

Developing a Sales Forecasting Tool Helps a Building Materials Manufacturer Accurately Predict Sales and Improve Business Success

Customer: Champion Windows

Size: 2,000 employees

Region: Ohio, USA

Industry: Manufacturing and Distribution

Profile: Champion Windows is a leading manufacturer and marketer of windows, doors, sunrooms, and roofing and siding products for home and corporate improvement projects

Services: Predictive Analytics

Business Need

Founded as a small manufacturer of aluminum storm windows, storm doors, awnings, and screen rooms, Champion Windows has expanded to building heavy commercial windows as well as doors, and has become a well-known brand name when it comes to quality and experience in home improvement. It operates in over 77 locations nationwide, and has over 50 showrooms.

Working in a highly competitive business environment, Champion Windows was facing challenges in predicting location-wise sales forecast. This was mainly due to the unexpected rise and fall in sales. Traditional forecasting tools such as Excel and Access, and manual processes failed to completely capture the variation in business, resulting in planning difficulties.

The enterprise sought to introduce an easy to use location-wise sales forecasting system, considering the marketing funnel that drives the net sales (for 48

locations), which could provide visibility to its management team and help them predict future activities associated with various business segments such as marketing, sales, and operations. The manufacturer wanted this system to deliver insights into several components in the marketing and sales journey.

Solution and Approach

To help Champion Windows gain deeper insight into the business, Synoptek developed a cost effective and efficient location-wise sales forecasting tool that provides the executive team the capabilities to create accurate and credible forecasts, and monitor and improve future activities associated with various business segments such as marketing, sales, and operations.

The Synoptek team gathered location-wise data for the past two years (2015 to 2016) of the marketing funnel that included factors such as advertisement



Synoptek, a trusted partner, has helped Champion put together our BI strategy for complete visibility into operations including sales, marketing, financial, and manufacturing performance. It was a great experience working with Synoptek and the BI team.

Dave Hofmeister (CIO), Champion Windows



spends, appointments created, cost per appointment, conversion run, appointments run, conversion close, orders, average ticket price and sales. The tool was structured at a granular level, taking into account all the above factors.

To make the solution user friendly, Synoptek took into consideration inputs from the marketing, sales, and operations teams to develop the forecasting model. The model uses R script (written for 48 locations using ARIMA time series modelling considering the marketing funnel) integrated with Power BI to create appealing visualizations for reports and the dashboard.

The tool provides location-wise visualizations, such that a particular location can be selected for which forecast is to be determined; if nothing is selected, visualizations for all of their 48 locations are created together, presenting net sales.

The tool's dashboard was designed to collect, analyze, and visualize forecasting data associated with various business segments:

- Marketing - Predicts sales figures based on how leads flow through the funnel, average conversion rates, and lead velocity.
- Sales - Predicts sales figures based on location, advertising channels, and associated costs.
- Operation/Installation - On the basis of sales forecast from advertisement spends of every channel, spending on various channels is revisited to produce optimum and maximum sales.

The forecasting tool leverages the power of Microsoft Power BI to help the executive team easily incorporate 'what-if' scenarios for key sales assumptions into strategic planning.

The tool also uses statistical and regression modelling techniques to predict various factors like advertising costs, lead conversions, and orders installed for each location.

Business Results

The location-wise sales forecasting tool has delivered rapid improvements in Champion Window's planning and decision making process. The tool delivers deep insights right from the advertising spends to net sales. With an accurate snapshot of location-wise sales patterns, the manufacturer is better able to predict product demand to improve scheduling and budgeting for various locations. In addition to this, a location-wise sales forecast helps in operating various stores and outlets on an optimum basis.

The tool puts powerful querying and analysis functionality into a graphic interface so management can easily filter/slice the data that they want to see.

Focused on delivering meaningful reports using simple visual representations, the tool provides management forecasting data in a simple manner.

With the right analytics, it is easy for decision makers to manage existing developments and project future trends.

Overall, the sales forecasting tool provides Champion Windows with powerful corporate performance management capabilities to facilitate effective planning and faster decision making, along with accurate forecasting and budgeting.

About Synoptek

Synoptek is a Global Systems Integrator and Managed IT Services Provider offering Comprehensive IT Management and Consultancy Services to organizations worldwide. Our focus is to provide maximum "business value" to our clients enabling them to grow their businesses, manage their risk/compliance, and increase their competitive position by delivering improved business results.