

# TCS Advanced Demand Forecasting Solution for Supply Chain

HiTech

Intense competition drives businesses to understand consumer behavior and use reliable tools to forecast demand. This helps plan the right level of buffering needed in inventory, capacity, and finances to avoid losses. Accurate demand planning and forecasting helps cope with constantly fluctuating demand patterns and global volatility.

In addition, companies need to control the impact of product introduction or obsolescence on market demand. Integrating your supply chain planning with PLM functions and deploying closed loop planning systems to predict such dynamics can help meet this need and drive down operational costs, while improving revenues.

Tata Consultancy Services (TCS) offers you Advanced Demand Forecasting Solution – an innovative, versatile, and cost-effective tool for HiTech supply chains. The solution applies advanced statistical forecasting methods that incorporate the effects of macro and micro economic factors to predict demand. Our platform independent solution can be plugged into an existing demand planning system to gather input data and provide the smoothed output.

## Overview

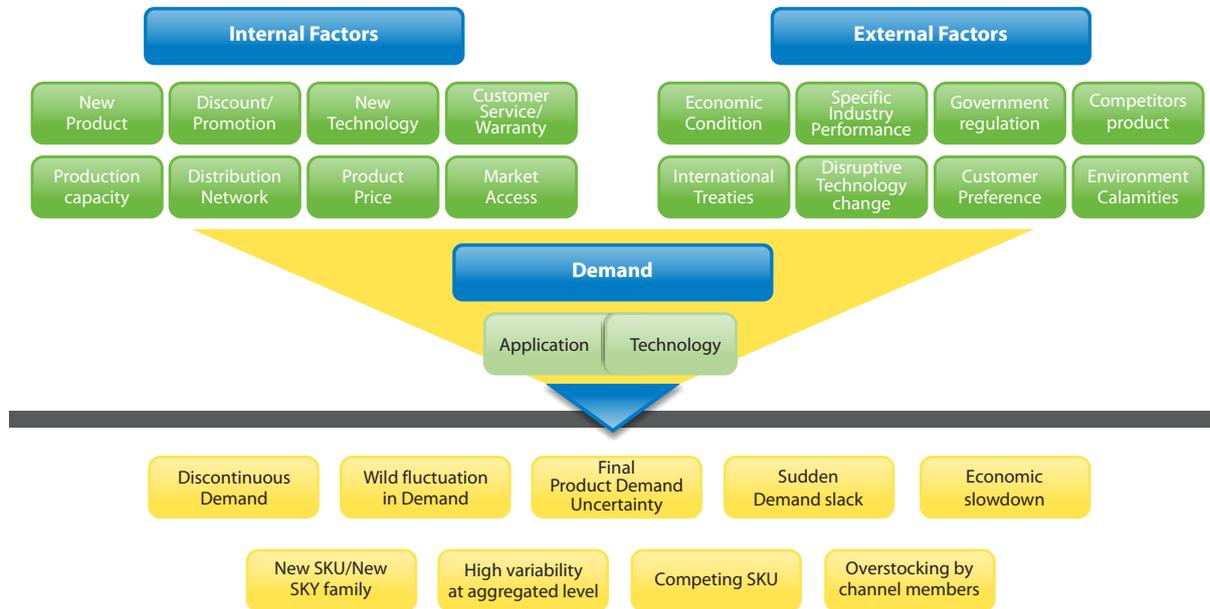
With the demand-supply equation having a large bearing on profitability, it is becoming increasingly vital for businesses to forecast demand accurately. Despite investments in demand planning and forecasting tools, and large ERP deployments, many companies struggle with forecast inaccuracies – especially with the demand forecast coming in from distribution partners. It is also difficult for companies to migrate to other planning tools to improve forecasting abilities in rare-event and volatile demand situations. Moreover, traditional statistical methods provide limited results in special conditions.

Our Advanced Demand Forecasting Solution, which uses the latest statistical approaches in demand forecasting, provides you improved accuracy in demand forecasting. The solution uses random historic events to model them into future predictions – increasing the preparedness of the company to cope with fluctuating demand scenarios and reducing the cost due to over-planning or under-planning. The solution adapts itself to the existing demand planner thus reducing cost of additional licenses and configures the most likely business demand scenarios to prevalent economic conditions to arrive at an accurate forecast pattern. This solution is platform independent and can be leveraged by enterprises with low forecast accuracy.

## Results

Our offering brings you the following benefits:

- **Improved accuracy in forecasting:** Unique algorithms, amalgamating the latest statistical methods, past event simulations, and existing economic conditions, ensure accurate predictions and increased profits. Improves predictability of rare events by modeling random occurrences into future predictions.
- **Optimized manufacturing planning:** Better preparedness in coping with a sudden spurt or slack in demand – ensuring that an optimal supply-demand equation is maintained.
- **Reduction in license cost:** With the solution working with the existing planner, there is reduced upfront cost of additional licenses.
- **Better control on complex and rare events:** Accurate prediction of rare events increase the capability to meet demand anytime. This improves customer loyalty and reduces the time lost due to recalibration of demand.
- **Reduction in planning cost:** Reduced cost of over-planning or under-planning improves the usage of capital.



**Overview of Loss/Gain via a Forecasting Error**

**The TCS Advantage**

TCS' focused services, domain expertise, and vast experience enable faster time-to-market for you.

Our offering uses a unique set of algorithms for improved predictions across diverse industries.

We add value to the engagement through:

- **Adaptability:** Adapts to the existing demand planner, reducing up front cost on tool licenses. Being platform-independent, it can be offered as a service too.
- **Versatility:** Working across platforms and industries, the solution adapts to concepts of machine learning employed in existing algorithms, helping the system to self-adjust and pick up best parameter values over time. This makes the approach more robust and entails less manual intervention.
- **Comprehensiveness:** The solution employs minimal historic data to resolve maximum number of demand discrepancies to arrive at accurate demand forecasts. Our unique algorithms are especially effective for chaotic and volatile data. Additionally, our computational approach is leaner and faster, using fewer data points as compared to traditional approaches

**Contact**

To know more about TCS' Advanced Demand Forecasting Solution, contact [HiTech.Marketing@tcs.com](mailto:HiTech.Marketing@tcs.com)

**About Tata Consultancy Services Ltd (TCS)**

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

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