Enabling data-driven growth leveraging Lumin on the Snowflake Data Cloud

Learn how an innovative healthcare services platform improved its resource scheduling through democratized, actionable and swift analysis

~300+
analyst & data scientist hours redeemed each week

95%
accuracy in advanced analysis results

24/7
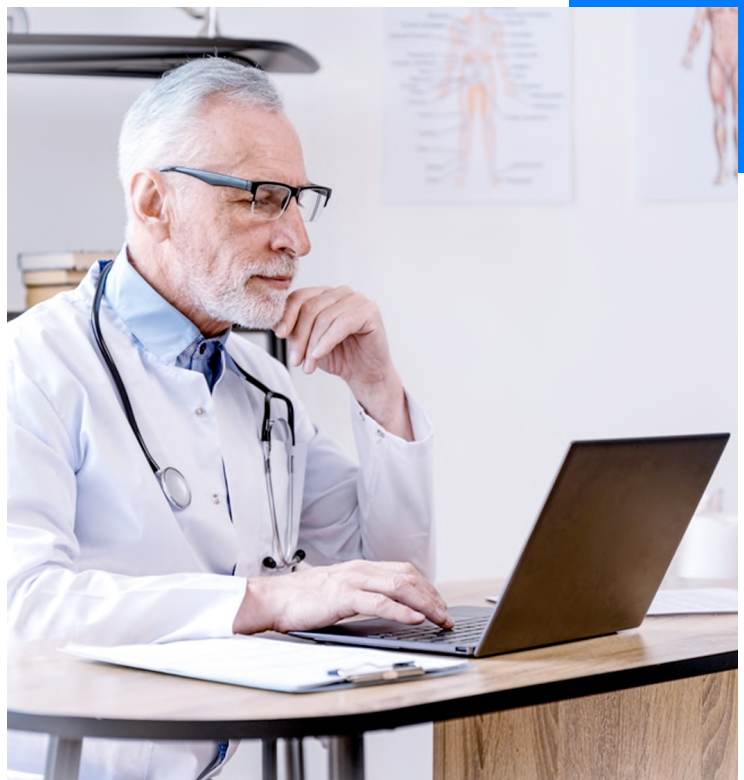self-service insights available for all business users

Context

During the COVID-19 pandemic, the global healthcare industry underwent several dynamic changes. The demand for healthcare professionals increased, while supply remained the same, and the existing systems in the industry were unable to meet the demand. The need for proper healthcare resource management emerged in response to the pandemic situation. Effective scheduling was also essential for ensuring optimal patient care, maintaining a healthy work-life balance, and reducing the risk of burnout among healthcare professionals.

Healthcare scheduling platforms work as an effective solution for professionals to manage the never ending workload. But such platforms generate colossal volumes of data every hour, attributed to a range of processes – from patient appointments to staff schedules, and operational data. However, the size and volume of the data make it challenging to investigate the data, and to arrive at actionable insights that can aid in business growth, operational efficiency, and improved patient care.

This case study illustrates how a healthcare marketplace platform implemented Fosfor's decision intelligence solution Lumin to generate key insights around worked hours, shifts, and facilities data, all of which had been hosted on Snowflake, to improve scheduling and aid platform growth.

Fosfor's customer, a pioneer in empowering independent licensed healthcare professionals to connect directly with healthcare communities with open workforce needs, wanted to present deep insights to the management in order to generate swift decisions, and diagnose on key performance indicators across different hierarchies.

The customer's platform, designed to address the healthcare shortage by directly connecting healthcare professionals with top-tier facilities, was facing several challenges including:

A turnaround time of weeks to generate insights

The analytics team was facing difficulties in disseminating insights to key decision makers in a timely manner. Data scientist hours were being utilized to integrate and clean the data hosted on Snowflake, instead of working on advanced analytical techniques to get deeper insights out of the data.

Inability to gain a holistic view of data

Considering the data size, absence of a singular view of the data created challenges for the leadership, as accessing multiple reports and dashboards was cumbersome and inefficient.

Delayed decision-making

The constant delays and challenges in analyzing the data affected the decision-making process and timelines, leading to a loss of significant business opportunities.

What the customer needed

A comprehensive scheduling and credential management platform for healthcare professionals which could:

- Reduce the time taken to generate insights, with a unified integration to the Snowflake Data Cloud.

- Implement a unified view of data to enable the leadership with key insights, and provide a holistic view of data across different geographies.

- Cut down the need for technical teams to access multiple analytical applications and touch points to generate reports.

- Enable the leaders to take faster data-driven decisions.

How Lumin + Snowflake helped

Lumin helped democratize critical insights across the C-suite and key executives on the Board, helping them take decisions on-the-fly. Lumin made the relevant data transparent for all stakeholders, and provided trustworthy insights that offered a comprehensive summary with easy-to-interpret charts.

- Lumin enabled natural language querying for easy decision-making on complex multidimensional questions, including questions on key performance metrics.

- Lumin's native Snowflake connectors allowed for seamless integration and enabled direct querying of multiple data sets from Snowflake, without loading them onto the server. This resulted in a faster processing time, and smarter query resolution.

- Lumin created cognitive business ontologies to set the metadata layer and make business querying more contextual for faster recall.

- Lumin refresh frequency synchronised seamlessly with the Snowflake Data Cloud, enabling access to the latest data at all times.

- The Lumin workspace created a one-stop destination for analysts and leaders to curate and share insights.

- Lumin executed advanced analytics, including diagnostics, univariate/multivariate forecasting, anomaly detection, and simulation analysis, along with advanced explanation features that established trust and confidence in the models in various business scenarios.

> " Lumin is Siri for your data. " *– VP of Data and Analytics*

Business impact

Reduced time-to-insights: With over 90% accuracy, the wait time for answers related to the open shifts, facilities, providers, specialties, revenue, and other critical dimensions was reduced from weeks to minutes.

Contextual and trustworthy insights: Lumin allowed the leadership to focus on key areas and perceive critical insights quickly. Lumin's explainability feature allowed users to view the models, error metrics, and relevant data features considered for analysis in a transparent manner, building trust on the solution. Lumin provided accurate forecasts and timely recommendations as well, allowing the team to leverage the tool without any ambiguity.

Reduced the dependency on analysts and data scientists: Natural language querying facilitated leaders to ask questions on the key focus areas and generate insights on-the-fly, reducing the need for multiple conversations with analysts, and or multiple dashboard builds.

Bullet-Proof solution implementation: The data-to-decisions timeline for the solution was less than 2 weeks with Lumin's ready to plug in Snowflake native connectors, making it one of the fastest and most effective solution implementations in the client's business history.

Seamless insights exploration: Lumin, with its native Snowflake connectivity, provides unified integration with the Snowflake environment. Lumin's simple natural language search-based interface eliminated the challenge of working with different dashboards and analytical applications to curate analyses.

" This is one of the best implementations we have ever been a part of. "

- Director of Data Science

About Lumin

Lumin is revolutionizing the decision intelligence category by empowering everyone in the organization to quickly discover insights from their data. Lumin's powerful decision intelligence capabilities combine AI and ML technologies with a natural language search interface. This dynamic combination allows users to ask questions about their business data, analyze billions of data in seconds, and gain comprehensive, automated insights – all without writing a single line of code.

With an interactive experience and insightful data stories, Lumin makes consuming intelligence easy, personalized, and fun!

To learn more, visit us at: www.fosfor.com/lumin

lumin

The Fosfor Product Suite is the only end-to-end suite for optimizing all aspects of the data-to-decisions lifecycle. Fosfor helps you make better decisions, ensuring you have the right data in more hands in the fastest time possible. The Fosfor Product Suite is made up of Spectra, a comprehensive DataOps product; Refract, a Data Science and MLOps product; and Lumin, a Decision Intelligence product. Taken together, the Fosfor suite helps businesses discover the hidden value in their data. The Fosfor Data Products Unit is part of LTIMindtree, a global technology consulting, and digital solutions company with more than 700 clients and operations in more than 30 countries. For more information, visit Fosfor.com

FOSFOR