established and emerging enterprises by leveraging borderless talent across three continents to achieve transformative outcomes that will reshape their trajectory. We lead and support our clients' efforts to design, build, and operate the products, systems, and processes required to deliver impact by leveraging deep insights, practical knowledge, and human spirit.

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