



Smoothing Demand Planning through Supply Chain Analytics

"By leveraging the marketing activities' impact on demand trends, our client is able to allocate budgets optimally to get the highest return coupled with reducing inventory lead time to cater to the demand that is forecasted using our machine learning models."

**- Ayman Rehan,
Program Manager, FTI**

THE CLIENT

A Top-20 Pharmaceutical Company of Pakistan approached Frontier Technology Institute (FTI) for advice on improving their inventory management and perform target setting

THE CHALLENGES

Our client was faced with a variety of challenges from the outset. Our client suffered from inconsistent KPIs due to absence of data validation and reporting pipelines. On top of that, a lack of formal procedure for setting marketing targets caused a negative impact on our client's marketing activity in their target areas. Also, poor performing reports and dashboards hindered visibility and proactive decision-making for executives, and the process of creating new reports, dashboards and visualizations required significant time from our client's development resources.

Finally, inconsistent data was recorded, of past trends and performance evaluation, on their products over the years which made it difficult for our client to forecast sales accurately.

THE SOLUTION

By adopting a consumer centric thinking, our team of data scientists and data analysts were able to generate focused information from our client's several data streams. FTI, first, completed an impact analysis outlining a set of activities and deliverables to improve our client's reporting and forecasting analytics. All data tables, views, storage procedures, functions, objects, and more were analyzed for improvements.

More than 60 percent of the objects had to be redesigned or rebuilt due to legacy systems or source system changes. For this task, FTI brought in its team of big data engineers in order to reduce complexity, change the business logic, and improve performance across our client's technology stack.

Based on the information gathered and data provided, an analytics solution was developed which was able to report, visualize, and forecast the sales. Simultaneously, a dashboard-enabled marketing model was also designed which could distinguish between the areas generating high sales. This was done to facilitate our client with strategy & budget planning and to be able to assess performance of the different marketing campaigns.

During this entire time, the focus business units went through a rigorous testing and training cycle before the eventual roll-out.

KEY TAKEAWAYS

Our client received expert guidance on which areas to spend more in terms of marketing, and how to manage and boost sales. They, now, have improved trending capabilities, deeper analytics across broader data sets, and increased trust in their data. Their executives also have access to comprehensive business intelligence functionality for each product along with past trends and patterns.

The Marketing department was able to identify potential areas to focus on to generate quality sales, beforehand, which helped them to carry out precision marketing and spend their budgets optimally. The Operations department was able to differentiate between the low sales and high sales areas from their list of target areas which enabled them to accurately manage their budgets assigning procedure, resulting in a high conversion rate.

Through this effort, our client saw an enhancement in their planning and budgeting, considerable reduction in their sales planning costs, and meeting of their yearly targets.

ABOUT FRONTIER TECHNOLOGY INSTITUTE (FTI)

Frontier Technology Institute (FTI) is a Data Science & AI Training and Advisory company focused on helping organizations solve complex data challenges, improve business analytics, and optimize business performance. Our goal is to deliver tremendous value to our clients by transforming their raw data into analytics-ready assets, and by providing critical insights needed to make better decisions. We focus on emerging technologies in data management, data analysis, enterprise AI, business intelligence, and digital transformation. Our core services include advisory and consulting, solution implementation, and skills training.

For more information, visit us at www.frontiertechnologyinstitute.com or contact us at info@frontiertechnologyinstitute.com.

