Improving Supply Chain Efficiency through Accurate Forecasting

latentview

Actionable Insights • Accurate Decisions

Client

Provider of Personal Computers, Imaging and Printing products

The Problem

The inventory Planning team wanted to improve Supply Chain efficiency by replacing their existing siloed ML/AI process with an advanced touchless ML Platform in Azure.

The requirement of innovative solutions to improve the existing forecast accuracy for key high-value parts & change the associated business processes.

The Before State

Inefficient forecast system for Inventory Planning of Personal Systems services resulting in:

Delayed forecast results – 5 days effort from 3 data scientists to reach the inventory team.

Delays / Failure in decision making leading to excess products worth $15M per year.

Failure to meet the SLAs.

The LatentView Solution

Operationalization of ML/DL models by building a reliable, **automated forecasting system** to generate forecasts faster.

Migration of 12 forecast algorithms (100k ML/AI models for 24k parts) from Azure DSVM to **Azure Databricks backed by Apache Spark.**

PySpark and SparkR APIs for distributed computing & hence faster computation.

Scalable framework using **On-Demand clusters.**

Seamless orchestration of Data & ML Pipelines using **Azure Data Factory.**

Constant Monitor, Data Audit & Version Control using **MLFlow** integration.

The After State

Helped the business to **improve Supply Chain efficiency** with timely decisions using faster forecast results.

8x faster computation.

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5x Reduction in Infrastructure Cost.

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A scalable framework to continually serve the future scope.

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Automated workflow integrated with the business operations.

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Up to **1.5%** improvement in Scientific models for M1 month.

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Monthly data refresh automatically triggered.

Values Adds:

- Spark Upgrade
- Supported migration of **additional 30+ traditional algorithms** from DSVM to Databricks
- MLflow API to ensure **Data & Model Audit & Governance**
- Key vault to access sensitive information and ensure **data security**

About: LatentView Analytics

LatentView Analytics is a leading global data and analytics service provider helping companies turn data into actionable insights to gain competitive advantage. As a trusted analytics partner to the world's most recognized brands, LatentView solutions provide a 360-degree view of the digital consumer, fuel machine learning capabilities and support artificial intelligence initiatives. LatentView's success is driven by a commitment to deliver unrivalled analytics solutions that enable Fortune 500 companies in the retail, CPG, BFSI, high tech, healthcare and other sectors to predict new revenue streams, anticipate product trends, improve customer retention, optimize investment decisions and turn unstructured data into a valuable business asset. LatentView has offices in Princeton, N.J., San Jose, Calif., London, Singapore and Chennai, India with more than 600 employees globally.

For more information, please visit **www.latentview.com** or follow us on **LinkedIn,** Email: **sales@latentview.com**