

Forecasting

Forecasting is the process of making statements about events whose actual outcomes (typically) have not yet been observed

Challenges Retailers face in Forecasting

- Scale of problems (Large number of items & stores to forecast)
- Intermittent demand (slow and erratic sales for many items at the store level)
- Assortment instability (frequent new-item introductions and seasonal assortment changes)
- Pricing and promotional activity

Forecasting techniques which are used to face the challenges

- *Large-scale automated forecasting*

The objective in any business is to have the right product in the right place at the right time – and in the appropriate quantity

A large retailer may have tens of millions of store/item combinations

This automation minimizes staffing requirements, while permitting forecasters to focus on the "high value" forecasts that have the greatest impact on customer satisfaction and financial performance

- *Forecasting and revenue optimisation*

Revenue optimization systems help the retail planner make better decisions on regular product pricing, promotional activity and markdown pricing

Such systems are designed to optimize an objective (e.g., maximize revenue, maximize margin or minimize inventory)

- *Forecasting and replenishment*

A good replenishment policy takes into account the uncertainties of supply and demand, and makes store-level inventory less dependent on a highly accurate forecast

Forecasting which are done mainly in Retail Industry

- *Sales Forecasting*

Sales forecasting is the process of organizing and analyzing information in a way that makes it possible to estimate what your sales will be.

- Factors that affect sales

External

Internal

External Factors

- Seasons
- Holidays
- Special events
- Competition, direct
- Competition, indirect
- External labour events
- Productivity changes
- Family formations
- Births and deaths
- Fashions or styles
- Population changes
- Consumer earnings
- Political events
- Weather

Internal Factors

- Product changes, style, quality
- Service changes, type, quality
- Shortages, production capability
- Promotional effort changes
- Sales Motivation plans
- Price changes
- Shortages, inventory
- Shortages/working capital
- Distribution methods used
- Credit policy changes
- Labour Problems

Demand Forecasting

Demand forecasting is the activity of estimating the quantity of a product or service that consumers will purchase

Demand forecasting involves techniques including both informal methods, such as educated guesses, and quantitative methods, such as the use of historical sales data or current data from test markets

Demand forecasting may be used in making pricing decisions, in assessing future capacity requirements, or in making decisions on whether to enter a new market

Focus Forecasting

It uses several logical and easy to understand rules to project past data into the future

Computer simulation program is used to measure the performance of the rules when compared with the actual demand

Few Software used in Retail Forecasting

- *SAS Demand Forecasting for Retail*

It uses SAS software's unique high-performance forecasting engine to automatically diagnose, model, execute and reconcile forecasts across multiple merchandise levels and locations

It allows creation of forecast projects and manages forecasts with a built-in repository and versioning system

SAS Demand Forecasting for Retail produces results at any level of the product and location hierarchies, down to the SKU/store level

Oracle Retail demand forecasting

Designed to handle the challenges of real-world retail forecasting, including scaling to manage the large volumes of data involved

The solution handles forecasting at the lowest level of detail (item-, by store-, by day-level), forecasting for new products, and forecasting for products with sparse sales, all at the lowest level with very little human intervention.

Forecasting provides a single forecast to drive the entire retail enterprise

This integration brings together forecasts produced for replenishment, merchandise planning, financial planning, promotions, and pricing

SAP for Retail

It uses sophisticated optimization and automation capabilities to help you strike the ideal inventory strategy – minimizing inventory ownership and maximizing customer service

SAP Forecasting and Replenishment can help you improve inventory turnover and prevent out-of-stock conditions that result in lost sales and customer alienation

Conclusion

Forecasts will never be perfect, and sometimes they may not even be very good

The goal of forecasting in retail should not be a foolish pursuit of perfection, but to generate forecasts that are as accurate and unbiased as we can reasonably expect them to be, and to do this as efficiently as possible

Large-scale automation helps solve the problem of generating forecasts at granular levels of detail (such as store, item or week)

However, there must still be a realistic assessment of the likely accuracy of forecasts at that level, and consideration of other strategies that can be used in conjunction with forecasting to best solve the business problem

THANK YOU!



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