

Fast-tracking Warranty Management with Augmented Intelligence for a Global Fortune 500 Home Appliances Corporation

Challenges faced

Our client, a US-based Fortune 500 home appliances corporation that manufactures and distributes heating, ventilating, and air-conditioning (HVAC) systems, wanted to improve their warranty and after-sales management process, which heavily depended on manual intervention by their data science teams. Unpredictable warranty expenses and claims resolution resulted in financial challenges for the client, threatened their market position, and damaged customer trust.

They also faced the following key challenges:



Every business query required manual data curation from multiple reports by the analysts, with a turnaround time of more than three days



The inability to gain a holistic view of data across the warranty lifecycle made it difficult for leaders to identify them as new business opportunities



The lack of integration between the product, finance, and service quality departments resulted in constant delays in decision-making



With every team investing in manpower to cater to their requirements, there were major inconsistencies in data management, thus creating multiple sources of truth

Our solution

Lumin provided the fastest way to effectively manage and curate product claims and ensure product support and service quality. This allowed the finance, claims and customer service teams to conduct comprehensive data exploration, enabling quick iterations and rapid drill-downs.

Lumin also offered the following benefits to the client:

- Lumin was able to query directly on data sets residing in multiple locations without loading them onto the server. This resulted in faster processing time and smart query resolution
- Cognitive business ontologies were curated to set the metadata layer and make business querying more contextual. In other words, the most frequently used business language was tagged to attributes, measures, and questions for faster recall
- Advanced analytics, including diagnostics, univariate/multivariate forecasting, and simulation analysis, was configured with explainable AI to gain customer trust and confidence in the models in various market scenarios
- Lumin's out-of-the-box capabilities, such as its smart Natural Language Generation (NLG) engine, autonomous nudges, and advanced analytics algorithms, resolved complex queries in real-time, fast-tracking warranty analysis

Business impact

- The wait time for answers related to the region, model, policy type, and other critical dimensions for processing warranty claims, reduced from weeks to minutes, with 90% accuracy
- Timely and trustworthy insights allowed business teams to focus on areas that required immediate intervention. Accurate forecasts and timely recommendations allowed them to unlock new business opportunities

- Business unit leads can now handle future visibility of claims, along with “what-if analysis” on part and non-part costs and their impact on warranty costs, reducing dependency on data science teams
- Lumin’s intuitive natural language search-based interface eliminated the challenge of sifting through long and tedious Excel reports. The success of this initiative has prompted other business units to adopt Lumin to help illuminate new business opportunities

Additionally, the client obtained the following benefits:



Query resolution time reduced from weeks to minutes



90% accuracy achieved in query resolution



Over 500 unique questions resolved every month



Projected savings of over **USD 1 million** expected in operations through faster, timely, and incisive insights

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 platform; Optic, a data fabric to facilitate data discovery-to-consumption journeys; Refract, a Data Science and MLOps platform; Aspect, a no-code unstructured data processing platform; and Lumin, an augmented analytics platform. 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 hundreds of clients and operations in 31 countries. For more information, visit Fosfor.com.