

PREDICTIVE DEMAND ANALYTICS FOR DIY RETAILERS

Factoring the Weather into Home Improvement Sales



For DIY-focused retailers no other external variable has the ability to influence sales as frequently, immediately, or meaningfully as the weather. The conditions outside significantly impact consumer purchasing decisions for lawn & garden needs, exterior maintenance, and indoor projects. And, because the weather is always changing, businesses face ever-changing shifts in traffic levels and demand for specific products. Weather analytics enable retailers to precisely measure the impacts, proactively align inventories with demand, and increase sales and profit.

CAPTURING FINANCIAL BENEFITS WITH WEATHER ANALYTICS

Factoring in the weather's influence helps businesses account for how the conditions outside affects sales. From a planning perspective, the analytics identify and quantify the weather-based demand volatility in the prior year's performance, removing error in business forecasts. In-season, weather-informed replenishment adjusts inventories based on when, where, and how much certain products will see demand increasing or decreasing due to upcoming weather conditions. Key benefits include:

- **Increase Sales by Reducing Out-of-Stocks**

Having product available when shoppers want it drives sales and customer satisfaction/loyalty. DIY retailers typically capture a revenue lift of 60 to 150 basis points by decreasing lost sales due to stockouts.

- **Improve Margins**

Grow profit through higher sales, lower inventory costs, and reduced markdowns when weather-driven demand insights are used to better align inventories with market-level demand. Companies can expect a 20 to 50 basis point profit lift (as a % of revenue).

- **Increase Working Capital**

Deweathering sales generates first year balance sheet boost for retailers. This process corrects for weather volatility in historical sales and the resulting, initial inventory realignment generates working capital by reducing the total system inventory via improved forecast accuracy and optimized safety stocks. The benefit can be measured by looking at working capital improvement as a percent of cash and cash equivalents, usually between 20-30% for the DIY sector.

Weather analytics also provide a weather-adjusted view of sales performance across the business and can be leveraged to optimize digital marketing, markdowns, and more.



Predictive Demand Analytics for DIY Retailers

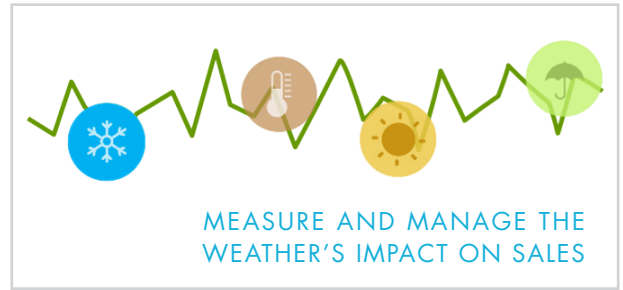
GETTING STARTED

The quickest way for companies to precisely quantify how the changes in the weather affect sales and confirm the financial returns that more accurate, weather-adjusted demand forecasts provide is to begin with a pilot that includes an upfront Weather Impact Analysis.

The analysis process combines multiple years of product and store-level sales history with corresponding weather data by time period (day or week) for each location. Planalytics identifies the weather's influence on demand and the degree of sales variability these relationships generate across products,

time frames, and locations. Deliverables from the initial analysis include highlights of product-level weather sensitivities, the related revenue volatility, and the forecast accuracy improvements that are realized by incorporating weather analytics.

Once the weather impact modeling process is complete, a company can access and utilize live, updating weather analytics for various products over several weeks. By using the key metric



of Weather-Driven Demand (WDD) in real-time, the business can experience how demand forecasts adjust for changes in the weather and capture improvements in key performance metrics

INCORPORATING WEATHER-DRIVEN DEMAND ANALYTICS

With the influence of the weather systematically updated and precisely translated into a business-friendly metric, DIY retailers are able to rapidly incorporate WDD insights into existing processes and technology solutions. WDDs quantify how much the weather alone has affected or will affect demand, adding value to replenishment, performance analysis, and digital marketing.

Weatherization to retailers is delivered via the following four Modules:

FINANCE MODULE

Get a clearer view of true performance with weather-adjusted sales metrics.

(Total & Department-level analytics)

REPLENISHMENT MODULE

Improve product availability by factoring in weather's impact on demand for the next two weeks.

(Product- and SKU-level analytics)

PLANNING MODULE

Get a better way of "normalizing" planning process vs multi-year average.

(Department- or Product-level analytics)

MARKETING MODULE

Optimize spend, offers, and messaging based on expected weather influences.

(Category- or Product-level analytics)

In areas such as replenishment, business maximize the financial benefits of an improved demand forecast by automating WDD adjustments across hundreds to thousands of products. Planalytics has integration partnerships with Blue Yonder, SAP, Oracle, and other leading retail technology providers, helping companies optimize current solutions and quickly begin to extract additional (and recurring) value.

WINNING WITH THE WEATHER

Planalytics has enabled Top 10 retail chains in both the U.S. and Europe to realize significant benefits with weather analytics. Examples of key gains DIY clients have achieved with Weatherization include

Improved demand forecast accuracy by over 10%

Reduced stockouts by 25% without increasing inventory

Cut end-of-season inventory of snow removal products by 35% by optimizing regional allocation



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