

MACHINE LEARNING POWERED SALES FORECASTING FOR A HOME FURNISHING COMPANY

BETTER INVENTORY MANAGEMENT AND RESOURCE ALLOCATION WITH ACCURATE SALES FORECASTS

CUSTOMER PROFILE

HQ

West Warwick, RI

INDUSTRY

Textile Manufacturing

EMPLOYEES

183

ITC SERVICES

Data Analytics

APPLICATIONS & TECHNOLOGIES

- Microsoft Power BI

INTRODUCTION

The client is a leading privately owned textile manufacturing company, offering a wide selection of home furnishings products. They design, manufacture, and market fabrics and flooring solutions, including linoleum and asphalt floor coverings, rugs, and carpets.

CHALLENGES

The client confronted a formidable challenge as their existing sales forecasting system relied on laborious and error-prone spreadsheets. Eager to enhance their forecasting capabilities and optimize resource allocation, the client sought an advanced, machine learning-powered solution. It was imperative to find a solution that surpassed the limitations of the rudimentary forecasting model available in Power BI, which was used as benchmark of the proposed solution.

SOLUTION

IT Convergence undertook a comprehensive evaluation of multiple machine learning and statistical models. Following rigorous analysis, the Long Short-Term Memory (LSTM) model emerged as the most promising candidate for time series forecasting.

The implementation began in a phased approach, with initial deployment to top-tier management and key users. Subsequent phases were planned to ensure fine-tuning based on user feedback and a gradual rollout to a broader user base.

The solution demonstrated its versatility by seamlessly interfacing with diverse data sources, both within the company's data warehouse and external data points. It effectively delivered highly precise sales forecasts spanning a 365-day horizon, which were made available for user consumption through an executive dashboard.

RESULTS

- Provision of flexibility through the ability to incorporate customizable parameters in response to evolving business needs and shifting market conditions.
- The delivery of precise sales forecasts, which proved instrumental in optimizing inventory management and enhancing profit and loss (P&L) projections.

ITC ADVANTAGE

- Certified Power BI consultants with expertise in machine learning and data forecasting
- Advanced AI/ML capabilities and experience in executing similar projects