Modern supply chains are challenged with a proliferation of product variants, shorter life cycles, and higher customer expectations. QAD DynaSys Demand Planning excels where product sales behavior is very complex employing intelligent algorithmic methods and machine learning techniques. These techniques are most applicable for items with short or zero history, complex seasonality, periodic products, high volume low frequency, and make-to-order products. Complexity is no longer an excuse not to have an accurate sales forecast.

DEMAND PLANNING SOLUTION

Demand Planning helps customers become effective enterprises by determining the best possible picture of future demand. This solution subsequently improves the alignment of supply and finance plans by creating an agile and synchronized supply chain.

VALUE AND BENEFITS

Demand Planning improves accuracy, control and visibility throughout your global supply chain. Improved forecasting provides enterprise agility ensuring you meet and exceed customer expectations and service level goals. Specific benefits include:

- **Increased sales revenue** – Demand Planning provides certainty in having the right product at the right place at the right time ensuring all potential revenue is realized.

- **Minimize expedite costs** – Demand Planning reduces the surprise orders and therefore the associated costs in expedited freight and additional handling.

- **Improve customer service** - Improve sales revenue and reduce penalties by having the best possible picture of your customer's future requirements. Satisfying your customer in-full and on-time generates goodwill, trading partner loyalty, and business differentiation over your competition.

- **Reduce inventory costs** – Demand Planning reduces working capital by ensuring optimal product availability. Just as important as the

forecast accuracy is the forecast error and degree of variance that the system calculates. This error combined with demand and supply variances, lead-time and other parameters allows Demand Planning to determine the optimal inventory profile. No more excess stock write offs.

- **Reduced obsolescence** - Demand Planning improves product portfolio management. Demand Planning provides visibility and accurately determines the impact of new product introduction and product decommissioning. This improves the success of product launches while minimizing obsolescence.

- **Effective promotions** - Demand Planning promotion planning ensures the most accurate picture of a planned promotion or event. Demand Planning promotion planning manages promotional uplift, cannibalization and halo effects; this delivers true net impact visibility. Demand Planning intelligent baseline planning ensures promotional demand is segmented from organic demand which is crucial for the integrity of forecasting.

- **Hands-off planning** - Demand Planning minimizes planner effort by automating much of the planning process using management by exception techniques to focus the planner to those areas that provide the most added value. This accelerates the effort and time to plan reducing plan-decay and improving enterprise agility.

- **S&OP synchronization** - Demand Planning resolves disconnect between operations and strategy by closing the loop between demand planning and

IMPROVE SERVICE LEVEL	BY AS MUCH AS **40 POINTS**
REDUCE WORKING CAPITAL	BY AS MUCH AS **25%**
IMPROVE FORECAST ACCURACY	BY AS MUCH AS **90%**
REDUCE WASTAGE COSTS	BY UP TO **40%**
REDUCE SUPPLY CHAIN COSTS	BY UP TO **25%**

S&OP. S&OP demand is aggregated from demand planning and subsequently S&OP decisions are published to the demand planning process. This ensures synchronization between sales planning and tactical & strategic decision making. Make S&OP decisions count.

- **Performance management** - You cannot improve what you cannot measure; Demand Planning measures the sales forecast accuracy against actual sales and providing feedback on trends and variability. It allows for offset periods so the forecast is measured at the decision making time-fence.

KEY CAPABILITIES

Single version of the truth. Whether you need to manage the forecast in days, weeks, or months; by SKU, category, brand, customer, warehouse, region; in units, pallets, kilograms; by revenue euros/dollars, or by profit contributed. It doesn't matter how different stakeholders need to work with the forecast, Demand Planning provides a single version of the truth available in any dimension.

Collaborative. Demand Planning uses the "Single Click Collaborative®" platform to facilitate a consensus demand plan that combines the statistical forecasts with multiple functional perspectives and events from the sales, marketing, and finance teams.

Multi-enterprise. Demand Planning transcends fiscal entity boundaries ensuring the best possible end-to-end picture of future demand across multiple enterprises.

Management by exception. Demand Planning manages very large product portfolios and ensures the planners efforts are focused to those events where the most value is added.

Data cleansing. Provides automated detection and correction of outliers, and other analysis of historical data using machine learning algorithms.

Baseline planning. Automatically segregates historical promotional activity from organic demand ensuring a promotion free baseline for statistic forecasting.

Statistical forecasting. Supports complex seasonality, external factors, trend analysis, auto-selection of best-fit algorithm; an expert library of forecasting methods for every possible sales profile including machine learning (Intelligent forecasting clustering).

Forecasting for complex history. New forecasting capabilities using machine learning techniques that can accommodate short history, periodic history, and step changes.

Multi-echelon forecasting. Detailed or aggregate forecasts, top down, bottom up and middle out forecasts. Reconciles forecasts based on different input (products, customers, markets).

Demand sensing. Demand sensing methods using customer real-time demand signals to drive short horizon demand management.

Demand shaping. Capabilities to simulate price/volume trade-off scenarios.

Product life cycle planning. Manage product lifecycle information ensuring demand expectations align with product life stage. This includes product introduction planning, growth tapering, pipe-fill volumes, functionally rich supersession management, and early obsolescence identification.

ABC classification. Perform pareto analysis to classify the portfolio using rules to identify fast movers, benchmark items, high profit and revenue contributors.

Inventory optimization. Determines optimal inventory policies (safety stock) based on service levels, inventory costs and supply and demand variances.

Trade promotions management. Comprehensive capability providing for all types of promotional activity. It provides special offer profiles, repetitive special offers, multi-item special offers and determine promotional, cannibalization and halo impacts of a promotion across the buy-in, sell-out periods of the promotional calendar.

FUTURE PROOF TECHNOLOGY

QAD DynaSys cloud – safe, secure and available. Demand Planning is available in the QAD Cloud. QAD Cloud services are ISO certified and carry SSAE15 SOC 1 Type II certification. Business continuity is assured with comprehensive disaster recovery planning.

Mobility. Demand Planning user experience supports Web, mobile and touch screen user interfaces.

Analytics. As the IoT and machine learning deliver a greater number of data points, supply chain solutions must have a best-in-class capability to translate data into trends and decision grade analytics. Demand Planning seamlessly embeds capability from Qlik, a leading business analytics provider. This provides a beautiful and pleasant to use data experience supporting responsive and accurate decision making.

In-Memory. Demand Planning uses a highly scalable, rapid in-memory data model enabling real time simulation planning and effective decision support.

Integration. QAD DynaSys supports integration with QAD, SAP, Sage, JDE, Oracle, Infor, Microsoft and many other ERP and enterprise applications. It uses a data hub approach to exchange supply chain information across the organization and includes tool for building custom integrations.

QAD DYNASYS DSCP SUITE

QAD DynaSys has been empowering customers to improve productivity and profitability through better supply chain decision-making for over three decades. QAD DynaSys, a division of QAD, invests heavily in research and development to future proof our solutions.
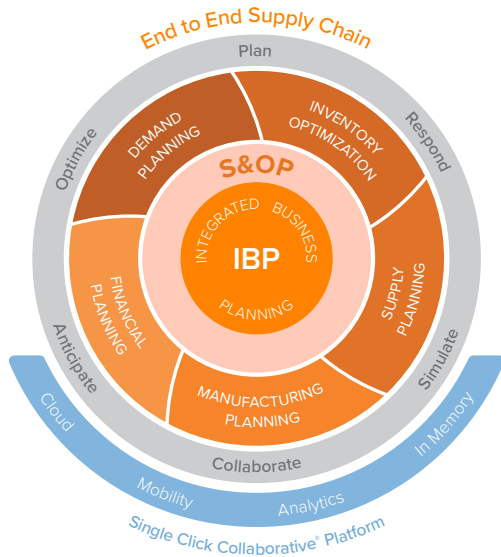
QAD DYNASYS DSCP SUITE

Demand Planning is available standalone or as part of the end-to-end DSCP solution.

Available Solutions

- Demand Planning
- Distribution Planning
- Production Planning
- Procurement Planning
- Network & Inventory Optimization
- S&OP
- DDMRP

At QAD DynaSys, we are helping our customers build the future of their supply chains.

QAD DynaSys Headquarters
Espace Européen de l'Entreprise
Immeuble Le Skansen 3 Allée de
Stockholm F - 67300
Schiltigheim
France
Tel: +33 (0) 3 88 19 14 14

QAD DynaSys UK
Sir Stanley Clarke House Quinton
Business Park,
Birmingham, B32 1AF
United Kingdom
Tel: +44 (0) 121 506 6500

QAD DynaSys USA
2651 Warrenville Rd
Suite 580
Downers Grove, IL 60615
USA
Tel: +1 (805) 566-4500