

# PRIVATE LABEL CANDIDATE IDENTIFICATION

FOR A LEADING ONLINE PROVIDER OF AFTERMARKET AUTOMOTIVE PARTS

## CLIENT OVERVIEW

The client is a U.S. based **online retailer of automotive parts and accessories**.

Their products are available **on their own portal** and also sold through other **online marketplaces such as eBay and Amazon**.



They sell over **5,50,000** top rated discount car parts, covering parts from all makes and models of both domestic and international vehicles.

## DID YOU KNOW?

The ability to make intelligent decisions that drive growth, disrupt the market and capitalize on emerging opportunities is now linked less to gut feeling and more to intelligence and data-driven insights.

### WHAT CONSUMERS THINK?

**74%** Private Brand is now a **BETTER VALUE** for the money.

**59%** It now offers greater **VARIETY**.

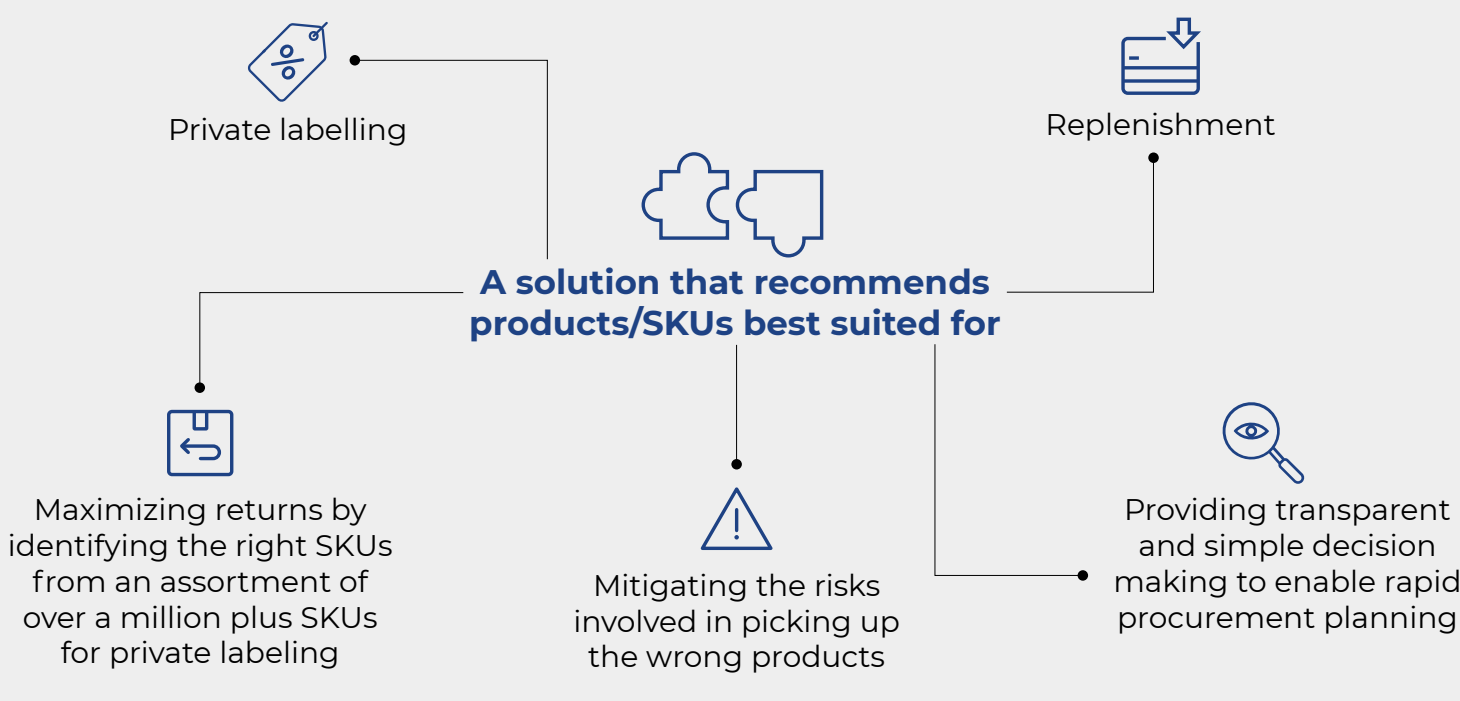
**53%** They shop at a store specifically for its private brand.

### WHAT'S IN IT FOR RETAILERS?

**25%** Retailers can make margins **25-30%** higher than from manufacturer brands.

**25%** Private-label sales are projected to grow to capture **25%** of dollars in the next decade.

## CONSIDER THIS



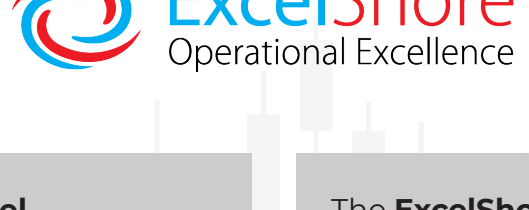
## CUSTOMER NEEDS

Recommend which products/SKUs are best suited for private labeling by predicting the sales for them over the next few months.

Predict the sales volumes for product based on following available data sets.

Provide a comprehensive list of influencing factors drawn from the current business data sets for product recommendation.

Provide an intuitive, model performance review that depicts the overall performance of all products for any given time line.



## ENTER



That's where our **Private label candidate identification** Decision Point came to their aid.

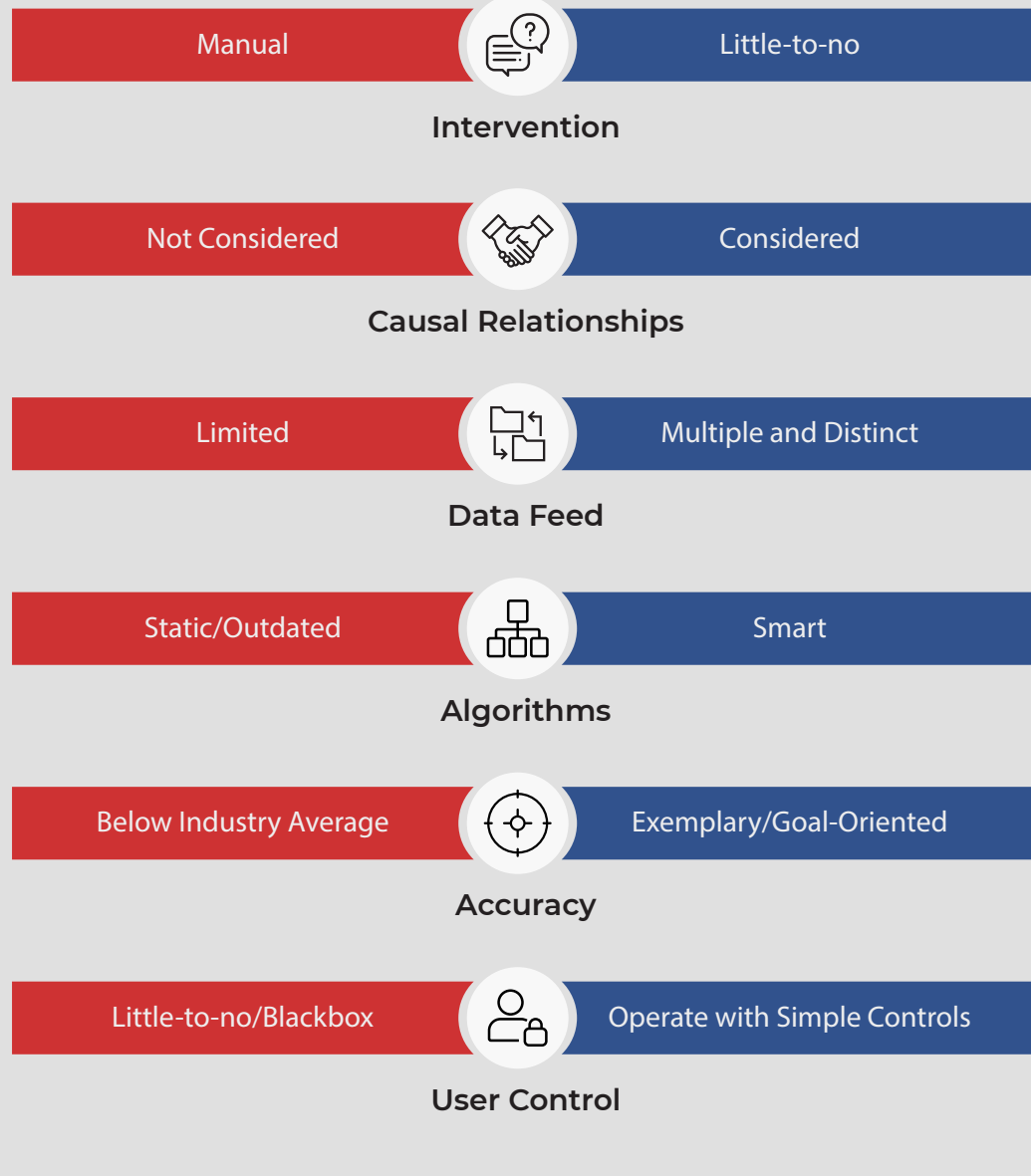
The **ExcelShore® model** used a **data-driven approach** to derive actionable insights from various business units like Product, Sales, Web analytics.

These were combined to architect an actionable dashboard that ranks the product on their likelihood of being most profitable.

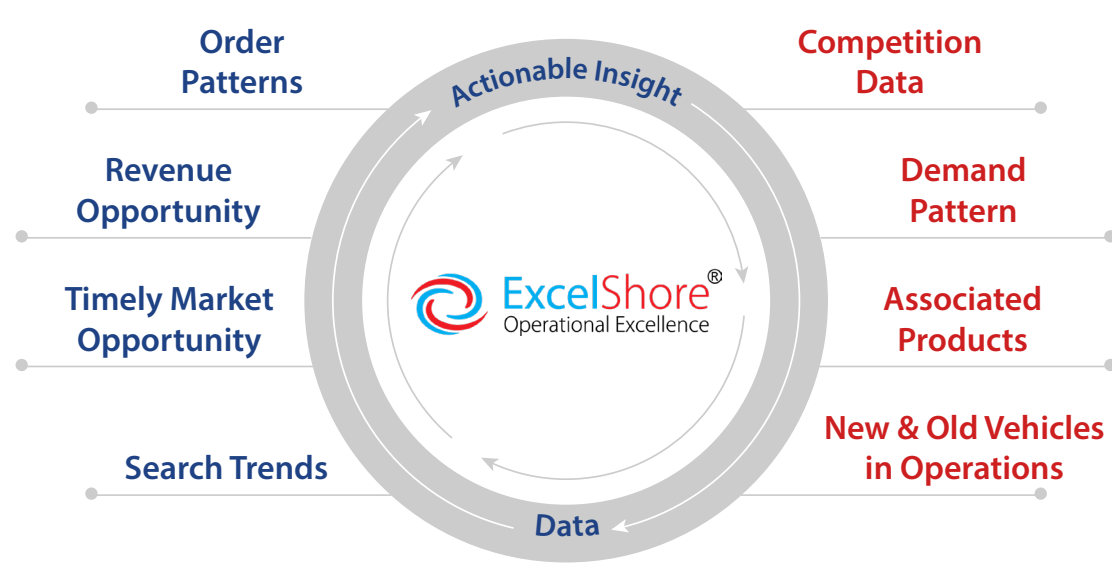
## TAKING IT FROM IF TO DONE

Lack of comprehensive analytical information on consumer preferences, due to which brand analysis resulted in a more conservative approach towards selecting the right products.

Finding the right candidates from an assortment of 5,50,000 auto parts and accessories well in advance since it takes considerable time from identification to launch.



## DATA MODEL - PRIVATE LABEL CANDIDATES



Product Database	Order System	VIO (Vehicles In-Operation)	Web Analytics
<ul style="list-style-type: none"> <li>Part Data</li> <li>Applications Data</li> <li>Product/SKU Data</li> <li>Brand Data Part Data</li> <li>Demand Data</li> <li>Year, Make &amp; Model</li> <li>ACES Data</li> </ul>	<ul style="list-style-type: none"> <li>Sales History</li> <li>Order Details at Application Level</li> </ul>	<ul style="list-style-type: none"> <li>New Vehicles</li> <li>In-Operation Details</li> </ul>	<ul style="list-style-type: none"> <li>Web Analytics</li> <li>Data Popular Search</li> </ul>

## ALGORITHMS USED

Our business goal was to classify products (SKUs) to be in top 3% of overall relevant products set in next 3 months sales.

### Naïve Bayes

was the selected machine learning algorithm for the given private label business problem at hand. It is not only simple but computationally very cheap compared to other machine learning algorithms.

### Bucketizer algorithm

was also used to transform a column of continuous features to a column of feature buckets. Bucketizer helps in finding the probability of the given bucket instead of finding probability for each continuous variable.

## BUSINESS IMPACT

The client could successfully **identify and launch several products** such as rear view and side view mirrors.

The client could **compete on prices** and the offered price was **8-10%** lower than the competition's prices and **profit margins 20-25%** higher.

The client was able to achieve **15% revenue share** within one year of launch.

## EXCELSHORE® PRESCRIPTIVE RETAIL SOLUTIONS

- Private-label Candidates
- Workforce Management
- Customer Retention
- Campaign Optimization
- Inventory Forecasting for Improved GMROI

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