



DYNASYS DSCP

DEMAND & SUPPLY CHAIN PLANNING

DYNASYS DSCP SOLUTION IS BUILT FOR SUPPLY CHAIN PROFESSIONALS, BUILT FOR YOU

Manufacturers and distributors continually strive to manage supply chain complexity and improve customer satisfaction while reducing inventory levels and costs. Effective supply chain solutions provide instant visibility and intuitive decision support enabling companies to become more agile and exploit supply chain complexity and make their supply chain a competitive business differentiation.

The DynaSys demand and supply chain planning (DSCP) technology provides a comprehensive end-to-end supply chain solution. The unique key to DynaSys is the underlying six pillars of the supply chain platform.

- **Anticipate.** DynaSys DSCP embeds best of breed business analytics capabilities providing complete visibility across the supply chain in a decision supporting and intuitive manner.
- **Optimize.** DynaSys DSCP employs advanced algorithmic and machine learning forecasting and constraint based optimization methods to quickly determine the most optimal and feasible plan minimizing planner intervention.
- **Plan.** DynaSys DSCP uniquely uses a single data model across all facets of planning. This provides tightly synchronized plans for manufacturing, distribution, inventory management, and procurement.

- **Respond.** DynaSys DSCP supports real-time supply chain profitable decision making. To maximize supply chain agility, DynaSys is designed with the latest “response planning” techniques including demand sensing and demand driven material requirements planning (DDMRP).
- **Simulate.** DynaSys DSCP synchronizes real-time with the IoT to alerts planners to events that may cause violations with the current plan. Planners are able run end-to-end simulations across the model to determine the most appropriate course of action.
- **Collaborate.** Modern day supply chain decision making requires much more than just how much to make, sell, move and buy. There is an abundance of real-time intelligence in the minds of supply chain stakeholders that can add much business value. DynaSys DSCP is designed to harness the collective qualitative intelligence of all stakeholders ensuring that risks are measured and mitigated and opportunities are exploited.

THE VALUE IS TRANSFORMATIONAL

DynaSys customers benefit from a more accurate picture of their supply chain future. This results in better forecasts, reduced inventory, higher customer fulfilment, and reduced costs from unforeseen events such as expedited freight costs and customer penalties.

The DynaSys business value extends beyond the financials. Companies use DynaSys to not only reduce supply chains costs and improve revenue, but also as

a digital business transformation platform. DynaSys DSCP enables enterprise agility allowing companies to respond quicker to exploit new opportunities. DynaSys solution reduces supply chain volatility and complexity enabling planners to focus on strategic objectives, risk management, new markets, and portfolio management. This promotes new and enhanced business models and business value propositions.

ONE SOLUTION – MANY CAPABILITIES

The core capabilities of DynaSys DSCP is explained in the following business processes.



DEMAND PLANNING - THE BEST POSSIBLE PICTURE OF FUTURE DEMAND

Some core strengths of DynaSys are the intelligent methods used to rapidly determine the best possible picture of future demand. DynaSys excels where product sales behavior is very complex employing intelligent algorithmic methods and machine learning techniques. These techniques are applicable for items with short or zero history, complex seasonality, periodic sales, high volume low frequency, and make-to-order products. Complexity is no longer an excuse not to have an accurate sales forecast.

Other expert techniques employed by DynaSys DSCP include:

- Demand sensing methods using real-time demand signals to drive near horizon demand management.
- Demand shaping capabilities to simulate price/volume scenarios.
- Exception management processes focuses the planner intervention to the area of the portfolio where the most value is added.
- Expert promotion planning to manage promotional uplift, and cannibalization and halo effects. DynaSys smart baseline planning ensures promotional demand is segmented from organic demand.
- Modeling individual product life-cycles 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.

The result is a high quality output for minimal input.

INVENTORY OPTIMIZATION

Volatility, risk and opportunity; this is the new normal for many DynaSys customers. DynaSys technology provides several tools critical to managing this change.

DynaSys DSCP measures the impact of different types of inventory such as working stock, safety stock, intermediate, and in-transit inventory. The solution applies segmentation rules and services level parameters to determine the optimal safety stock targets across all tiers of the supply network.

SUPPLY PLANNING

The best possible picture of future demand naturally needs to be aligned with the best possible picture of future supply. DynaSys provides comprehensive holistic supply planning capability to calculate optimal distribution, manufacturing, and procurement plans.

DynaSys DSCP coordinates material and information flow across the entire logistics network. Finite capacity distribution plans respect lead-time; batch size; and ordering, shipping, and receiving calendar constraints. The DynaSys solution inherently supports segmentation strategies with a deep supply allocation rules ensuring the right demand is served. Geo mapping visualizations of product flow intuitively highlights distribution activity.

DynaSys DSCP optimizes the order and delivery plan for all purchased items including raw materials, packaging, finished goods and products linked to trade. This best-in-class capability supports supplier schedules, standing-order call-offs, and supply calendars. It contains unique 'look-ahead' logic to strategically attain carriage- paid or to fill containers. Strategic sourcing rules (multiple supplier share, etc.) may be configured.

MANUFACTURING PLANNING

DynaSys DSCP provides finite capacity optimized planning to determine all manufacturing material flows across all production stages subject to resource capacity, skills and tools, labor, and material constraints. Intelligent optimization algorithms holistically determine the perfect plan across the planning horizon enabling overtime, outsourcing, and seasonal stock-builds as necessary.

Complex material rules such as lot tracking and shelf life are available. DynaSys provides available to promise (ATP) and capable to promise (CTP) to complement the order promising process.

FINANCIAL PLANNING

DynaSys is equally a tool for the finance team. It enables operational budgets and sales and cost targets to be defined or synchronized with a finance system. It aligns plans and measures progress of revenue, profit and supply chain costs against budgets. It is "fiscal period/year" aware as well as simultaneously supporting sales

and manufacturing calendars. This provides a unique ability to view a single version of the truth in finance or operational metrics, targets, and calendars.

DynaSys empowers strategic planning and infrastructure decisions. The DynaSys solution offers strategic network flow management and includes cost-to-serve, where-to-serve simulations factoring variability of demand and supply, capacities and fixed costs.

SALES & OPERATIONS PLANNING (S&OP) / INTEGRATED BUSINESS PLANNING (IBP)

The DynaSys solution positions S&OP/IBP as a central focus of all supply chain planning process. This is critical as the impact of all decisions are aligned with executive objectives and growth initiatives. A key differentiator for DynaSys DSCP is the adoption of financial dashboards, metrics and benchmarks. This extends beyond revenue budgets and sales targets. Executives are able to use to balance sheet metrics such as cash flow-impact, working capital, and return-on-assets to compare a planned scenario against a baseline. This financial extension is critical for companies to leverage S&OP as a platform for growth and business transformation.

THE TECHNOLOGY – FUTURE PROOF YOUR INVESTMENT

DynaSys cloud – safe, secure and available. DynaSys DSCP is available both on premise and in the cloud. DynaSys data centers and application managed services

are ISO certified. The DynaSys cloud carries SSAE16 SOC I Type II certification, the highest international security standard. Business continuity is assured with comprehensive disaster recovery planning.

Mobility. DynaSys is deployed on the internet as well as mobile devices providing an ultra-modern customer experience such as touch screen and finger friendly interaction.

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. DynaSys DSCP 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. DynaSys DSCP uses best in class technology to provide a highly scalable, rapid in-memory data model enabling real time simulation planning and effective decision support.

Integration. 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 an ETL (Extract Transform Load) tool for building custom integrations.

SUPPLY CHAIN PLANNING IS OUR HERITAGE

DynaSys has been empowering customers to improve productivity and profitability through better supply chain decision-making for over 3 decades. DynaSys, a division of QAD, invests heavily in research and development to future proof our solutions.

Solutions Offers

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

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

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