The Definitive Guide to a New Demand Planning Process



The term supply chain management has been around for several decades, however, the concept behind it existed for over 100 years of commercial history. The evolution of supply chain management has been especially dramatic with the emergence of technology and globalization. Before, the focus of organizational improvement was on specific areas like manufacturing, logistics, or procurement. This approach has gradually developed into more integrated operations and led to the concept of demand planning and forecasting. Today, no company can exist without a proper demand planning process. In this article, we'll guide you through every aspect of demand planning and introduce you to the fundamentals of demand planning and forecasting.





Forecasting: What and Why?

Demand planning and forecasting is a hard task. The words "demand planning" often cause a lot of stress, anxiety, and despair within the team. It's hard to find a business, whose team is excited and optimistic about improving the demand planning process within the organization. However, after decades of technological advancements and progress, there are currently many solutions to demand planning and forecasting issues. The **negative consequences of poor demand planning** include:



All of the problems that arise when a business fails to anticipate demand are <u>very costly</u> to the company and can even be fatal. Stock problems arise in all companies regardless of the size and years operating. Giant corporations like Walmart, Best Buy, Target, Kmart, and Nike lost millions of dollar because of <u>inventory mismanagement</u> and faced the risk to get shut down. The supply chain planning can be very frustrating and the aim of demand planning and forecasting is to improve the supply chain processes.



Fundamentals of Demand Planning and Forecasting

So what is demand forecasting all about? We live in a fast-changing world, where everyday business owners face a new customer demand which must be satisfied. Without a proper plan and forecast, your chances to satisfy your customers' wants are almost non-existent. Demand planning and forecasting are especially hard for fast-growing companies because they operate in volatile conditions. That's why having a proper demand planning system is a must for them. **The fundamentals of demand planning and forecasting are not rocket science**. We'll introduce you to the basic concepts and fundamentals of demand planning and forecasting to give you a solid understanding of what it's all about. Demand planning is the base by which a business owner evaluates how the company will operate in the nearest future. It also helps to determine parameters like inventory, purchase, and replenishment. If you want to perform a health check-up of your company, then <u>demand planning is funda-</u> <u>mental for your business</u>. When you get a solid understanding of how many products will be sold and when they will be sold, this would help you stay competitive and profitable in the marketplace in the long-run.

Sales managers in most companies face the hardest **challenge of maintaining a balanced inventory management process.** Inventory mismanagement means the inability to strike a balance between having the right amount of stock and sales. So when the demand rises, it can result in the out-of-stock problem. Following the same logic, when the demand is lower than anticipated, this results in excess inventory stock. Eventually, in the long-run, this brings to a lower customer satisfaction rate, and thereby, lost customers. If you lose your customers, you lose your business. So demand planning and forecasting are essential for the success of any company.

PRUDUCT

The fundamentals of demand planning and forecasting lie in the idea of making correct estimations of future sales. From the company's perspective, demand forecasting means deciding its share in the total market demand in advance. Such estimations are made based on various factors, such as present and anticipated market conditions like increased competition, and controllable and uncontrollable factors like enhanced product introduction or government policies. Analyzing your company's demand forecasts helps you understand the needs of your key customers, and educate you on the buying characteristics of customers.

There are numerous benefits that demand planning can offer your company, but the most direct consequence of accurate inventory management is that you will avoid conditions of overproduction and underproduction. This is a significant factor which will save your company a lot of money and improve customer loyalty. At <u>Intuendi</u>, our demand forecasting software considers every product category, sub-category, SKU, and style to get the most precise sales trends and future opportunities. Intuendi software also considers all the potential consequences, both positive and negative, that can arise and somehow impact the demand levels. Demand planning and forecasting would help the company to **make more educated decisions** in one of the following areas:

Create and formulate a winning pricing strategy.

Plan and schedule the acquiring and production processes accordingly.

Make accurate provisions for finances.

Create advertisements and plan their implementation in the due time.



Demand Planning Process Step by Step

Step 1 - Specify the Objective

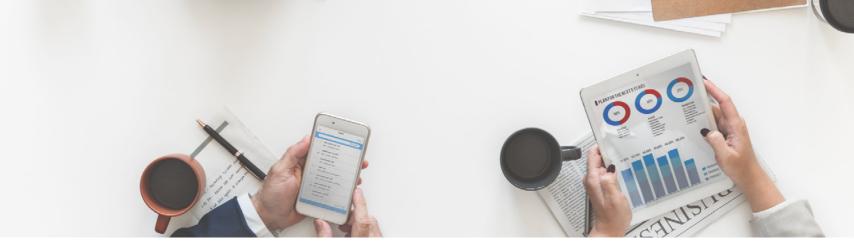
Now that we know how important demand forecasting is, we need to understand how exactly to implement the demand planning process. Let's consider the process step by step.

You need to set a specific objective for which you are conducting a demand forecasting. The objective you define may be expressed in terms of short- or longterm demand, one or several segments of the market, the demand for a specific product the company owns or the whole demand for that product in the market, etc. Setting an objective is the very first step you need to undertake before the demand forecasting process begins. The objective will be your guide and direct the whole process.

Step 2 - Define a Timeframe

Once you have set an objective, based on the objective you need to determine the time perspective. The demand forecast for the objective set can be for a short period or long period. In the case of short-term demand planning, most of the determinant factors of demand may be assumed to be constant. However, it can be harder for long-term periods as the factors involved would be more volatile.





Step 3 - Choose a Demand Forecasting Model

Demand planning and forecasting models fall under two categories:

1 **Survey Method** - this method is carried out by conducting consumer surveys and opinion poll methods.

2 **Statistical Method** - this method includes trend projections and econometric methods.

The method is chosen based on the purpose of forecasting and all the factors related to the demand. When you are conducting <u>a manual demand plan-</u> ning using a statistical method, it's best to stick with granular methods which would clearly demonstrate when and how different target segments in various locations may purchase your product and for what price. This is especially important for products that are radically innovative in emerging categories.

Step 4 - Collect and Import Data

Data is the king of the whole demand planning and forecasting process. If you've been operating in the market for some time, then you must have gathered data on your operations. It's best to have at least data for 24 months of sales in order to make accurate predictions and analysis. However, if you are new in the market then you can use secondary data and consider all the external and internal factors involved. In any case, make sure to use useful and relevant data to create an accurate forecast.

Step 5 - Alignment with the Business Strategy and Ongoing Adjustments

The demand planning and forecasting process must be 100% aligned with the business strategy of the company. Inventory management is an essential internal business process that is connected with all other processes within the business. So when you create a forecast considering multiple data sources (e.g. historical data, customer feedback, etc.), all your tactical decisions about the resources, distribution, shipping, and inventory must be aligned with business decisions. Remember that **demand planning is an ongoing process** that needs continual adjustments. As more data becomes available, your final forecast formula will be moderated to be as accurate as possible.

The lost sales and stockouts problem can be easily improved by maintaining an operative demand planning process. An important part of the process is ensuring a properly implemented S&OP plan, which would make sure that the company uses its resources, such as capital, budgets, and warehouses, in the most optimal way. The S&OP process includes many critical tasks and there is a number of requirements for its sustainable implementation, which we discuss next.





Requirements for Sustainable S&OP Process Implementation

A sales and operation process is the process where the executive level management meets on a regular basis and reviews projections for demand and supply and discusses the resulting financial impacts. The aim of the S&OP process is to create an operating plan which would summarize how company resources (e.g. time, money, employees) would be allocated. Companies that use S&OP get better visibility of the demand and supply throughout the enterprise, enhanced <u>inventory management</u>, improved product lifecycle management process, and more accurate budget forecasting. <u>S&OP is an ever-evolving</u> process that plays a crucial role in all businesses' demand planning and forecasting.

The S&OP implementation process is often poorly structured. This is especially true when the implementation decision is made from the bottom up with no executive sponsorship. The managers who carry out the process in such manner don't follow the complete methodology behind the S&OP process and leave out the pillars that are essential for sustaining the process. If the credibility of the process is damaged, it can result in the death of the company. So the S&OP implementation process is like building a house - it needs a strong foundation to start off. Below are some important and helpful pointers to guide the S&OP process:

S&OP in the hierarchy - in the company hierarchy, S&OP is usually within the supply chain part. The S&OP implementation must always have the support of senior management and key people in each function, in order to have an aligned planning process. The collaboration of Sales, Operations, Finance, and Logistics departments is crucial for successful S&OP implementation because that's how you can get data to support all your decision-making.

S&OP Leader - a person in this position must have a solid understanding and experience in Supply Chain, in order to lead all the activities. This person must also be very disciplined because meeting the schedule is essential for the successful S&OP process. A junior candidate for this position will not work.

S&OP Team - building a strong team that will support the S&OP process is key to starting a successful project and maintaining it.

Roles & Responsibilities - each member of the S&OP Committee must have a very clear role and responsibilities throughout the process. They must be well-trained to handle different situations and contribute to the process properly. Also, all activities must be recorded for future projections. Documentation and Process Auditing - it's important to have proper documentation of the S&OP process. Everything must be formalized through documents of procedures and operational instructions to make sure the decentralization of information. This also ensures that if a team member leaves, the overall process won't fail because everything is well-planned ahead. After a few months of S&OP implementation, you need to perform an audit of the process for monthly cycles. Thereby, you'll make sure that everything that was planned has been implemented in practice. Bigger companies have a department that's devoted to S&OP auditing.



Final Step: Adopt the Right Demand Planning System

Demand planning and forecasting is a hard task that requires a lot of hard work, time and consistency. In today's ever-changing business environment and globalization, implementing a successful demand forecasting and maintaining inventory management is extremely hard if you're not using the right system. At Intuendi, we offer you the best inventory management and demand planning software. There is a wide range of services, such as demand and sales forecasting, inventory and budget optimization, omni-channel demand planning and more, that Intuendi offers. Invest in a feature-rich software like Intuendi to end all your inventory mismanagement issues once and for all. You don't need to hustle and keep stressing out anymore because Intuendi is based on a smart technology which will free you from wasting your time on poor and tedious forecasting tasks. We'll provide you with the best machine learning based solutions for an accurate and effortless demand forecasting and drive your business growth with better estimates of your future sales. Take your business to the next level with Intuendi. Click here to request a free trial now!

ABOUT INTUENDI

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Intuendi was founded in Florence in 2016 by Data Scientists and Software Engineers of the Università degli Studi di Firenze. The main goal of the company is to make it easier for every business to effectively run Supply Chain Management processes and achieve remarkable results by using Artificial Intelligence state-of-the-art technologies.

Intuendi.com is the platform designed for the next generation Inventory Management: its continuously evolving Forecasting and Optimization smart modules provide businesses of every size with tools that have traditionally been offered to enterprise companies only.

We strongly believe that due to the technological progress and the Industry 4.0 era, small and medium businesses will set off for a smarter and more sustainable growth embracing the benefits of advanced analytics. Intuendi makes that possible.

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