

ADVANCED DEMAND FORECASTING ACCELERATOR

Identify patterns more accurately and in less time.

 **Microsoft**
Solutions Partner
Microsoft Cloud

 **Microsoft**
Solutions Partner
Data & AI
Azure

Specialist
Kubernetes on Azure
Analytics
Infra and Database Migration
Migrate Enterprise Applications
to Microsoft Azure

 **REPLY**
VALOREM



ORGANIZATIONS STRUGGLE WITH ACCURATE LONG-TERM PLANNING.

Forecast up to 1 to 2 years ahead to determine demand patterns, business decisions, external factors, and retailer data. By properly analyzing and predicting future demand, all needed products will be available in the store, so customers can purchase them without waiting for long delivery times, and any poorly selling products will not be stale.

CHALLENGES

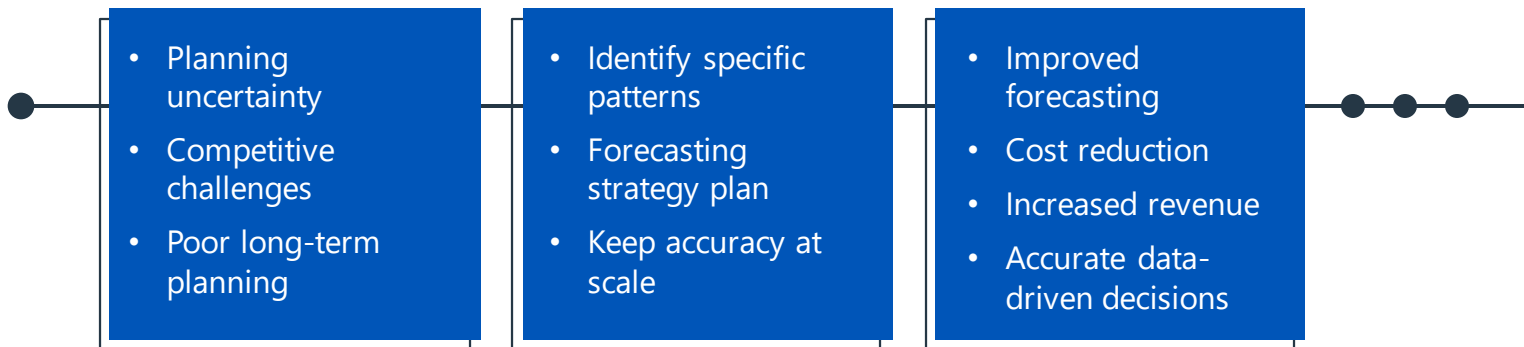
- Planning uncertainty
- Competitive challenges
- Poor long-term planning

IDEAL SOLUTION

- Identify specific patterns
- Forecasting strategy plan
- Keep accuracy at scale

DESIRED OUTCOMES

- Improved forecasting
- Cost reduction
- Increased revenue
- Accurate data-driven decisions



ADVANCED DEMAND FORECASTING ACCELERATOR

Valorem Reply's Advanced Demand Forecasting Accelerator helps organizations improve their demand forecasting and create a strategy to enable them to make more accurate data-driven business decisions.

1 INCREASE IN SALES

4 REDUCED PRODUCT SPOILAGE

2 CUSTOMER SATISFACTION

5 REDUCED PERSONNEL COSTS

3 HIGHER INVENTORY TURNOVER



VALOREM REPLY ADVANCED DEMAND FORECASTING ACCELERATOR & AZURE MACHINE LEARNING

Valorem Reply's expertise across the Azure Cloud can help you extract maximum value from your most important data.

Optimize Supply Chain Operations

Minimize Delays

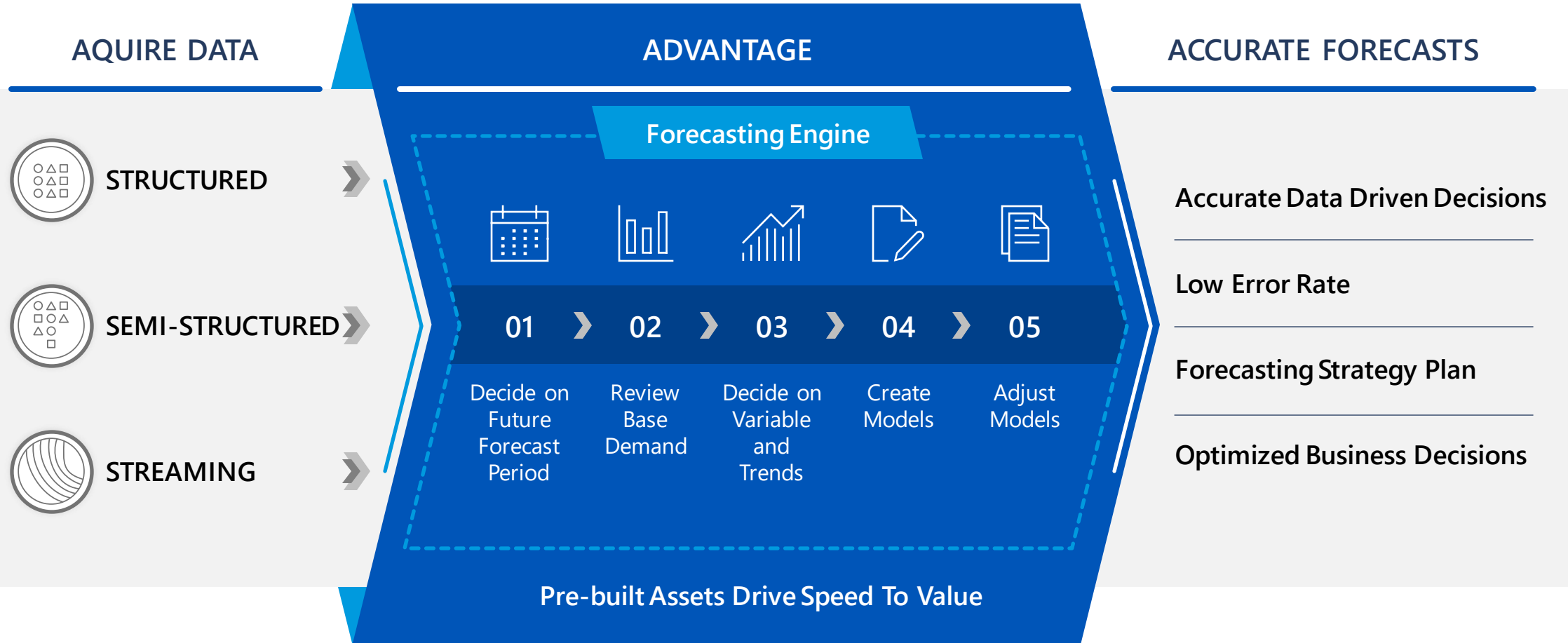
Personalize Marketing Campaigns

Optimize Pricing and Inventory Management

Improve Customer Service and Experience



ADVANCED DEMAND FORECASTING ACCELERATOR



DEMAND FORECASTING ACCELERATOR PLATFORM



ADVANCED DEMAND FORECASTING VALUE

- **Increase in sales** All needed products will be available in the store, so customers can purchase them without waiting for long delivery times.
- **Customer satisfaction** Plan purchases in advance, so customers won't face the problem of their favorite product's absence.
- **Higher inventory turnover** Thanks to proper planning of goods in warehouses, poorly selling goods will not be stale.
- **Reduced product spoilage** Demand forecasting will help to accurately plan the delivery of products, considering expiration dates.
- **Reduced personnel costs** By analyzing and predicting future demand, we can plan an optimal number of employees for proper shift support.

Demand forecasting accelerator



Demand patterns

Seasonality, trends



Business decisions

Promotions, markdowns, and range changes



External factors

Holidays, footfall, weather, local events, competitor activities



Retailer data

POS, retailer forecast, assortments, pricing, promo data, and market data

SIBYL
Advanced
Demand
Forecasting



Accurate forecasts and plans

Item Level Forecasts:

From intraday to months ahead

Planning:

Up to 1 to 2 years ahead



ADVANCED DEMAND FORECASTING FOR RETAIL

Identify Specific Patterns

Speed to Market

More Accurate in Less Time

Keep Accuracy at Scale

Planning Horizon

<1-14 days

2-8 weeks

2-12 months

12-24 months



Retailer

- Inventory allocation, such as force-outs or scarcity allocations.
- Store and distribution center replenishment.



Retailer

- Store Capacity Management
- Workforce Optimization



Retailer

- Purchasing
- Capacity Planning
- Space and Assortment Planning
- Merchandise Planning and Clustering
- Sales and Operations Planning

CPG

- Demand Planning
- Promotion Planning
- Master Production Schedule (MPS)
- Materials Requirements Planning (MRP)
- Assortment Planning



Retailer

- Capacity Planning and Network Optimization

CPG

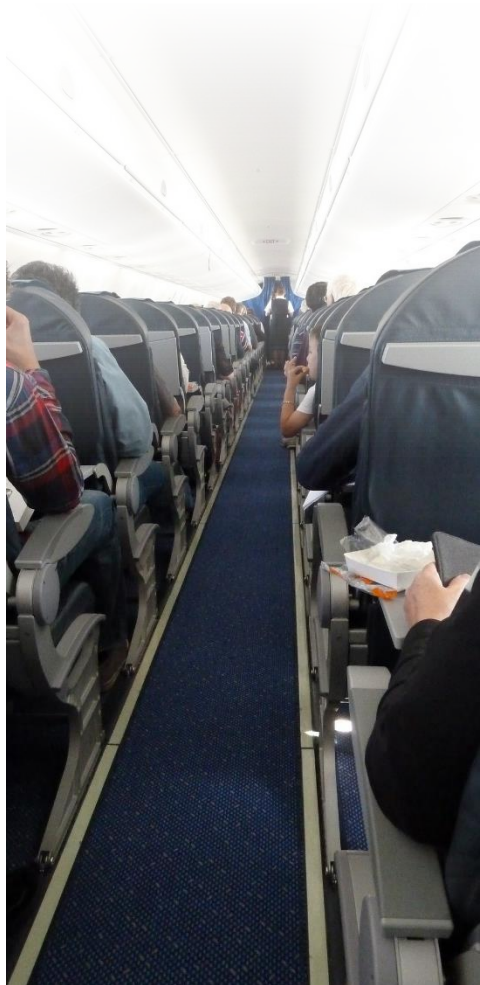
- Rough-Cut Capacity Planning
- Sales and Operations Planning
- Product and Market Planning
- Financial Planning

CPG

- Inventory Allocation and Replenishment
- Distribution Requirements Planning (DRP)
- Production Planning and Scheduling



MODERN DATA PLATFORM FOR MAJOR AIRLINE



CHALLENGES & OPPORTUNITIES



- Need to maximize catering revenue and minimize waste
- Customer satisfaction issues due to menu option availability
- Improve ground operations and in-flight efficiencies

STRATEGIC SOLUTIONS



- Azure Machine Learning
- Databricks Engineering Modules
- Build/refine iterative predictive model
- Additional variables included in model to include routes, time-of-day, seat configuration, historic load factors

BUSINESS IMPACT



- Catering team can more accurately predict demand for high margin menu items
- Decreased costs in waste
- Increased revenue forecasting
- Extensible model now available for other in-flight menu items
- Seamless integration with existing reporting platform



LEARN MORE ABOUT VALOREM REPLY'S ADVANCED DEMAND FORECASTING ACCELERATOR

Learn more: go.valorem.com/Advanced_Demand_Forecasting.html

