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What Is Demand Management: Functions, Process and **Examples**



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Companies that adapt their business models for today's demand-driven supply chains have a global competitive advantage. Learn how data analytics supports the demand forecasting and planning accuracy needed to grow revenue and profits in volatile times.

Inside this article:

- Learn the demand management process steps
- Activities and techniques that take demand management to the next level
- Demand management examples from multiple industries
- Best practices to make demand management less complex

What Is Demand Management?

Demand management is a planning methodology. Companies use it to forecast and plan how to meet demand for services and products. Demand management improves connections between operations and marketing. The result is tighter coordination of strategy, capacity and customer needs.

In 2014, the Global Journal of Management and Business published research that concluded that demand management "provides an important bridge between the marketplace and a company's internal operations." The study also clarified the concept of demand management as "the creation of interactions between operations and marketing with the goal of understanding the market and developing actions in sync with company strategy, production capacity and end-customer needs.'

Those conclusions remain valid today. Modern demand management identifies and captures all potential demands, interprets them and communicates them to relevant departments within the organization. An example of external demand is an assessment based on customer inquiries or booked orders, while an internal demand assessment may calculate the raw materials needed to produce a new product and the promotional activities required to support the launch of that same product.

What is demand management in logistics?

Demand management informs the work of logistics in the supply chain. Logistics is the part of the supply chain process that plans and controls the flow of objects between origin and consumption.

Role of demand management in the organization



Demand management is a process that supports supply chain management (SCM). Supply chain management applies to managing all of an organization's sourcing, developing, manufacturing and delivery activities, including moving materials, services and goods from suppliers. The <u>supply chain</u> is a complex, interconnected system that enables companies to build products and bring them to market. A company may be a critical link in other businesses' supply chains.

Key Takeaways:

- Demand is now driving supply. Demand management helps smooth out the volatility created by higher consumer expectations and shorter fulfillment cycles.
- Successfully anticipating and planning demand is a competitive advantage. The process eliminates waste and increases value in every area of the supply chain.
- Data and analytic capabilities supporting customer-centric demand management are what it takes to win in a fastpaced and intensely competitive global marketplace.

What Is the Purpose of Demand Management?

Demand management formulates an action plan to meet current and anticipated conditions in target markets. The process provides data and insights to marketing, demand planning. production and sales forecasting teams to help them achieve company goals.

Objectives of Demand Management

Juccessful demand management teams today are customer-centric — it's all about the ability to predict and fulfill demand vith the right products and services. Specific areas of focus include improved customer service, more accurate forecasting and lower costs.

Specific objectives of customer-centric demand management include:

- Improved customer service: Understanding client needs and behaviors increases customer satisfaction and improves service.
- **Forecasting with greater accuracy:** Predictive analytics efforts optimize decisions by business leaders and improve supply chain management.
- Reduced costs: Improved forecasting optimizes inventory investments and can minimize safety stock levels.
- Enhance existing products and excel at new product introductions: Create a line of customer-appropriate new products and refine them based on feedback.
- More efficient planning: Strike the right balance of demand to supply and minimize surpluses with reliable data.

Goals of Demand Management

The end goals of demand management are to boost sales growth and deliver strong profit margins. Business leaders use the process as a central decision support tool, contributing to strategic initiatives and tactical execution.

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Demand Management vs. Demand Planning

Demand management, like demand planning, aims to keep supplies and demand in balance. The difference is that demand management looks at consumer demand in the short term, while demand planning covers more extended timeframes.

Demand management is like demand planning in that both help companies avoid producing more goods than they can sell at the price they want to charge. Demand planning analyzes consumer trend, historical sales and seasonality data to enhance a company's ability to meet customer demand in the most efficient way possible over the long term — up to 24 months for most businesses. <u>Demand planning is crucial</u> because it minimizes excess stock and the associated negative effect on cash flow while improving profits and flexibility as a business adapts to customer demand.

Demand Management vs. Capacity Management

Demand management identifies potential demand variations. Capacity management is a response to demand. Capacity management aims to ensure resources are available, so business activities and production can thrive under any circumstances.

In general, demand fluctuates while near-term capacity remains constant. Demand management activities generate the information capacity management teams need to manage the company's resources — including technology and equipment, manufacturing, labor and office and warehouse space — to best meet upcoming needs.

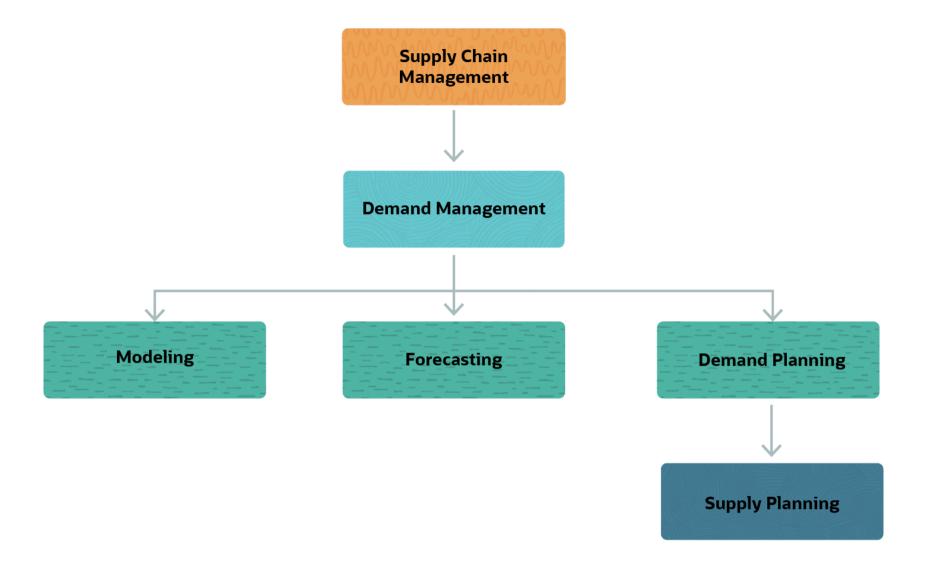
subpar capacity management may create contracted revenues because of customer attrition, unfulfilled orders and lecreased market share — things every business wants to avoid.

Demand Management Components and Process

The demand management process is intrinsic to <u>supply chain</u> management in that it balances supply with demand. The first three steps of modeling, forecasting and demand planning inform the fourth, supply planning.



THE DEMAND MANAGEMENT FIVESS AND COMPONENTS



Components of demand management

Each demand management process features components to identify and focus on customer needs. Based on the data lerived from each element, managers arrive at the best plan to improve overall business performance and optimize the upply chain from end-to-end.

Demand management process: Modeling

This component requires the business's demand planning team to acquire from other groups data linked to sales and demand drivers such as innovation, social media strategy and market trends.

They can then enter these data sets into demand management and planning software or manually analyze them for various exercises including:

- **Model review:** Checks to validate the current demand model.
- **Reality assessment, test and simplification:** Checks to validate demand indicators for validity based on logic and statistics.
- Mathematical modeling: Uses equations based on historical data to check demand impact.
- Data collection and preparation: Data is used to devise a demand planning strategy.

Demand management process: Forecasting

Demand forecasting uses predictive analytics to forecast future demand for services or products. Demand forecasting supports reliable supply decisions based on estimated future sales and revenue. Areas of focus include:

- **Objective setting:** Make sure your objective satisfies your product marketing, financial planning, operations and logistics teams and be specific.
- Collection and data recording: Integrate data from sales channels for a cohesive picture of actual product demand and insight into sales forecasts. Check orders, dates and sales channels to forecast growth and trend projections and see actual SKUs ordered. Evaluate products that have high return rates and make improvements based on the reasons for those returns.
- **Measurement and data analysis:** Whether you use automation and predictive analytics or complete the task manually, opt for a repeatable data analysis process to set yourself up for success with subsequent forecasts. As data



Budgeting: Based on a feedback loop, update the budget to allocate funds based on growth goals. Demand
forecasting reduces inventory carrying costs and improves the accuracy of marketing spend, future headcount,
inventory and production need and new product plans.

Demand management process: Demand planning

The demand planning process forecasts product or service demand to ensure you can satisfy customers. Demand planning aims to strike a balance — sufficient inventory levels to meet orders without a surplus.

Consider these best practices:

- **Use past sales data:** This information highlights past demand patterns, so a company can better understand its fluctuations from a historical perspective, which improves future forecasting.
- **Confer with customers:** Because historical data alone can't predict future trends, it's crucial to collaborate with manufacturers, distributors and customers to form a complete picture of upcoming demand. That information factors into the planning process.
- **Manage and combine forecasts:** You must ensure forecasts reflect the most current data to inform decision—making. By implementing a system for updating and managing these forecasts, you make it easier to gauge progress and combine separate insights into a consensus-type forecast.
- **Reexamine the data:** Meet with key personnel to reanalyze your numbers. This step helps ensure that teams have the ability to reconcile demand with accessible supply.

Demand management process: Supply planning

Supply planning is the part of the demand management process handled by supply or inventory management. The goal is to identify and address the most critical problems, plan across multitier locations and simulate potential responses to ptimize inventory and customer service costs. Then, you can write and execute a plan based on the best data available, *i*th customer needs in mind, based on all inputs.

Ine tip from experts is to stay flexible. A vital element of demand management is continuously finding ways to mprove operational flexibility and reduce demand variability. When you have technology that supports planning you can eact efficiently and quickly — then, disruptions don't cause chaos, and it's easy to pivot to a better position.

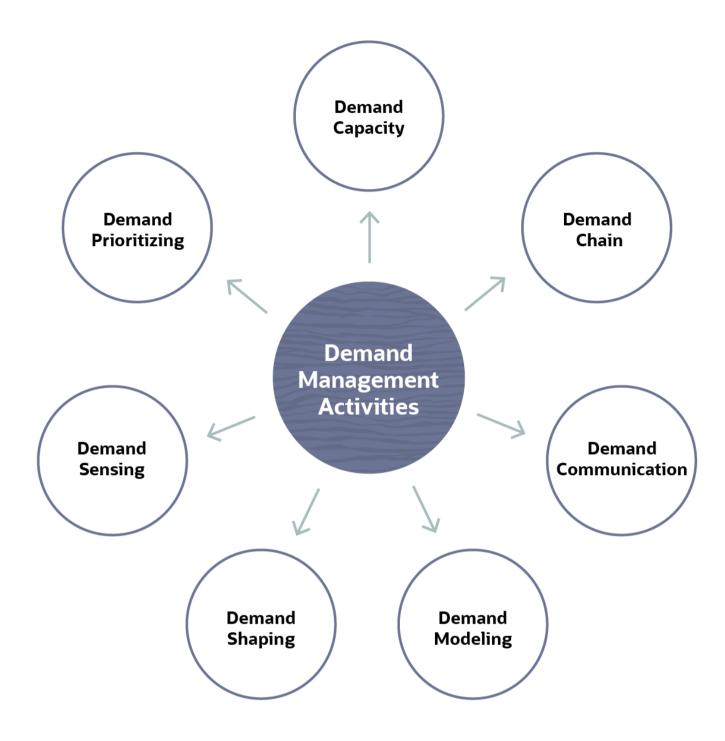
A 2002 study in the International Journal of Logistics Management <u>on the demand management process</u> describes synergies with business functions and departments and each component in detail. The research also stresses the need for collaboration in forecasting so that management remains in control and company goals and objectives are achieved.

Activities in Demand Management

Demand management activities help teams dive deeper and develop plans to support a more efficient supply chain. Activities include demand capacity, chain, communication, modeling, shaping, sensing and prioritizing.



Demand Management Activities



- **Demand capacity:** Demand management helps you coordinate capacity demands, such as production time, inventory and resources. Capacity planning is critical because it directly impacts cost centers. Operating expenses are impacted when demand and capacity are out of sync, so coordination is essential to achieve alignment.
- **Demand chain:** The demand chain relates to the customer demanding products or services as and when required, referred to as pull. In the internet economy, the demand chain-based e-fulfillment model condenses time, is pull-oriented from the customer and is based on real-time event monitoring, inventory and information for forecasting and planning in other words, the end consumer is king.
- **Demand communication:** In the collaborative demand management model, you communicate forecast demand to all stakeholders, business areas and teams affected by the forecast. Everyone then works in a spirit of transparency to a common goal.
- **Demand modeling:** Demand modeling works from the bottom up. This activity breaks demand components into external and internal factors and the demand stream, and it examines how each factor influences purchases to ascertain future demand.
- **Demand shaping:** Demand shaping is an operational supply chain management strategy where a company uses price drops, incentives and other tactics to induce customers to purchase specific items. Demand shaping helps the business match demand for a specific product to the planned supply.
- **Demand sensing:** This predictive tool is a game-changer in high-demand ecommerce scenarios. Demand sensing depends on data sent in near-real-time. New mathematical techniques to sense demand make it possible to quickly understand what is selling, who is buying and how the product or service impacts market demand.

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items.

Activities in demand management require leaders and their departments to take a holistic view, work together and make informed decisions based on data.

Who Uses Demand Management?

Virtually all departments and divisions within companies use demand management directly or indirectly. Demand management determines upcoming needs, so every area of the business can work efficiently, without overtaxing systems.

Demand management users include marketing and sales, finance, research and development, production, quality control and logistics. The demand management data that flows from those departments impacts order fulfillment, customer service, customer relationship management, manufacturing flow management, <u>procurement</u> and product development and commercialization.

How Do You Manage Demand Management?

The demand management process functions best as a team effort, with the goal of better understanding supply issues. In larger firms, a demand manager oversees the process. Participants should include new product development, sales and marketing and production schedulers.

The most effective way to handle demand management is to deploy integrated, analytics-driven processes. Successful ompanies leverage predictive analytics, market intelligence and best-in-class technologies to achieve revenue growth goals and objectives.

Demand management extends beyond forecasting and incorporates the demand sensing and demand shaping echniques discussed earlier in this article. Demand managers can continuously shape demand based on <u>analysis of key performance indicators (KPIs) and metrics</u>.

Data sharing enables high <u>supply chain visibility (SCV)</u>, another crucial demand management approach. Supply chain visibility alerts schedulers and planners when order fulfillment issues or low inventory levels threaten the ability to demand.

6 Demand Management Examples in Various Industries

Equilibrium in supply and demand is essential in every business. Demand management examples occur in both product and service companies. Industries that use demand management range from cosmetics to public utilities to theme parks.

Here are six example demand management use cases:

- **Demand management in cosmetics:** In 2021 the worldwide beauty and personal care market reached \$483 billion, according to Statista. As good as that number looks, consumers are fickle, and what is hot today will likely not be in a few months. Cosmetics firms drive consumer behavior by, for example, seeding trends with celebrity product endorsements. Once cosmetic companies generate demand, they must ensure those products are available for purchase. Managing the supply chain plays a central role in helping trend-driven companies create a competitive advantage by sensing demand and responding fast.
- **Demand management in automotive manufacturing:** Like cosmetics firms, automotive businesses face challenges in predicting and responding to evolving customer demand. Leading automotive companies expend a lot of resources improving supply chain visibility and ensuring that suppliers have the financial and organizational capacity to meet demand changes. Several manufacturers are moving to a model that involves closer financial and operational collaboration and dropping standard contracts. Manufacturers using demand management trust the financial health of their suppliers and their response to demand variations.



significantly reduces decision-making risk. Managing overall demand dynamically deepens existing customer relationships and helps teams predict revenue and strategically use various distribution channels to reach target customer segments.

- Demand management in theme parks: The Walt Disney Company is a leader in effective demand management and on-point customer service. Disney has carefully studied how long patrons will wait in a line before they require a distraction. The studies pinpointed when to engage guests with mirrors, Disney characters, videos or other methods. They also set the waiting queues in a serpentine pattern so guests cannot see the line length and feel that they are constantly progressing forward.
- **Demand management in public utilities:** Utilities employ demand-side management programs to comply with government regulations and help customers save money. Energy efficiency programs the prime demand-side management effort offer customers incentives to increase efficiency and decrease the overall demand for electricity in programs around the United States and abroad. Demand response programs lower customer demand during times of emergency, such as fires or very high system load during heat waves or sudden freezing weather conditions. The goals of these programs are to reduce pollution from electric generators, avoid new generator and transmission line builds and lower customer utility bills.
- **Demand management in air quality products:** MAXAIR Systems provides ventilators and other solutions to meet personal respiratory and contact safety concerns. When the COVID-19 pandemic caused the company's sales of airpurifying respirators to increase sixfold, it needed a way to manage its supply chain effectively so it could produce enough units to meet demand. Company management took the pandemic as a challenge to improve processes and help save lives. It quickly adopted demand management techniques and was able to keep up with orders while planning to meet future demand and supply chain challenges.

Demand Management Strategy

uperior demand management requires high-quality data that teams then analyze continuously — often daily, depending in the environment and type of business. The process includes updating forecasts based on that data to inform strategies.

In 2015, the Transportation Journal synthesized more than 100 demand management studies and found that "consensus in competitive orientation, operational strategies and the environment led to superior performance."

Today's demand management strategies still focus on cost reduction, revenue enhancement and streamlined operations.

Example of a demand management strategy

The pandemic underscored the effects of global events on product demand and supply chains. Even though COVID-19 was not something most companies planned for, those that already used demand management strategies to handle disruptions, particularly in retail, fared better than those with no strategy in place.

The Foley and Lardner LLP 2020 Global Supply Chain Disruption and Future Strategies Report, a survey of 150 C-suite manufacturing executives in various industries, found that companies have learned the lesson that disruptions are a present and future threat, and strategies are needed to fend them off.

Demand management strategies that have gained prominence post-pandemic include:

- **More robust contingency plans:** What-if exercises prepare companies for emergency situations and test the effects of changes, without production schedule disruption. Theoretical exercises preview potential impacts on issues such as inventory levels, whether KPIs are affected and how adaptable the team is to changing conditions.
- **Forecasting flexibility:** Manufacturers should strive to accurately predict customer demand in any circumstance. One strategy is to look at previous demand and forecasts to determine forecasting accuracy and note whether the strategy needs to change regardless of current variable conditions. One of the best ways to improve flexibility is to use multiple forecasting methods based on different situations in the market, selling profiles and lifecycle phases.
- **Focus on resilient and flexible processes:** Some companies are moving away from single supply sources to multi-sourcing to mitigate possible interruptions in supply chains. Analyzing the risk attached to each supplier, sub-supplier and step can ensure smoother delivery in any circumstance.



Demand Management Best Practices

Demand management success begins with promoting a demand management culture. Other best practices include the use of reasonable time frames, good forecasting and respect for process owners.

Demand management best practices include:

- **Fostering a demand management culture:** When senior leaders embrace a demand management culture, the entire organization's activities are synchronized toward product availability. The culture is now one with a single charge: Achieve greater efficiencies in the supply chain.
- **Agreement and action on objectives:** Most companies have strategic goals. Demand management programs based on an overarching strategy reduce inventory and increase service levels.
- **Defining reasonable time horizons:** Options for meeting surplus demand vary depending on the timeframe of the predicted demand. Define these horizons in advance, so all stakeholders agree on appropriate actions in each situation. Short-range forecasts, around three months, tend to be more accurate than long-range forecasts because data is fresher. Medium- and long-range forecasts support management decisions regarding development and design and new processes, plants and products.
- Maintaining a sound methodology: Imagine the consequences of making decisions based on a forecast demand shift, only to modify the predictions based on sweeping changes to the prediction model. It doesn't work. Effective demand management relies on a dependably applied, company-standard methodology.
- **Utilizing reliable statistical forecasting:** Reliable planning consistently incorporates some form of statistical modeling. The prediction model should be proven valid, well-understood and repeatable, and it needs to evolve with the business.
- **Respecting process owners:** It is essential that process owners perform their appointed duties without meddling from company leadership. Even if their recommendations go against the grain of previous strategies or tactics or are inconvenient, organizations should abide by process owners' input.

Advantages of Demand Management

A series of interconnected improvements result from consistently practicing demand management principles. Advantages include improved forecasting, a more confident sales force and better labor management.

Additional demand management advantages include:

- **Improved forecast accuracy:** The use of demand-sensing, point-of-sale (POS) data and big data and data analytics hones near-term forecast precision.
- **Improved product forecasting:** Well-executed demand management assists supply chain managers with more accurate production forecasting based on reliable data.
- More accurate supply chain scheduling and operations: More precise analysis and forecasting mean companies can optimize production, shipping and warehouse operations.
- Sales force confidence: Solid demand management gives sales team members confidence in the company's ability to deliver on products and services.
- **Organizational agility:** The ability to respond and adapt to change in the environment and within the company helps you better manage when pivoting in challenging times.
- **Better labor management:** Successfully predicting peaks in demand allows businesses to plan staffing levels more accurately.
- **Enhanced competitive advantage:** By successfully anticipating and planning demand and integrating business processes, companies gain an advantage by eliminating waste and increasing value in every area of the supply chain.



Demand management delivers higher revenue, more control over product availability and the ability to respond to change without undue disruption.

Other benefits of demand management include:

- **Easier product and service delivery:** Builds confidence in the sales force about the company's ability to deliver products and services; smoother product introductions.
- A solid foundation: Helps to create a foundation for merchandising, budgeting and logistics processes.
- **Easy monitoring:** It's simple to review supplier transactions and see growth or decline, respectively; plus, it provides the ability to monitor all related expenditures.
- Stronger relationships: Reasonable pricing and targeted offers ensure that customer connections are built to last.
- **Supply chain support:** Demand management processes boost operations with robust modeling, forecasting and demand and supply planning.

Disadvantages of Demand Management

Most demand management disadvantages arise when companies lack systems to easily handle the process and/or suffer from poor or insufficient data, risk-averse or rigid management and siloed teams. Businesses need to remove a number of barriers or risk derailing the effort.

Barriers to demand management include:

- A lack of proper expertise: Demand management is not easy to master. It involves many different components and requires people with the right skill sets. Success may require hiring managers with applicable experience and training as well as new technology to help simplify the process.
- Risk-averse or rigid management: Demand management as a methodology sounds like a business superpower, and it can deliver big advantages. But it requires top-down buy-in, with executives dedicated to universal adoption and committed to creating scalable, agile processes supported by the right resources.
- **Siloed teams:** The company loses time and potential opportunities when it places great emphasis on demand forecasts and less on collaborative effort. For example, goal and expectation misalignment between demand-generation departments, such as marketing and sales, and supply chain departments, such as sourcing, logistics and operations, can result in duplication of efforts and losing sight of strategic objectives.
- Poor or inadequate demand data: Gathering accurate, up-to-date, trustworthy and relevant data can be difficult. Many organizations rely solely on historical data to predict demand, which is "old school" and problematic because market conditions shift continually. Taking advantage of technology that serves up the most current information removes the challenge of showing quantifiable demand changes.

Challenges of Demand Management

Challenges in demand management often involve consumer pull. Consumers want more, faster — many expect instant responses and same-day delivery. Business leaders must adapt to cope with more frequent peaks and valleys in consumer demand.

Other challenges of converting to next-generation demand management include:

- **Distanced customers:** You must maintain the balancing act for sales and work with retailers on demand modeling to pick the right timing, level and location for promotions. Co-planning with customers particularly those who make up the bulk of your business helps mitigate demand volatility.
- Lack of POS data: POS data is the closest many companies come to accurate, real-time demand information, so it makes sense to receive, store and use this data in customer co-planning efforts. It can provide early warning signals of upcoming shifts in demand and help suppliers and their direct customers keep consumers happy.



• **Fast pace of change:** In an accelerating and complex business environment, companies that want to lead need to improve their forecast accuracy — and be ready to pivot to still manage demand when a forecast is incorrect.

Supply Chain Balance Demands Multiple Techniques for Success in Today's Global Marketplace

The maxim that "change is the only constant" would be more accurate if we added the word "accelerating" to the beginning. To win in today's global marketplace, companies need to focus on a range of techniques to support customercentric demand management.

Unforeseen risks and volatility are likely in the future. The antidote is data. Knowledge gathering — and sharing — are the key to delivering value. Companies need to forge reciprocal relationships with suppliers and customers, and from sales and marketing to logistics, every department needs to work collaboratively. Finance teams must direct spending in support of optimized demand forecasting, and executives need to demonstrate buy-in from the top down.

Most of all, in a time of accelerating change, demand management depends on reliable data. For accurate forecasting and planning, predictive analytics – Al, machine learning, data mining and predictive modeling — support, validate and justify sales and marketing strategies in a dynamic and interconnected world.

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