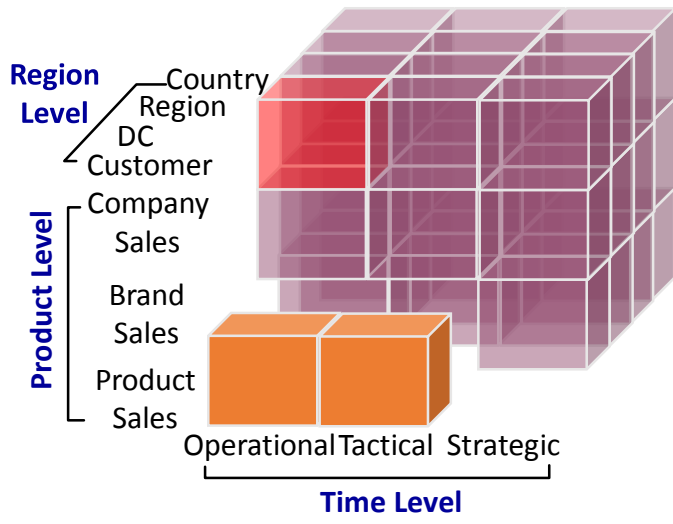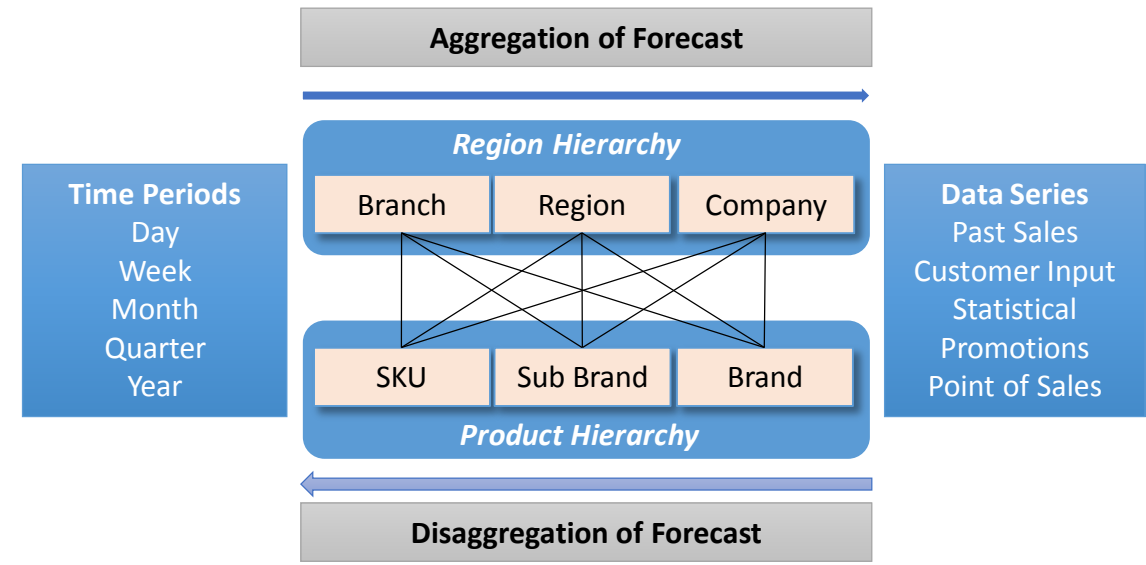## Data Collation and Tracking

- Ability for regional sales people or account managers to enter forecast directly in the solution for their respective location
- Automatic consolidation of forecast to company level
- Top level changes automatically disaggregates to bottom level thus enabling both top down and bottom up forecasting
- Forecast changes are tracked and monitored
- Authorization control of editing / viewing forecast values based on item or region or time
- Creation of new data measure to capture additional data
- Adjustment to historical data to remove outliers
- Each adjustment both in forecast and history are tracked with ability to add notes

Aggregation of Forecast

Time Periods	Region Hierarchy			Data Series
Day	Branch	Region	Company	Past Sales
Week				Customer Input
Month				Statistical
Quarter	SKU	Sub Brand	Brand	Promotions
Year	Product Hierarchy			Point of Sales

Disaggregation of Forecast

Region Level: Country, Region, DC, Customer
Product Level: Company Sales, Brand Sales, Product Sales
Time Level: Operational, Tactical, Strategic

Data Analysis

- Ability to generate forecast using different techniques like Arima, Regression, Exponential, Holt Winter, Croston, Moving Average and Weighted Moving Average
- Generate ABC classification based on quantity, price or margin at any level in region hierarchy
- Enable different forecasting techniques for different SKUs based on their ABC classification
- Automatically calculate Best Fit among various forecasting techniques
- Compare Best Fit forecast with the sales input and raise exceptions if difference is more than certain percentage
- Measure forecast accuracy at different level in hierarchy
- Ability to create user specific algorithm to generate forecast

Planvisage Demand Forecasting Salient Features

Function
- ABC Analysis
- XYZ Analysis (frequency of demand)
- Unlimited Data Measures
- Graphical Displays with Line, Bar and Pie charts
- Operate Daily, Weekly or Monthly
- Product Rank
- User Defined Filter

Data Measures
- Historical; Orders or Shipments
- Best Fit, Adjusted or Sales Forecast
- Customer Forecast
- Budget
- Custom Data Measure with User Defined Formulas

Flexibility
- Gregorian Calendar
- 13 by 4 Week Calendar
- 4-4-5, 4-5-4, 5-4-4 13 Week Quarters
- Parallel Product Hierarchy
- Parallel Region Hierarchy
- UOM Conversion Factors
- Waterfall Chart

Security
- User, Password, Role Sign In
- User Control by Product, Region, Data Measure
- Role limit to Add, Edit, Delete, View
- Notes on Forecast Change
- Custom Validation
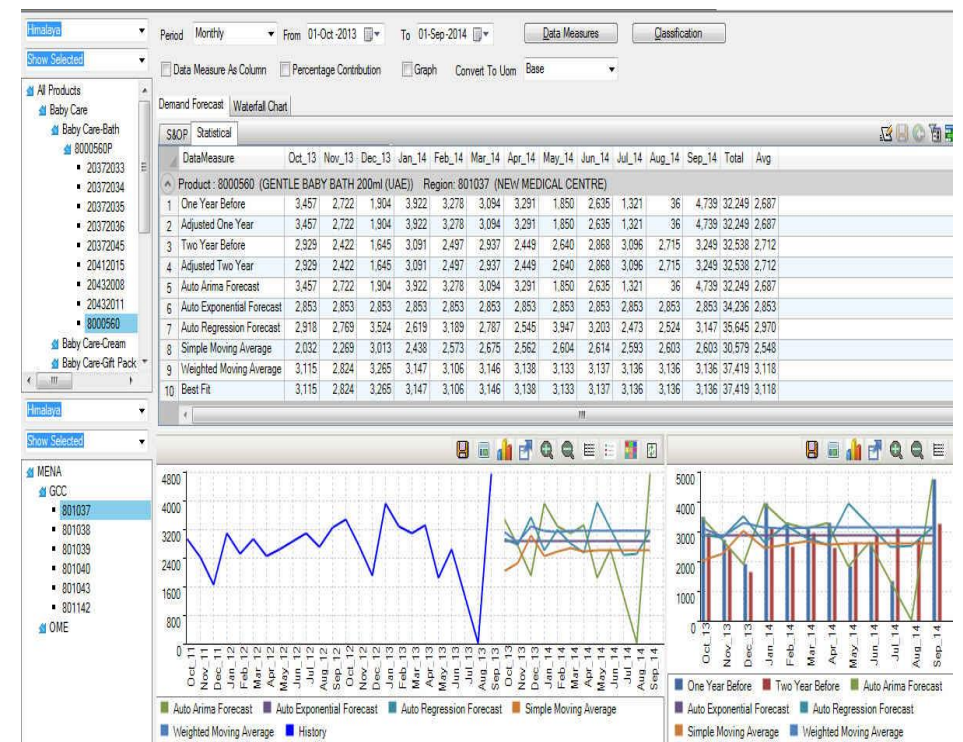
Case Study

A Leading FMCG company having
- 40 Depots
- 3 Channels
- 3000 SKU

Before Planvisage
- Forecast Accuracy 40%
- Applies Last 3 Months Average to come out with Forecast
- Excel files to consolidate forecast data from different Area Sales Manager

After Planvisage
- Forecast Accuracy 70%
- Sophisticated Statistical Techniques other than just 3 Months Average to predict trend and seasonality at Item – Region combination
- Single unified system to collate data from Area Sales Manager and compare with Statistical Forecast

Day of Month	Task Performed Using Planvisage Solution
14th	Master data updated like promotion items, new item introduction or phasing out of items
17th	Statistical forecast is generated using different techniques like Arima, Exponential and Regression and Best Fit is technique is selected based on least Forecast Error
18th	Area Sales Manager (ASM) moderates the Statistical Forecast. His authorization is restricted to his Items and Region.
19th	Zonal Manager moderates the forecast generated by ASM
20th – 21st	Corporate moderates the forecast
22nd – 24th	Supply Chain Planning Team generates Replenishment Plan and Production Plan. S&OP meeting is conducted and final Plan is arrived
25th	Completion of Cycle

Poor forecasting can lead to inaccurate demand plans, which causes excess inventory, or even more costly, inventory stock outs. AMR Research note reported that a 5% improvement in demand forecasting accuracy correlates to a 10% improvement in prefect orders. AMR goes further to show a 10% improvement in prefect orders can yield 50 cents better earnings per share.
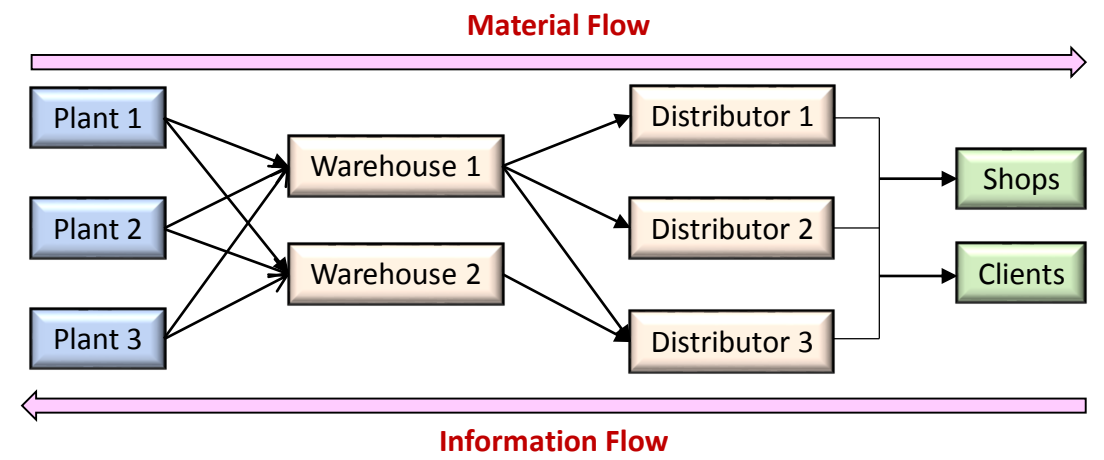
Issues

Problems Like
- Murky Supply Chain Visibility
- Poor Forecast Accuracy
- Reliance on Inflexible Systems
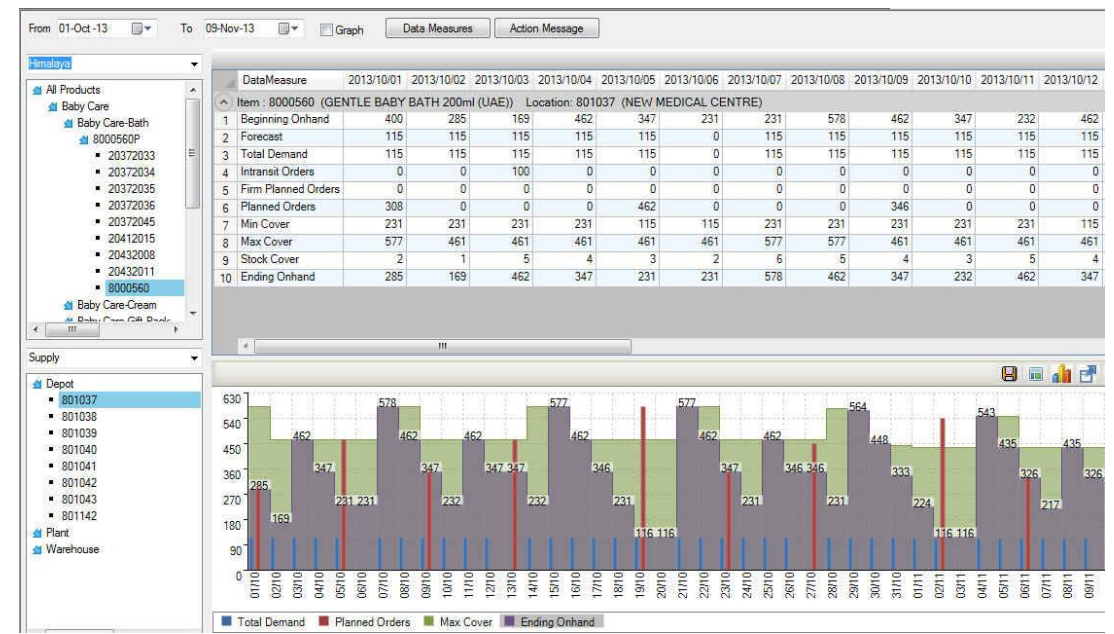- Supply Lead Time Variability

Leads To
- Frequent Stock Outages
- Increased Inventory Costs
- Poor Customer Satisfaction

Planvisage Replenishment Planning Salient Features

Planvisage Replenishment Planner provides tools to calculate and manage inventory for all points in complex distribution network
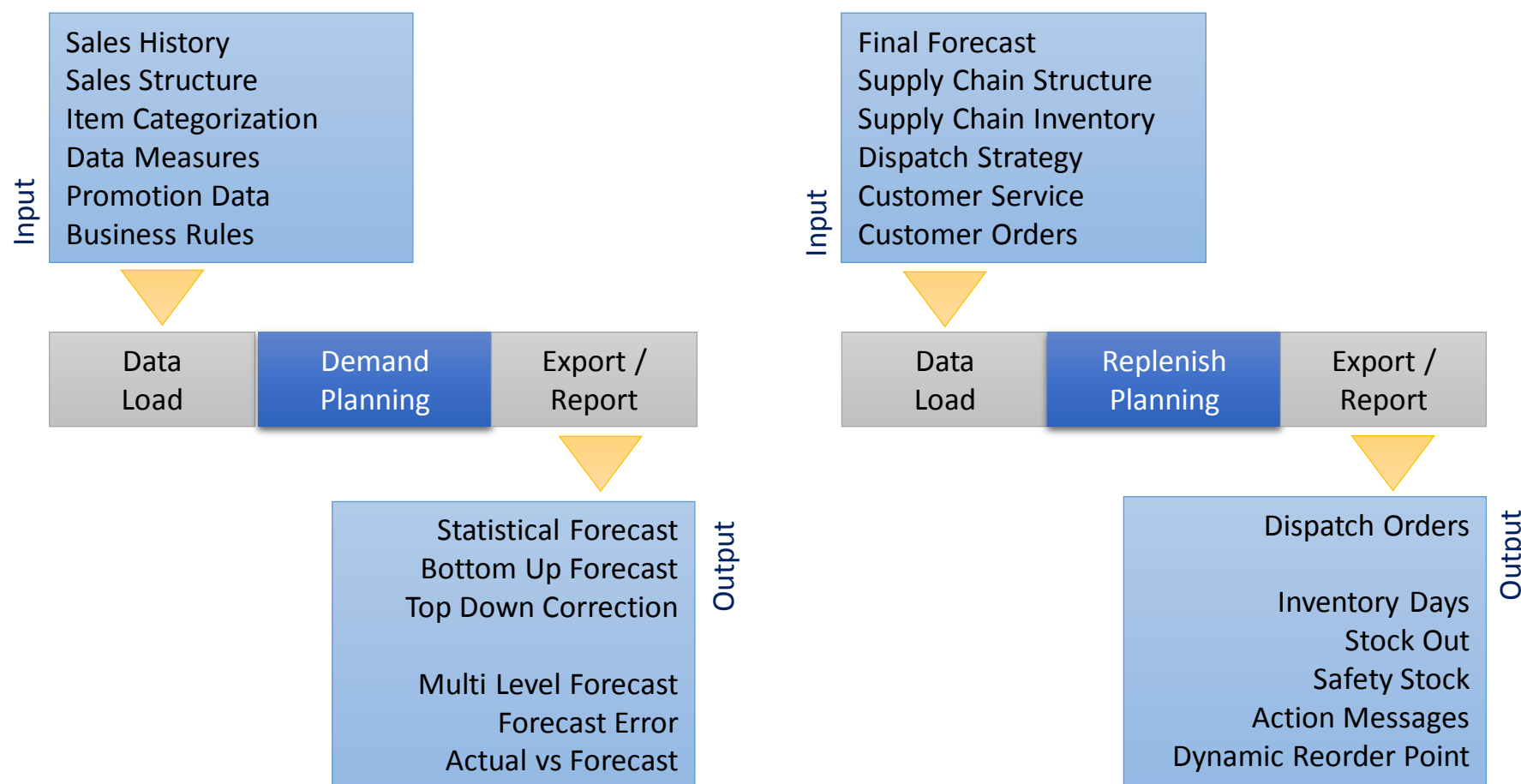
- Powerful engine that allows to calculate order frequency, order quantities and supply paths based on lead time, calendars, sourcing rules and other variables

- Manage inventory shortages using balanced allocation logic, which ensures stock locations share any projected service issues.

- Color-coded alerts for service violation, such as a stock out. Tools to analyze and provide best resolution.

- Establish order parameters such as Minimum Order Quantity and Lead Time for each product in each location

- Reduce or build inventory and vary customer service levels throughout the year with Time-phased Safety Stock

- Supports Distribution Planning, Kits, Bill of Material and Bill of Distribution with Unlimited number of Levels

- Numerous Replenishment Rules like Lot-for-Lot, Minimum Order Quantity, Order Multiples, Period Order Quantity, Product Rank

- Automatic calculation of Safety Stock and Safety Time based on Demand Variability, Supply Variability and Customer Service Level

- Generation of orders based on Minimum and Maximum Cover

- Action Messages like Release and Expedite Order, Cancel Order, Negative Projected Inventory, Projected Inventory below Safety Stock

Data Flow – Demand Forecasting and Replenishment Planning

Potential Benefits

Automatically synchronize supply with demand even with hundreds of thousands of product and location variables. It can:
- Boost order fulfillment rates
- Reduce inventory
- Increase responsiveness to customers
- Gain global supply chain visibility

The result: Operate a more efficient supply chain with complete visibility of inventory and planned movements throughout the organization.