

Can demand planning unlock new profit potential for distributors?

How better forecasting
and inventory planning can
improve the bottom line

Table of contents

Executive summary	3
Distribution dynamics create new opportunities	4
Pitfalls of current forecasting techniques	6
Using demand planning to unlock new profit potential	7
How distributors improve profitability with Infor Demand Planning	9
The Demand Planning Maturity Model: Where are you today?	10
Conclusion	13

Executive summary

Distributors have always relied on their professional buying skills and inventory management expertise to service their customers. Yet today's global supply chains, redundant inventories, demanding customers, expedited orders and tighter margins require distributors to add capabilities to survive, or even better, to thrive.

Each day, distributors are challenged to source and sell globally while maintaining a local presence and strong customer service. Now that distributors are increasingly playing an expanding value-added role in the total supply chain, they must become more proficient at understanding, predicting, and helping to shape demand for products.

To remain competitive, distributors must be able to rapidly react to even the slightest change in demand. But current forecasting techniques and the tools used by most distributors aren't up to the challenge. Using replenishment policy to trigger re-order points doesn't provide a long-term view. Even worse, spreadsheets are error prone and labor intensive, and they don't integrate easily with ERP systems.

Distributors have begun asking "Can demand planning unlock new profit potential for my business?" The answer is a resounding "Yes." Leading distributors are turning to forecasting and inventory planning to increase profits across all three main activities in their organization: Buying goods, stocking goods, and selling goods. Consider these results:

- **Buy:** A long term view of demand empowers buyers to move beyond re-order point purchasing to more strategic procurement, building stronger relationships with suppliers and lowering the cost of goods sold.
- **Stock:** Increased forecast accuracy means smarter inventory investments and more efficient inventory management, resulting in decreased operating costs.
- **Sell:** More consistent fill rates and premium services, such as Vendor Managed Inventory, can work together to increase margins and boost the bottom line.

With demand planning, distributors can overcome even the toughest forecasting challenges associated with seasonality, promotional events, and new product introductions. Demand and inventory planning solutions can help companies:

- Improve forecast accuracy 20-40%
- Increase on-time delivery performance up to 20%
- Slash inventory investments and increase turns by 15-30%
- Reduce obsolescence by 15%

Infor™ can help your organization leverage better forecasting and inventory planning to improve its bottom line. Our Demand Planning Maturity Model, presented later in this paper, can help you assess where your company is today, and chart where it could be in the future.

Distribution dynamics create new opportunities

“Dynamic forces of change are converging upon the wholesale distribution industry. The business environment is changing and distributors must change too.”¹

Several dynamics are applying pressure in the distribution business environment and many distributors are struggling to master today's marketplace. Distributors are facing multiple challenges, including:

- Managing global supply chains and redundant inventories
- Chasing new growth, new markets, new products, and new business models to adjust to market trends
- Increasingly difficult customer demands, including tighter timelines and expedited orders
- Tightening margins due to customer price pressures and rising costs
- Controlling costs and doing more with less, which is complicated by internal operational silos

Excess inventories are the single biggest threat to the financial performance of every distributor. This excess inventory results from global expansion that has multiplied overall inventory levels and increased time to market, as well as complex multi-tier supply chains that have increased “just in case” safety stock. In some cases, decentralization has added even more redundant inventory.

Other industries, such as consumer products manufacturers, have realized benefits from using demand management to improve service levels, while managing their manufacturing operations and inventories more efficiently. Distributors, however, have always relied on their professional buying skills and inventory management expertise to service their customers at an acceptable level of investment in inventory.

Now that distributors are playing a unique and expanding value-add role in the total supply chain, they must become more proficient at understanding, predicting, and helping to shape demand for products. Moreover, given their close proximity to the customer in the overall supply chain, distributors are in an excellent position to add value to their suppliers through increased visibility and potential supply chain savings. This benefits customers, distributors and manufacturers alike.

¹ Adam J. Fein, Ph.D., *Facing the Forces of Change®: Lead the Way in the Supply Chain*, National Association of Wholesaler-Distributors, 2007

Despite these challenges, new opportunities are emerging:

- *Vendor managed inventory (VMI)*—In this profit model, distributors take ownership of a customer's inventory for a premium price.
- *Supply chain collaboration*—By sharing information with vendors and customers, distributors can profit from tighter relationships that foster more reliable supplier performance.
- *Acquisitions*—As distributors expand their coverage, there are opportunities for greater economies of scale.

Dr. Adam J. Fein sums it up in *Facing the Forces of Change®: Lead the Way in the Supply Chain* (National Association of Wholesaler-Distributors, 2007) when he says, "Distributors must change." These changes include leveraging better customer demand data, sharing demand-based information, and performing real-time analysis of orders to become more demand driven.

Pitfalls of current forecasting techniques

In the past, most distributors subscribed to the conventional view that forecasting added little value. A distributor's business was more supply focused than demand driven. Given today's complex global supply chains, those needs have changed, but current forecasting techniques and the tools used by most distributors aren't up to the challenge.

Some distributors use replenishment policies to trigger re-order points, but this method doesn't look beyond the next purchase order placed, and therefore doesn't make it easy for suppliers to plan their business efficiently.

Other distributors use multiple spreadsheets, usually with thousands of rows of data, making this a painful, error prone and manually intensive process. Spreadsheets also lack the ability to easily integrate with ERP and procurement systems. With spreadsheets it is very difficult to:

- Introduce new products and phase out old ones, a frequent task for distributors.
- Provide the manufacturer with visibility into future growth or decline for specific products, so that they can plan their business accordingly.
- Work with manufacturers to plan promotions to stimulate demand.
- Build stock for a new product introduction or a store opening.
- Determine sourcing strategies and supplier splits.
- Manage demand for a project.
- Identify slow moving products.
- Add in a new distribution center.
- Convert the forecast into a financial plan for revenue, purchase spend, and cash flow.
- Collaborate to capture knowledge from supply chain partners, such as manufacturers, designers, and transportation resources.

In short, spreadsheets can't provide the multi-dimensional analysis or collaborative planning capabilities required to plan demand and supply. That's why distributors are turning to demand planning to help predict and shape customer demand with greater accuracy. Demand planning accommodates even the toughest forecasting challenges associated with seasonality, promotional events, and new product introductions.

Using demand planning to unlock new profit potential

Distributor operations can be grouped into three main activities: Buying goods, stocking goods, and selling goods. As shown in Figure 1, demand planning can help distributors tap into new profits across each of these aspects of their business. This section provides an in-depth look at how demand planning impacts a distributor's procurement, inventory management, and sales functions.

Figure 1: Operational impact of demand planning

Buy	Stock	Sell
Demand planning empowers buyers to become more strategic	Increased forecast accuracy means smarter inventory investments	Increased customer service
Visibility builds stronger relationship with suppliers	More efficient inventory management	Better fill rates increase revenue and block competitors
More complete picture means better negotiations	Better inventory placement means less repositioning	Value added services, such as VMI, strengthen customer relationships
Lower cost of goods sold	Lower inventory carrying and logistics costs	Opportunity to increase price and margin

Buy: Better visibility, more proficient procurement

Every distributor depends on the professional buying skills of their procurement team. Demand planning provides increased visibility and a longer horizon, so the negotiating skills of these buyers can reach new levels based on a more complete picture of supply chain cost and service. Having a long-term view of demand empowers buyers to move beyond re-order point purchasing to more strategic procurement.

Demand planning provides a foundation for more proficient procurement that helps distributors:

- Eliminate the guesswork when making purchasing decisions.
- Transform buyers into planners.
- Provide more time for negotiations.
- Build stronger relationship with suppliers.

By leveraging demand planning, distributors can collaborate with suppliers via the Internet and provide longer planning horizons. In turn, these supplier-manufacturers can use these longer planning horizons to improve their reliability and delivery performance. More strategic procurement and better negotiating all add up to a lower cost of goods sold and higher profits for distributors.

“Strategic buying and demand management techniques can provide cost improvement to buyers at all volumes.”²

Stock: Lower operating costs with more efficient inventory management

Distributors can leverage demand planning to boost forecast accuracy. That increased accuracy translates directly to smarter inventory investments. With demand planning, distributors have the ability to drive out the excess inventory that does not add value, without sacrificing customer service.

More efficient inventory management helps distributors:

- Maintain a more consistent and accurate inventory balance.
- Place inventory in the right markets, resulting in less repositioning.
- Decrease costly obsolete inventories.

It's a real challenge to identify the excess inventory and remove it. But with improved forecast accuracy, distributors have a better chance of carrying the right inventory in the right place at the right time. Ultimately, increasing inventory efficiency lowers inventory carrying and logistics costs, which delivers greater profits.

Sell: Using higher service levels to become a preferred vendor

By having the right inventory in the right place at the right time, distributors can increase customer service and build a stronger relationships with customers, ultimately becoming that customer's preferred vendor.

Better customer service helps distributors:

- Increase fill rates and boost revenue.
- Prevent competitors from gaining access to customers.
- Improve their reputation in the market.

With demand planning, distributors can offer advanced value-add services, such as vendor managed inventory (VMI), for premium prices. More consistent fill rates and premium services work together to increase margins and boost the bottom line.

“Another aspect of demand management is demand shaping—a distributor can work with buyers to optimize their ordering by day of the week and time of day to lower overall supply chain costs.”³

² Karen Prema, “Buyers leverage demand planning from distributors,” *Purchasing*, April 20, 2006.

³ Karen Prema, “Buyers leverage demand planning from distributors,” *Purchasing*, April 20, 2006.

How distributors improve profitability with Infor Demand Planning

Still not sure if demand planning can unlock new profit potential for your distribution business? Consider the following examples of the impact Infor Demand Planning has had with a variety of distributors:

- A leading aftermarket auto parts distributor experienced a 27% inventory reduction while improving customer service.
- A building materials supplier saw on-time vendor deliveries increase from 50% to 70%.
- A healthcare distributor's fill rates improved from 94% to 98.5%.
- A large plumbing supplier reduced inventory from 30 days to 20 days within the first year of implementation.
- A craft supplier used Infor Demand Planning to meet Wal-Mart's contractual fill rates.

Wholesale building materials distributor

One of the largest wholesale distributors of building materials in the US has seen dramatic productivity improvements using Infor Demand Planning. This distributor provides more than 10,000 products from 40 distribution centers to lumber yards, building supply dealers, home center chains, and industrial manufacturers.

The building materials distributor needed better control of what products to stock or not in each depot, especially for slow moving products. With Demand Planning, they have fully integrated forecasts that can be aggregated to any level in the product hierarchy. Now they can optimize safety stock levels through more centralized control of inventory and tighter collaboration with customers and suppliers.

Heating and plumbing products distributor

The world's largest distributor of heating and plumbing products has realized the value of leveraging demand planning. This distributor provides construction products, materials, and services through more than 5,000 branches located in 28 countries across Europe and North America.

This distributor was challenged with erratic ordering, erratic product availability, and poor supplier performance. With Infor Demand Planning, they have increased fill rates and on time deliveries, improved inventory turns, and reduced working capital.

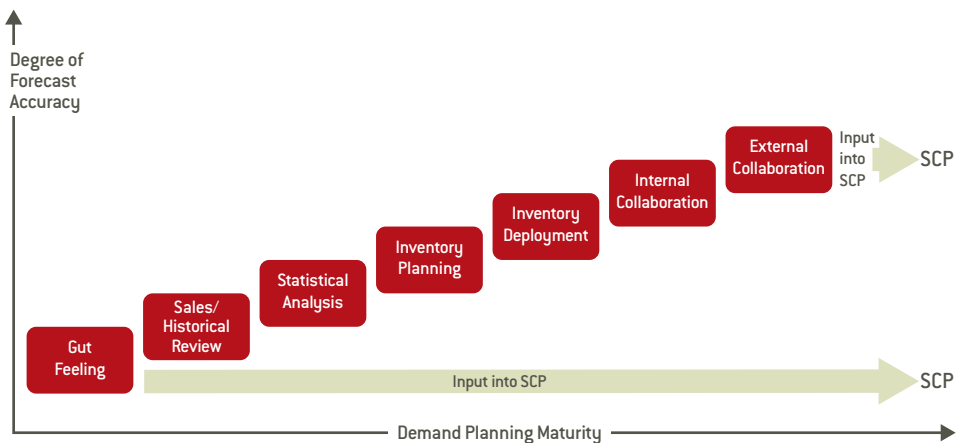
The Demand Planning Maturity Model: Where are you today?

Each of the distributors profiled above had to assess their current forecasting process as well as its limitations, and then chart a course for how to improve their capabilities in forecasting and inventory management. The Infor Demand Planning Maturity Model was designed to aid distributors with that assessment.

Are you up to the test? Review the descriptions of each stage and determine where your organization fits on this model.

Distributors can leverage demand planning across a wide spectrum of capabilities—with the ultimate goal of collaborative demand planning. As shown in Figure 2, each stage represents a greater degree of accuracy in forecast and inventory plans, and corresponding improvements in supply chain performance.

Figure 2: Demand Planning Maturity Model



Stage 1: Gut Feeling

At the low end of the Demand Planning Maturity Model is the notion of forecasting based on “gut feel,” with no formal analysis of historical sales data. This forecast is usually a combination of the aggregated sales forecasts, and the forecaster’s opinion as to whether or not this forecast is credible. Because of inadequate tools and performance review processes, often forecasters at this level are working at an aggregate product level, or worse, a forecast expressed in revenue. But purchasing requires forecasts at SKU levels, and in a multi-site operation, warehouse assignments are important, so deliveries can be orchestrated.

Stage 2: Sales/Historical Review

Traditional forecasting methods have typically stemmed from the analysis of historical data and figures such as sales orders and inventory stock-outs. By tracking and analyzing historical data, forecasters try to predict future demand for a particular customer or aggregate of customers over a given time period. Typically performed through spreadsheet analysis, this model has served distributors well over the years, given the flexibility and the user-friendliness of spreadsheets. Often, the primary purpose of this type of planning is not for operations management, but rather financial management. Enterprise systems have also typically been used for this type of forecasting, and helped move forecasters from a gut feeling to a reasonable, substantiated, albeit difficult-to-manage, forecast.

Stage 3: Statistical Analysis

The next stage of demand planning is statistical analysis, which uses basic statistical formulas to project demand. Many people perform some level of statistical analysis with rudimentary time series methodologies, such as moving averages and focus forecasting. At this level of the Maturity Model, forecasters are essentially using tools to systematically arrive at a demand forecast that they can utilize as a starting point to which they can apply external factors not known to the system.

Stage 4: Inventory Planning

The next stage moves to the heart of a distributor's business: Inventory and replenishment planning. At this level, distributors are importing their sales history from their ERP systems, and are beginning to feed the generated forecasts into their planning systems. Leveraging forecasts to drive inventory plans means distributors can achieve a pre-set service level for each inventory classification using the forecast error to determine safety stock. By integrating an ERP system, such as Infor ERP A+ or Infor ERP SX.enterprise, with Demand Planning, distributors can increase operational efficiencies, enhance employee effectiveness, improve customer service, and maximize their IT investment.

Stage 5: Inventory Deployment

After integrating the forecasts into existing systems and improving inventory planning, distributors can begin to more efficiently deploy inventory across their distribution network. By placing the right inventory in the right location, distributors avoid costly repositioning and obsolescence. Better yet, more effective inventory deployments mean a distributor is ready to capitalize on sales opportunities as they arise.

Stage 6: Internal Collaboration

Even the most advanced of the earlier demand planning techniques are backward-looking, using historic information to project future demand. With internal collaboration begins forward-looking forecasting. This includes collaboration between sales, marketing, procurement, and inventory management to get the most complete view of the demand and supply conditions affecting the business. From accounting to sales to the warehouse, and everywhere in between, with collaborative demand planning distributors can start to harness the employee knowledge not found in any system, to optimize inventory levels, increase productivity, and improve profitability.

Stage 7: External Collaboration

At the final stage of collaboration, companies start to harness knowledge from outside their organizations and forecasting transforms into a supply chain-wide collaborative effort. At this point, customers and suppliers are working together in real-time, using statistical analysis, functional extensions, and often advanced Internet technologies to formulate the most accurate forecasts possible.

By working, or collaborating, with your trading partners, you create a way to share information that eliminates the guesswork and prediction around a customer's needs.

But what exactly is collaboration? Examples could include:

- Scheduling of periodic teleconferences with major customers to get rough ideas on their future demand.
- Monthly communication using a browser-based front end to the Demand Planning application to examine the system-produced forecasts, and to easily modify those forecasts to accommodate customer or supplier knowledge.
- Frequent contact through e-mail updates or "event triggered" automatic alerts that can be generated from within Demand Planning to notify all parties of unusually high or low demand spikes.
- EDI transmissions with advanced ship notices and new orders placed.
- Automatically sharing future product demand with vendors for improved efficiencies.

Obviously, the goal of collaboration is to provide economically viable technical solutions to support simplified, automated, closed loop demand planning processes that allow users to spend less time creating the information and more time using it. Web-based tools let you take previously used forms of collaboration to a higher level.

Conclusion

Although today's complex global supply chains create many new challenges for distributors, those challenges also create new opportunities. To leverage these opportunities, distributors must become more proficient at understanding, forecasting, and shaping product demand.

With demand planning, unlocking new profit potential is easier than ever for distributors. From the procurement perspective, a long term view of demand empowers buyers to move beyond re-order point purchasing to more strategic procurement, building stronger relationships with suppliers and lowering the cost of goods sold. For operations, increased forecast accuracy means smarter inventory investments and more efficient inventory management. From a sales viewpoint, more consistent fill rates and premium services can both increase margins and boost the bottom line.

Demand planning delivers tangible results that translate to a better return on assets for distributors. As the distributor examples illustrated, the specific outcomes include:

- More strategic procurement
- Tighter customer and supplier relationships
- Lower cost of goods sold
- Smarter inventory investments
- Increased inventory efficiency
- Reduced logistics costs
- Better customer service

Now that you've identified your goal on the Demand Planning Maturity Model, Infor can help you get there. Infor SCM Demand Planning presents powerful forecasting techniques in a graphical environment that allows distributors to automatically detect seasonality, trends, slow-moving items, unusual outliers, and step-changes in demand. Its statistical engine is "self-learning," requiring minimal intervention to develop accurate demand plans. This flexible, scalable solution enables forecasting at any combination of product group, customer, or channel, and can operate at a single site or multiple locations.

To learn how to start generating more profit with demand planning, visit Infor at www.infor.com

About Infor

Infor delivers business-specific software to enterprising organizations. With experience built in, Infor's solutions enable businesses of all sizes to be more enterprising and adapt to the rapid changes of a global marketplace. With more than 70,000 customers, Infor is changing what businesses expect from an enterprise software provider. For additional information, visit www.infor.com.

Disclaimer

This document reflects the direction Infor may take with regard to the specific product(s) described in this document, all of which is subject to change by Infor in its sole discretion, with or without notice to you. This document is not a commitment to you in any way and you should not rely on this document or any of its content in making any decision. Infor is not committing to develop or deliver any specified enhancement, upgrade, product or functionality, even if such is described in this document.

Infor Corporate Headquarters

13560 Morris Road
Suite 4100
Alpharetta, Georgia 30004
USA
Phone: +1(800) 260 2640



Copyright © 2007 Infor. All rights reserved. The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All rights reserved. All other trademarks listed herein are the property of their respective owners. www.infor.com.