

Leveraging Data Science to Increase Forecast Accuracy against Inventory Loss



Business Objective

- To create a data-driven, statistically backed solution to improve the visibility of product availability, across business units.
- To help the company manage inventory to reduce losses
- To integrate data from multiple sources and use it for effective data analysis, and insight generation

Client

Our client is an American multinational food manufacturing company in the food processing business for over 100 years

Industry

Manufacturing and Logistics

Function

Sales and CRM

Technology

SQL, Tableau

The Solution

TekLink delivered the following solution using SAS Enterprise Guide, Microsoft SQL Server, and Tableau Desktop:

- Dashboard creation in Tableau to showcase inventory performance, and risk metrics for all of the client's business.
- The management team makes the business decisions, by tracking the dashboard.
- The risk metrics allow the user to understand the inventory exposure of various products to the market.
- The team helped process the data with SAS from SAP, SQL Server, and SharePoint, to create a comprehensive data file.
- Provision to generate customized reports from the final model, based on requirements of individual business units.
- The reports are accessed by the business units on a weekly basis
- The team also has provided regular enhancements and updates to the existing solution
- The model is tuned to guide to the actual achieved in comparison to the predictions of inventory production and consumption.



Outcomes and Benefits

- Identification of products with high-risk inventory build-up due to various reasons such as:
 - Inadequate Planning (based on demand forecasting)
 - Past shipping performance
 - Planning performance (based on actual shipments and planned production)
 - Revenue Slippage (actual POS sales comparing with national average consumption)
- The metrics developed help the business plan the future steps including write-off amounts.