



Demand Excellence

A Holistic Model for Optimizing Demand Planning



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*With evermore complex demand planning puzzles to solve...**many view optimized demand planning as the only realistic lever to help manage supply chains in today's ruthless markets.***

One of the greatest challenges facing supply chain professionals today is creation of a quality demand plan.

Driven by an unprecedented spike in marketplace activity — new product introductions, promotions, the explosion of SKU counts, price-related “gaming,” savvy consumers, and the now-global crush of competitive pressure — **a sharper view of future demand is a must-have weapon** in the quest for nimble supply chains that can rapidly respond to fluctuation in demand patterns.

Across all industries, organizations are struggling to meet the market-driven surge in customer service requirements while simultaneously striving to make the most of working capital. Hypercompetition is driving down prices, leading many to choose offshoring as a way to reduce costs and manage pricing. Yet solutions like offshoring have their own risks, as revealed in cautionary tales about wrong inventories being shipped overseas or costly air freight shipments from distant supply lines to meet urgent customer needs.

The heightened urgency to improve demand planning is also being driven by development of other internal processes like Lean, Sales and Operations Planning (S&OP), and Sarbanes-Oxley compliance. S&OP emphasizes the importance of a one-number plan. Lean, and similar best-practice supply-centered processes,

address the importance of a quality, single-number demand signal to propagate through the supply chain. And Sarbanes-Oxley requires a reality based portrayal of future business opportunities — another reason to improve demand planning output.

With evermore complex demand planning puzzles to solve and with greater urgency to develop demand planning expertise — within and throughout their own organizations — business leaders are increasingly focusing on comprehensive approaches to enable high-performance demand planning. In fact, **many view optimized demand planning as the only realistic lever to help manage supply chains in today's ruthless markets.**

Gone are the days of narrowly focused “silo” strategies based on a tool, a process, or a training plan. Today's best-practice approach is much more comprehensive, based on a holistic model that incorporates **people, process, and technology** improvements to enable optimal demand planning.

With decades of hands-on experience and insight into real-world challenges facing global supply-centric organizations, Spinnaker's industry-veteran supply chain specialists developed a demand excellence process approach based on this all-encompassing model — for a number of reasons.

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First, we witnessed firsthand the need to define a demand planning standard that breaks down the silo approach and collectively examines the processes and subprocesses that support and enable the tools, the consensus process, and the overall business needs of an organization to develop a quality demand plan.

Second, merely acknowledging and articulating the existence of a demand excellence process exposes the numerous disciplines and expertise that demand planners must master to create quality demand plans. While this “exposure” often reveals gaps and deficiencies, candidly acknowledging what you “don’t know” is key to developing skills and competencies. And since the demand planning role has evolved over the years — from a chiefly clerical position to a pivotal

planning role — our Demand Excellence™ model acknowledges and addresses the importance of that shift.

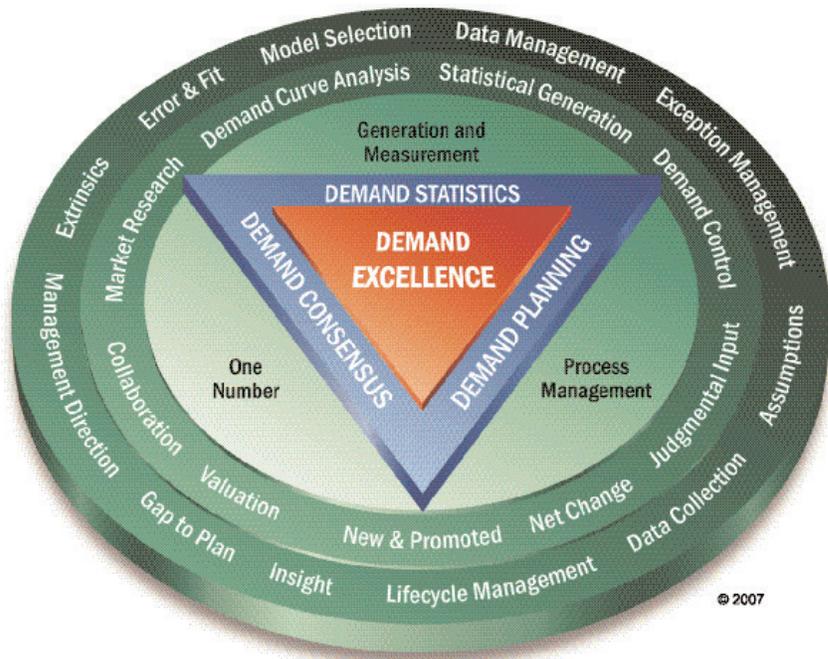
Demand Excellence has three distinct major processes: **Demand Statistics**, **Demand Planning**, and **Demand Consensus**, each of which is supported by numerous subprocesses (see **Figure 1**).

Demand Statistics focuses on best-quality statistical forecast generation, data management, and measurement.

Demand Planning centers on obtaining the best judgmental input, assembling assumptions, and integrating new activities plans (like promotions and new products) into the demand plan.

Demand Consensus is concerned with building a one-number plan and integrating the demand planning process into your entire organization.

Figure 1 —
A holistic approach
to optimal demand planning:
the Spinnaker
Demand Excellence™ model.



The Demand Excellence™ model shows the competencies that collectively comprise demand planning best practice. Your challenge is to measure your company’s current state of maturity against these criteria, to identify gaps — or perhaps entire process areas — in need of improving, before you can execute against the model.

Measuring performance is a straightforward exercise.

Simply use the maturity assessment in **Table 1** to rate your business on a scale from 5 (good) to 0 (poor) for each of the various subprocesses to get a macro-view of your organization’s demand excellence readiness.

Certain businesses won’t fit the model precisely, of course. A chemical producer that sells plastics resins to second-tier manufacturers may not have promotions per se, but the company may have sales programming that drives activities similar to promotions. Thus it’s important to carefully consider the Good/Poor model descriptions for each of the subprocesses as they relate to your specific organization.

Most people usually score their businesses around 35 out of a possible 75 points upon initial review of the 15 subprocess groupings in the maturity assessment.

Table 1 — Demand Excellence Maturity Assessment

Using numbers from 5 (good) to 0 (poor), rate the current state of demand excellence in your organization for each category.	
New & Promoted	
5	Robust process to develop new product forecasts, define promotional impacts, and to measure post facto performance.
0	Little or no visibility to promotional or new product plans — and inadequate post-activity forecast adjustment.
Lifecycle Management	
5	Strong integration of all life cycle activities into the demand planning processes including portfolio management and SKU rationalization and run out.
0	A lack of processes or subprocesses support product life cycle management.
Net Change	
5	A rigorous capture of what changed to the prior plan, with review and explanation of the changes; changes to the plan are explained as changes to assumptions.
0	Little tooling or recognition of what changed and why.
Statistical Generation	
5	Monthly statistical forecasts generated enabled with detailed reviews of the output of the statistical engine; error and deviations generated from the statistical forecast; the statistics are calculated at the right level.
0	No statistical generation or a poorly managed statistical generation process (and/or a lack of understanding of statistics as they relate to demand planning).
Management Direction	
5	Management is actively involved in the gap-closing process and offers support, validation, and direction to the process.
0	Top-down forecasts, budget-based forecasts, or management-directed forecasts are imposed without justification and are typically a SWAG.
Data Collection	
5	Forecast inputs are provided in forms that are immediately usable and able to be interpreted by demand planners. These inputs are timely, and the organization is focused on improving the quality of inputs.
0	Forecast inputs are provided in “dollars” or at such a high level of aggregation (e.g., total customer levels) that they provide no guidance regarding mix or underlying trends. Forecasts are not seasonalized or rationally paced.

Table 1 (cont.) — Demand Excellence Maturity Assessment

Using numbers from 5 (good) to 0 (poor), rate the current state of demand excellence in your organization for each category.	
Exception Management	
5	The forecast is managed by exception. Typically forecast error, bias, and trend differences are used as the basis for exception processing. In sophisticated implementations ABC or volume variability models are used to manage forecasts.
0	The forecast is subjected to full overrides or is either “fully” reviewed or not managed at all.
Data Management	
5	Robust maintenance process to assure that system data within a demand planning solution is clean; this includes making sure zero instances and “dead branches” are removed; realignments and remapping is a regular occurrence.
0	Data management is largely ignored, leaving a suboptimal demand planning engine in place.
Demand Curve Analysis	
5	The organization has an in-depth understanding of the demand curve, including the degree of lumpy demand, seasonality, pacing, etc.
0	Dynamics of the demand curve are not understood.
Market Research; Extrinsic	
5	Market research is exploited where appropriate, to improve the judgmental forecast. Significant effort is used to determine if there is correlation between research and the demand plan. Consumer research and syndicated data is used in consumer-based industries.
0	Market research or extrinsics are not used to improve the forecast (assuming this research is available).
Insight; Judgmental Input; Assumptions	
5	Sales and marketing insight is valued but challenged. Insight is well understood before being included as a forecast input. Insight and Judgmental input are presented as assumptions to the demand plan.
0	The demand planning function under-involves the business, or the insight provided by the business is not challenged for reality. Assumptions behind the demand plan are not conveyed.
Error & Fit; Model Selection	
5	Measurements of error and fit are used to optimize model selection. Stakeholders are well aware of the math and the usage of error and fit to enable better model selection. Models are appropriately selected based on the demand curve.
0	Little or no knowledge of model selection processes or measures.
Valuation; Gap to Plan	
5	The development of a unit-based plan that is subsequently valued; the development of a gap-to-plan process, and then the valuation of gap closers.
0	A dollar-based planning process that is a morphed balance-of-year plan.
Demand Control	
5	Short-term forecast management including forecast consumption rules and forecasting rolls are managed within the process.
0	There is little alignment between the demand planning and execution processes.
Collaboration	
5	Significant internal and external collaboration and information sharing as needed to create a quality forecast.
0	Disharmonious or political environment leading to suboptimal results; win/lose mentality with trading partners.

Once you rate your business against these standards your next challenge is to assess the competency of your *human* resources to achieve demand excellence. Because just as demand planning has become more complex, so too has the baseline skill set required by demand planners become more sophisticated.

It’s not what you know...

Supply chain professionals are familiar with the traditional litany of must-have planning skills and abilities: quantitative mindset, collaborative nature, business-savvy sensibility. Yet these desired competencies are useless if not properly applied in the context of demand planning.

Moreover, they don't address the capability of individuals to execute against a demand excellence process, nor are they specific enough to gauge the competency of your existing demand planners or demand planning team.

To provide such insight, **we often recommend developing a demand planning competency matrix** to conduct skills assessments. This matrix helps business leaders

align the requirements of the Demand Excellence™ model with the requirements of the various roles already existing within their own demand planning organizations.

Detailed criteria are first defined to gauge the desired knowledge level and competency of demand planners. These criteria are normally customized to fit a company's process needs, systems, and roles. **Table 2** shows a sample competency matrix

Table 2 — Sample Demand Planning Competency Matrix and Skills Assessment

Role: Demand Planner

Develops a forward-looking demand plan, combining techniques such as forecast strategy, forecast aggregation and disaggregation, causal factors, econometrics, market intelligence, and customer collaboration.

Aware	Functional	Skilled	Expert
Identifies the impact of forecasting data and direction on own work activities	Applies an understanding of forecasting fundamentals and calculations to identify possible areas to modify the statistical forecast based on market data and historical results	Develops forecasts to reach; defines financial goals/business strategies	Conducts financial impact analysis of low-accuracy product to recommend changes to business strategy
Describes the forecast process and how it impacts supply planning	Utilizes tools to analyze historical data (i.e., execution reports, histograms, Top 10 list)	Leads a business through the process of analyzing shipment history, supply capabilities, and customer/market intelligence to determine forecast strategy	Demonstrates proficiency at managing the full demand planning process for an entire business
Can detect problems in a forecast but is unsure of best approach to resolve	Monitors and implements fixes to resolve significant deviations from forecast	Selects different approaches as appropriate to project future demands through a forecasting strategy (i.e., market trends, forecasting pyramid, customer collaboration, or coefficient of variation)	Identifies and recommends changes to company strategic plan based upon industry, market, and forecast trends projections
Is aware of the major subprocess elements used to define a forecast but cannot operate independently to execute more than a few of the subprocesses	Consistently executes tasks related to developing a forecast (i.e., reviewing sales history, budget, market updates, statistical forecasts, and forecast exceptions)	Determines final detail, customer-level allocation based on contractual agreements, and business direction and strategy (engages in proactive sales and marketing communication)	Capable of selecting forecasting models that best fit analysis under different historical conditions and trends
Operates in a silo; interacts with input providers in group setting only	Communicates with business unit contacts to provide judgmental input into statistical forecasts	Consistently applies standard forecast accuracy methods and uses these principles to make corrections with highest impact	Leads a business through a process of building a comprehensive forecasting plan and determining the right levels at which to forecast

Table 2 (cont.) — Sample Demand Planning Competency Matrix and Skills Assessment

Aware	Functional	Skilled	Expert
Can generate exception reporting but is limited in ability to interpret	Works with other departments to communicate demand plan and forecast key performance indicators	Monitors adherence to the demand plan and recommends corrective action for non-adherence	Proactively seeks out issues in the forecast that can lead to future deviations
Can identify macro demand drivers	Demonstrates the ability to identify product line demand drivers related to own work area	Communicates demand plan to supply organization, including trends, net changes, and underlying assumptions	Is a font of wisdom around the demand plan; can articulate market- and product-based sales drivers; is considered the forecast expert
Recognized problems in the forecast	Maintains standard “watch” list to keep abreast of potential forecast changes	Engages the organization in root-cause analysis around forecast deviations	Defines the benchmark standard for forecast deviations either judgmentally or mathematically

developed to assess the skills of demand planners at one company, with “scoring” categories ranging from Aware (lowest) to Expert (highest), with Functional being the minimum target-level in terms of achieving demand excellence. Once the matrix has been built, the next step is to actually evaluate the skills of personnel throughout your organization.

Making the Demand Excellence Transformation

Famed UCLA basketball coach John Wooden is often quoted as saying “You can’t teach height,” meaning that a person’s innate characteristics are sometimes advantageous. Yet while competency in statistics is an increasingly important skill for demand planning, having a Ph.D. in mathematics does not make one a qualified demand planner.

Across numerous demand planning organizations we have found **most of the skills necessary to achieve excellence in demand planning are learned, not inborn.**

This means these skills can be taught, which reinforces the value of a competency matrix for conducting comprehensive skills assessments.

The results of these assessments can be used to develop well-targeted training plans for individuals and departmental groups. For example, a collective lack of understanding about data management indicates a need for highly focused systems-based training. This approach ensures that time isn’t wasted covering fundamental “basics” when specific task-related training is what’s needed, thus driving greater value in less time and much greater return on your training investment.

A Final Take Away

In our experience implementing demand excellence processes we have discovered that a multi-step implementation approach is simplest and most pragmatic:

Step 1: Define the Demand Excellence™ model elements appropriate for your company,

then use the model to assess your current state of process maturity.

Step 2: Develop a roadmap to (re)implement the process and tools for demand planning excellence.

Step 3: Determine the competencies required to support a version of the Demand Excellence™ model suitable for your business.

Step 4: Conduct a skills assessment of demand planners within your organization using a competency matrix as a rubric for scoring.

Step 5: Identify training required to elevate the competency level of your demand planning organization or individuals.

While the Demand Excellence™ model serves as a roadmap for best practices in demand planning, it will fail if not supported by focused attention on the capabilities of your demand planners and on strategic training to improve their skills.

As you engage in a redesign of your demand planning process or systems always remember — it's people that make the difference.

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To learn more, contact the supply chain specialists at Spinnaker. Call

877-476-0576 or visit
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