

How to Become a Demand Planning Rock Star

For the Chemicals Industry

By **Jonathan Feinbaum**

Executive Summary

At many companies, demand planners often work as a team of one, gathering data and interpreting it in order to improve the company's ability to predict what supplies and ingredients it needs to purchase. The demand planner can easily be a scapegoat for things that go wrong in this process. But it doesn't have to be that way. With the right tools and guidance, you can turn this sometimes lonely position into one that improves the company's flexibility and profitability. And turn yourself into the company's rock star with a solid career that adds value to the bottom line by taking three steps:

1. Identifying and engaging stakeholders
2. Obtaining the right data at the right time
3. Presenting data and motivating change to secure results

This white paper covers the areas that are critical to successful demand planning, such as identifying stakeholders and their unique needs, and how to develop and implement the demand planning process as a continuous improvement model that drives business and meets the company's individual and overall goals. In addition, this white paper provides some real-life examples of successful demand planning strategies as well guidelines and expectations based on interviews with chemical industry demand planners and overall industry findings.



About the Author

Jonathan Feinbaum is a Solutions Consultant for CDC Software. He is a demand planning rock star in his own right, helping hundreds of companies implement ERP solutions and demand planning programs. He is customer-driven to improve supply chain collaboration and add to our customers' profits and financial stability.

Introduction

In this extremely competitive environment in which every dollar counts, companies must replace merely tactical operations with strategic and innovative ones that enable them to plan and respond to market changes quickly and effectively. Too many companies are stuck in the “tactical rut.” Their forecasts and demand planning are time consuming, draining resources that could be used to improve customer relations and market share. They do not have the right people contributing to and managing the planning process. They rely on outdated tools that do not provide the detailed and easily comprehended data necessary for strategic decision making.

If this profile looks like your company, don't give up. Sadly, about one-third of today's companies are stuck in the tactical rut. Fortunately, there are steps that you, the demand planner, can take to help take your company out of the tactical rut and into the fast lane of better planning and execution that leads to improved performance.

Working in the chemical industry poses its own challenges. From plastics to petrochemicals, the companies that make up the chemical industries face unique requirements in demand planning and forecasting. In addition to the demands that face all manufacturing industries, the chemical companies are often intermediate manufacturers whose businesses are tied to macro-economic indicators. Without the right tools, demand planning and forecasting are very difficult. As the global economy has gone from fast growth to climbing out of a worldwide recession, chemical manufacturers now more than ever require highly accurate forecasting to remain competitive and maximize profits.

The good news is you have the opportunity to be your company's rock star. You can be the person who initiates a strategic planning process that unites strategy with execution and links the corporate objectives with performance throughout the company. Not satisfied with just the standard forecast vs. actual reporting, you integrate the plan throughout the company to enable the company to react quickly to market changes and plan with greater accuracy. You will garner the attention of executives by your ability to transform data into valuable knowledge that cuts costs and boosts market share.

Why Demand Planning?

Demand planning is a vital part for managing your company's value chain. It helps you create more accurate demand forecasts that tie together all aspects of your business, from production to sales. It enables your company to do more with less waste.

A common misperception is that demand planning merely involves forecasting that can easily be done using Excel spreadsheets. This approach usually leads to many problems, such as various divisions using their own product terms and metrics, which in turn forces the planners to spend weeks cross checking the data simply to create a master document. When so much time is spent on just interpreting data, there is very little time left for analyzing the results or making improvements to the plan.

Some may question the resources needed for this upfront investment. A better question is: Can we afford to have inaccurate and incomplete forecasts that result in shortages, overruns, shrinking profit margins, and unhappy customers?

“Speed creates innovation. If we can pull our information faster from a common platform, we can make faster, higher-quality decisions that enable us to add features to our customer relationships that they find to be of high value.”

Allen Look

Director, Global
Information Technologies
SI Group

A recent study by a leading planning organization found that among medium to large-sized companies, a mere 1 percent improvement in forecasting accuracy led to over a million dollars in savings. For example, a company with annual revenue of \$100 million annual sales could realize a \$1 million reduction in costs simply by improving its forecasting accuracy a tiny bit. Now, imagine the possible savings if you invest in the tools and strategies that increase your forecasting accuracy a lot. This is what demand planning rock stars understand.

Demand planning rock stars know the right process and tools can streamline demand planning and forecasting as well as establish measurements for an ongoing improvement process. They start with the right tools that go beyond a yearly, static forecast to create a dynamic system that can be adjusted to adapt to changing market conditions.

Enterprise software motivates change by:

- Linking the ERP system to the demand planning process
- Replacing the antiquated Excel spreadsheet with more accurate and efficient software
- Streamlining the demand planning process
- Enabling users to get the right information faster
- Providing flexibility to modify the plan on an as-needed basis, not just once a year

Graphical Reporting tells the story that gets everyone excited

- High level charts and graphs for senior executives
- Product-level reporting that helps sales and marketing make more informed decisions and targets
- More accurate monthly reporting to give production departments a better view for replenishing inventory
- Monthly reports for finance that shows the company progress towards yearly objectives

Demand Planning for the Chemical Industry

Chemical manufacturers are largely business to business (B2B) companies, an intermediate step in the creation of products ranging from cleaning products to tires to building materials and much more. Many chemical manufacturers maintain a very large portfolio of products that involve hundreds and thousands of SKUs.

Chemical manufacturers often have global supply chains as well as global customers, which create complex production schedules and customer demand management. The key is to have the right amount of inventory available at the right time to avoid costly excess inventory and warehousing or, on the other hand, too little inventory that creates stock-outs.

Unlike other industries, such as food and beverage manufacturers, that can predict seasonal demand patterns, the chemical industry is often bound to macro-economic changes that affect demand. For example, government rebates on the purchases of new cars may suddenly increase the demand for the chemical materials used to create tires.

For these reasons, the chemical industry needs demand planning rock stars to find hidden opportunities and cut costs from the system by enabling manufacturing facilities to produce accurate demand forecasts.

Become a Demand Planning Rock Star Step One: Identifying Your Stakeholders and Creating Measurements

Identifying Stakeholders

Too often companies have a silo approach when it comes to demand planning. Demand planning rock stars, however, know that to achieve results the process must be truly integrated across the company. In order to create an accurate and dynamic forecast, the right participants from different areas of the company must be included. The first step is to identify these stakeholders. The stakeholders are groups that are loosely tied together, including virtually any group with an interest in the annual budgeting process. They can range from executive management, the finance team, schedulers and planners, marketing, and the sales team. All of them have different input roles and expectations from the forecasting process. These stakeholders are also interested in the annual and/or monthly forecasts, depending on their role in the company.

The most common stakeholders in a demand planning process include:

- a. Sales team leaders (e.g., the V.P. of Sales and various regional team leaders) who provide information from sales pipelines
- b. Operations and manufacturing team leaders who provide the link to the company's operating targets and product sourcing

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- c. Marketing team leaders who provide information on upcoming promotions and changing market dynamics
 - d. Finance executives that maintain the linkage of planning and operations to the financial objectives and constraints of the company
 - e. Major Customers. Do not underestimate the impact your top customers have. Working closely with them has benefits for your company and your customers.

A demand planning rock star is not intimidated by this list of different titles and divisions involved in the process but sees it as an opportunity to enhance communication throughout the various parts of the company to improve all aspects of the business. Each stakeholder should own their part of the planning performance and be able to easily understand the forecast measurements. A senior executive does not have the time to sort through pages of data before making a decision. For example, sales people are concerned with their customers and will often not implement a process that is too cumbersome. By getting buy-in and agreement in the planning stages, you are more likely to achieve the results you expect.

Creating Measurement Criteria

The saying “That which gets measured gets improved” is an easy way to underscore the importance of measurement. A good forecast measurement process should help find exceptions quickly, determine the accuracy of the forecast, and provide insight in how to deal with variables.

You will need to determine with the stakeholders what measurements should be included in the forecast and where those metrics should be tracked, such as

- At the Customer forecast level, and/or Item forecast level, and/or Product Family level, etc.
- Exception conditions and alerts
- The sensitivity of the measurements based on contribution stratification
- The frequency of reporting (daily, weekly, monthly, quarterly, annually)

These measurements are unique to each company. The days of simply reviewing the actual vs. the forecasted once a year are long gone. Different stakeholders may review accuracy at different intervals; however, a demand planner will usually review the forecast accuracy weekly or monthly to ensure everything is going according to plan.

To summarize, demand planning rock stars take the steps below when initiating the demand planning process.

1. Identify the business units, teams, and individuals who will have input into the process (e.g., V.P. of sales and marketing, regional sales teams, etc.)
2. Determine their individual roles in the process and interests, such as monthly and/or annual forecasts, overall company forecast or rolled-down divisional forecasts, etc.
3. Develop a measurement criteria

4. Present the data in a variety of different ways to help various stakeholders better understand the data as well as a cross-check to make sure everything is going according to plan or if adjustments must be made.



Become a Demand Planning Rock Star Step Two: Obtaining Data for Accurate Forecasting

What distinguishes a demand planning rock star from others is the ability to integrate sales, marketing, operations, and financial targets in the demand planning process. Tactical companies do not recognize the importance of collaborative planning that links sales forecasts to demand planning. Demand planning rock stars know that by integrating the sales data with the demand plan they will get more accurate data in an ongoing manner.

Demand planning rock stars perform the following steps when dealing with data:

- Link the data from the ERP system to the demand planning process
- Use a good software tool to gather, analyze, and distribute data
- Implement a process that coordinates planning and decision making across the company
- Develop a strategy that links day-to-day operations to the overall company goals

Linking Data from the ERP System

Data, with rare exception, is almost always obtained from the ERP system. While it is possible to implement the demand planning system prior to integrating it to the ERP system, most demand planners have found it is much easier and less time-consuming to integrate the demand planning system with the ERP system prior to implementing it.

An example of the ERP integration process includes mapping from the ERP system(s) that involves all the components of the demand planning pyramid.



Demand Planning Pyramid

Essential Data

- Master data (products, customers, etc.)
- Customer order history
- Shipment and backorder history
- Historical promotions
- Current open customer orders

Integrating the essential data with Ross ERP's Demand Planning Module has been easily and successfully done in many companies.

Finding a Good Software Program

Once the data is extracted from the ERP system the next step is to determine how to manipulate this enormous amount of data. Without tying each company or division's processes with the overall demand planning process, annual forecasting is tedious and less accurate.

Companies stuck in the tactical rut almost always rely on clunky Excel spreadsheets and fail to benefit from advanced software based on statistical forecasting models. Whether you are a multi-national company that deals with the same product being given different names in different languages or a smaller company that gets input from different business units that use different formats, trying to do efficient and accurate planning using Excel makes forecasting an extremely difficult and time-consuming process. Streamlining this process enables planners to spend more time analyzing the data rather than trying to make sense of it. Advanced demand planning tools allow spreadsheet users to move from a 'manage by review' process where they have to review everything in the spreadsheet to determine where the issues are, to a 'manage by exception' process where the system is directing the Demand Planner to the items requiring their expertise and attention.

Some companies have hundreds of new SKUs for new products and packaging each month. The scalability of a good demand planning system simplifies the process. Multi-national company must also make sure their demand planning software has the capabilities to allow data to be in local currencies, and then converted to a standard currency (US Dollar, Euro, etc, depending on your company's need).

“ With our new demand planning system, it’s actually easier to train users and, everyone is putting consistent information into one common system. Our more accurate forecasts help us with raw material purchases, planning in the plant, and planned growth into other regions. ”

Allen Look

Director, Global
Information Technologies
SI Group

Coordinating Planning and Decision Making Across the Company

A demand planning rock star will include the people who are most knowledgeable about their piece of the plan. Tactical companies too often put supply chain or finance managers in charge developing the sales forecast with little or no input from the sales teams. A demand planning rock star, however, realizes the teams most involved with executing their portion of the plan must be included in the planning process. They make sure that data from the sales pipeline is incorporated into the demand planning process through the right software to increase the accuracy of the data. This is one of the biggest challenges that a planner faces, and a background or training in change management is helpful when you move to a single solution that everyone must use.

Linking Day-to-Day Operations to Company Objectives

Demand planning rock stars make sure that daily operations are tied into the overall company goals by creating a spirit of integrated team work and choosing the right tools that deliver detailed information. A subpar software tool will not provide the detailed, customer-level and product-level data that both sales and manufacturing need in order to better forecast sales and production levels.

In order to achieve yearly targets, you must make progress towards them on a daily basis. By obtaining the correct data on a granular level and being able to review and adjust forecasts on a weekly or monthly basis, demand planning rock stars can distribute the information that makes a positive difference.

SI Group tackles demand planning globally

Demand planning is a critical component of the SI Group's global success. It wasn't always that way. Brian Taylor, manager of the Business Solutions team at SI group says that the company had 13 different forecasting solutions a few years ago. Forecasts were disconnected and caused issues in managing the demands of their global customer base.

The process of moving to one system didn't happen overnight. In fact, Taylor says it was staged over a couple of years to make sure that everyone was involved and the final product worked. "After implementing the system, all the territories now use the

same part codes, the same descriptions, and everyone works on the same grid," says Taylor. "They use the sales forecasting tool to enter and adjust their forecasts. We get the information in one spot, all together, to basically compile everything into one forecasting process. Our first year using the demand planning system reduced the time required from 2 to 3 months to around a week. Next year, we expect to shave off some more time."

Taylor says the new system gives executives visibility into the forecast in a way that they never had before. "Being able to see helps them make better decisions, and ultimately should help them drive the company to create a better forecast in the future," he says.

Become a Demand Planning Rock Star Step Three: Getting Results

If you have the right tools and the right data, you are only two-thirds of the way to your goal. To make it to rock star status, you need to turn that information into action. You need to go beyond merely measuring performance to managing performance. The right people must have the ability to access the reports and the authority to take action based on the information you provide.

Once a periodic forecast measurement is done against actual demand figures, it is vital the stakeholders can review the information easily. It is also very important that a demand planning system be able to show exception data in an easy-to-understand manner to highlight potential problems. A good demand planning tool provides the ability to present information to the various stakeholders in an easy-to-understand manner, which motivates them to take action.

The following steps should be included to get the results you need:

- Get executive buy-in to include data in performance reviews
- Make sure the software enables users to run integrations on a regular basis
- Software should deliver the data in graphical representation that drives people to achieve their goals
- Demonstrate accuracy of forecasts across a variety of critical measurements, not just one

Executive Buy-in

Change can make people reluctant to use a new system. By obtaining executive buy-in the change process runs smoother. Executives can include the demand planning data into performance reviews of various teams and offer incentives for users to accomplish goals.

Regular Integrations

In addition to a lengthy forecasting process, companies without a good demand planning tool could only forecast using the top number of the grand total for the whole company to see how they were tracking against that number. This precluded them from getting the detailed information to determine how to improve their processes on a more targeted basis. It also prevented them from seeing exceptions that highlight potential problems and trends.

A good demand planning system will facilitate regular data integration to refresh the data and make any necessary adjustments to the plan. Without good demand planning software, many companies only do this on a quarterly basis or worse yet, once a year. Demand planning rock stars run a full refresh on a weekly or monthly basis. This integrates data about new products, new product locations, sales' histories, new product orders, and any other updated information pertinent to the business that enables adjustments to be made in a timely manner.

In cases with multiple companies that act individually within the parent company, a good demand planning system gives them the ability to run the integration as often as they like, enabling them to refresh the data for updating and remodel their individual forecasts as necessary. This in turn helps the parent company to obtain more accurate data from a regional basis.

Information that Drives Change

Once periodic forecast measurements are done against actual demand figures, it is vital the stakeholders can review the information easily. It is also very important that a demand planning system be able to show exception data in an easy-to-understand manner to highlight potential problems and uncover opportunities. A good demanding planning tool provides the ability to present data to each of the stakeholders in ways they need to see it. For example, a high level graphical representation to senior executives who need a high-level view to quickly determine the information presented by the data or granular product-level information for sales managers.

“ The ability to see our order patterns globally and to serve our customers globally helps in our investments and in their investments. Overall, it makes for a much richer relationship. ”

Allen Look

Director, Global
Information Technologies
SI Group

The ability to see sales and forecasts in one place and actually do a measure of how well the company is forecasting on a granular level, such as customer-to-customer or territory-to-territory, opens up opportunities to better forecast customer demand. “Overall, being able to see sales and forecasting data from one source and do a measurement as to how well we’re forecasting, lets us compare on a customer-to-customer or territory-to-territory basis when we used to only be able to compare how we were tracking against the grand total of the company,” say Brian Taylor, SI Group.

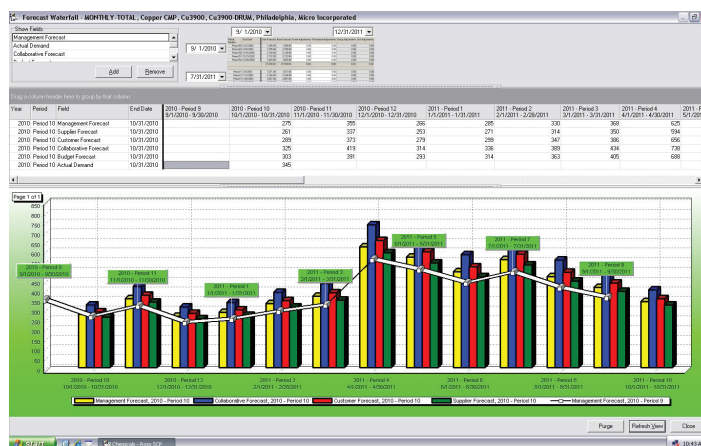
Having better information on a more detailed level also helps companies adjust their forecasts in sufficient time to prevent problems or find opportunities that were previously hidden. This ability to view the data at a more granular level often produces surprising revelations. For example, one company’s sales force, using its new demand planning software, analyzed its data to discover that a customer who was believed to be the 30th in terms of sales was in reality the company’s 4th most valuable customer just by comparing the data to the ERP system. This knowledge is extremely valuable in helping people understand the power of the new tool as well as implementing more resources to an important segment of the business and improving customer satisfaction.

Ensuring Forecast Accuracy

The next question is inevitably how do you determine the accuracy of your forecasts?

Industry statistics show that while month-to-month errors average in the 0 to 20 percent range, that number goes down to 10 percent or less on a rolling, three-month forecast.

Graphical representation lets planners create a quick comparison and cross check of how the annual forecast, the collaborate forecast, the system/management forecast, and monthly forecasts relate to each other to make sure the forecast is on track. By seeing the lines on the chart are trending according to prior forecasts and calculations, the demand planner can make sure everything is going to plan or make adjustments.



Forecast Waterfall Report and graph from CDC Software Demand Planning solution.

Demand planning rock stars create a dynamic system that reflects changes over time. A table that shows the forecast vs. actual demand at different points in time, such as over a 3-month period, can help you see how a forecast varied over a certain time period as well as the most accurate forecast during that period. This information is very useful in predicting future demand and creating more accurate forecasts.

Conclusion

More than simply forecasting production needs, demand planning rock stars help enhance the performance of every segment of the company. By getting the CEO the information that results in increased sales and reduced costs that look great on a quarterly report, demand planners can help drive business. From helping the sales team identify top customers and better serve them by knowing what they need and when they buy it to helping the marketing team see new trends in order to increase market share, rock star demand planners touch every aspect of the company.

Demand planning rock stars use good demand planning software tools with advanced functionality and easy reporting features that provide more detailed and accurate data that can be analyzed, sliced and diced in various ways that are nearly impossible without them. This information enables their companies to create more accurate and timely forecasts to determine demand as well as gain a deeper understanding of the sales process, production planning and inventory process. Naturally, this helps reduce costs in markets with tough competition. For the chemicals industry with its reliance on the movements of global markets and macro-economic trends, this advantage is crucial.

Equally important is the ability demand planning rock stars provide users to better understand sales' trends. This in turn helps their companies to better manage inventories and stock levels, which improve overall customer relations. Lastly, demand planning rock stars know that demand planning systems also serve as the basis to implementing Advance Planning and Scheduling (APS) systems that can offer more detailed and accurate data and management tools for supply chain management.

By helping to create an integrated demand planning system that spans the entire company and delivering easy-to-understand, accurate data, demand planning rock stars are able to initiate the change that takes gets their company out of the tactical rut and turns it into an innovative leader with the results that prove it.

To learn more about how CDC Software can meet your company's unique challenges, **contact us.**

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