White Paper:

A CFO's Guide to Inventory Control

eazystock

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The Importance of Inventory Control

Inventory often accounts for more than 25% of a company's assets, and in many wholesale, distribution and e-commerce companies, inventory levels are continuing to grow.

This increase in inventory is partly due to over-purchasing to secure safe levels of stock in case of unexpected events but also due to constantly expanding product ranges.

Too much inventory means too much capital tied up in stock, elevated risk of not selling out and high warehouse costs. In other words, poor inventory management can easily have direct negative impact on your business.

Adapt or Fall Behind

The Amazons, Walmarts and Ebays of this world are already in full control of their inventory. They are using sophisticated and often very complicated systems managed by entire departments and teams of consultants.

Small- and medium-sized businesses are still able to compete with their special domain expertise in their niche or with very personalized offerings and service, but relying on this edge will be much tougher as giants are broadening their product ranges, adding specialized services and taking on one vertical after another.

The big guys are able to keep margins up, lower their prices and deliver faster while many SMBs are struggling to keep up. When selling online, competition is particularly harsh as your competitors are only a click away, and if you don't have a product in stock, someone else will likely have it.

This whitepaper will tell you the basics of inventory management and optimization so that you can take the control you need as a manager in finance.

To Buy or Not to Buy?

the procurement pain is real

Procurement is a complex topic and purchasing the "right" quantity depends on a range of factors. In short, the challenge lies in finding the best "trade-off" or, more precisely, the best possible cost-benefit ratio.

- On one hand, you want enough stock to always cover the demand. In addition to the immediate lost revenue of the sale, running out of stock can result in lost revenue in the long term by causing your customers turn to your competitors.
- On the other hand, too high stock levels mean that you run the risk of not selling out. Capital tied up in inventory can't be invested elsewhere, and warehouse and insurance costs add up.

It's important to find a balance of high service levels to your customers to low levels of capital tied up in inventory.

The question remains though: how do you know when, what and how much to buy?

Demand Forecasting
the art of seeing the future

Predicting the future is obviously not easy, and there are several different methods for forecasting demand. If the demand for your products is constant over time, you probably don't have much of a challenge.

In reality, however, distributors are stocking items with various demands that fluctuate throughout the year. Here are some factors that make demand forecasting particularly challenging but are still necessary to consider when you're looking to optimize your inventory.

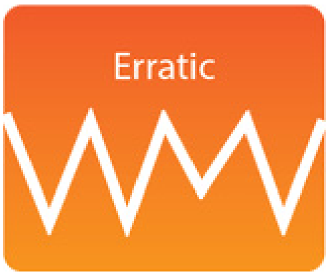
Demand Patterns

Various products have different demand patterns.

The product is selling slowly

The demand fluctuates

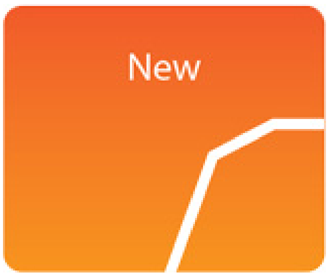
The product has a fast turnover



The demand is unpredictable

The demand is increasing

The demand is decreasing



The product is new on the market

There is currently no demand

The product is not selling anymore

Demand patterns

The demand for products with fast patterns is relatively easy to predict. But how do you know how much an intermittent or lumpy-demand product will sell or a product that's new on the market? How do you pick up when a product is in negative or positive trend? When you have a broad product portfolio, this can become quite complex and many distributors feel forced to keep too high levels of inventory in stock to avoid the risk of running out.

The dynamic of sales history

Demand forecasting is based on historical data to a considerable extent, and many companies are only recalculating their forecasts monthly or even more infrequently. But new sales data is generated every day and if your system isn't constantly updating forecasts, you will miss out on early signs of trend changes and always be a step behind.

Seasonality and campaigns

Most distributors can expect seasonal fluctuations in their demand. Everything from peak holiday sales activity to droughts in sales due to weather changes will in-fluence what products your customers buy. Campaigns are another factor that create volatility, even though they are dictated by the organization rather than an external factor. These factors must be carefully planned for since they can cause pretty significant demand changes which in turn can cause revenue loss at best, customer loss at worst.

Safety stock

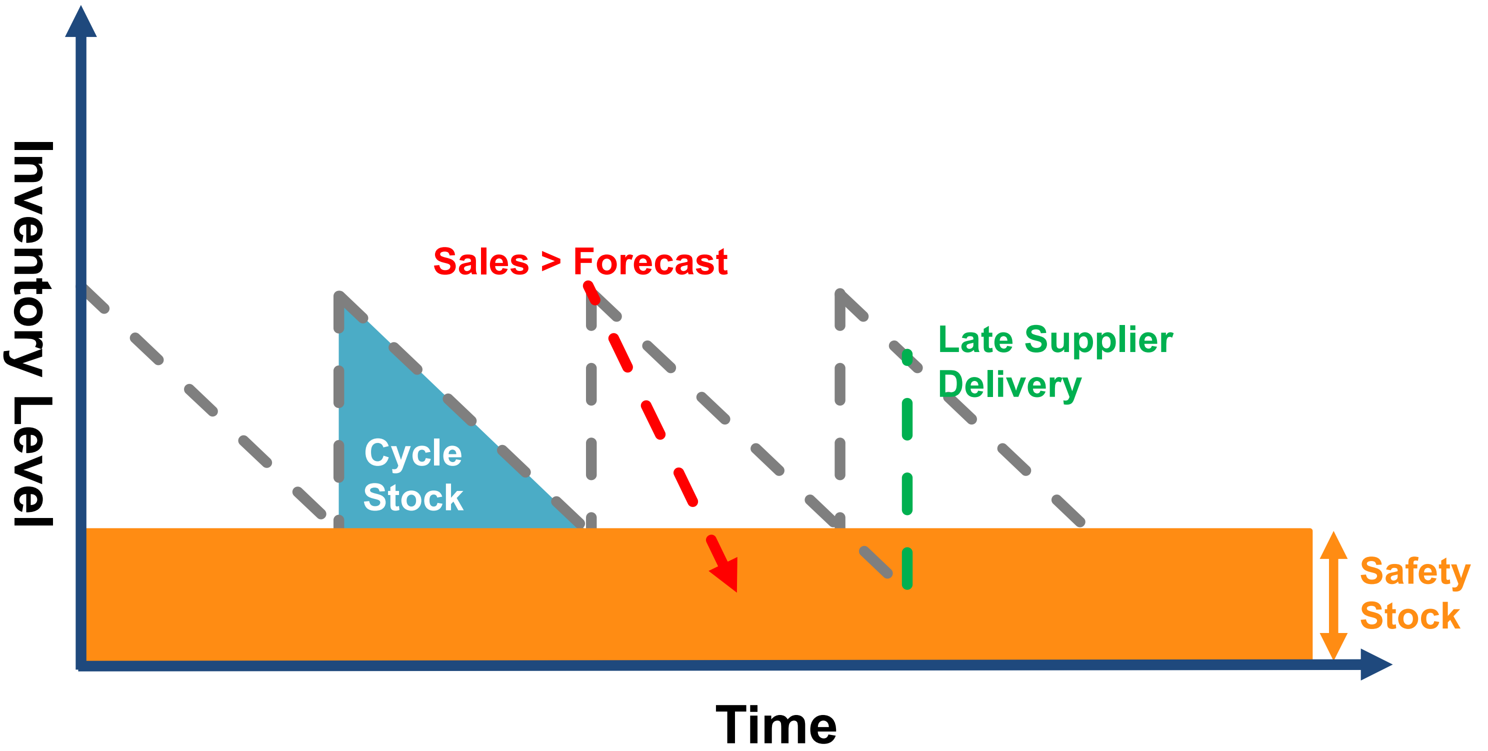
the protection against unforeseen demand variations

Safety stock ensures that your warehouse will keep running smoothly in the event of a variety of disruptions.

Safety stock is a buffer of inventory between the end of your cycle stock and your stock levels reaching zero. Your cycle stock is the inventory that you plan to sell within a certain time period (typically between supplier deliveries) based on demand forecasts.

Safety stock guards against unexpected disruptions such as your sales exceeding your forecast within a certain cycle (marked in red). When this happens, you run through your inventory faster and having safety stock ensures that you can keep delivering to your customers without delay.

Another example is late supplier delivery (marked in green). Perhaps there was a problem with the shipment or there was a natural disaster limiting materials; in any case, supplier disruptions are inevitable and having safety stock ensures that your customers will not have to miss out on their deliveries.



Calculating safety stock

Advanced safety stock calculations are some of the most important mathematical calculations to be able to achieve good KPIs.

Safety stock calculations differ in complexity; some warehouses just guess how much stock they'll need. Some will just carry an additional cycle stock. Some will factor in demand deviation, some will factor in lead time deviation, some will factor in target service level. The more factors there are in the safety stock calculation, the more complex it is to calculate – but the more accurate and optimized your safety stock levels will be.

Safety stock calculations have a direct impact on the amount of safety stock you hold and how much capital your business ties up in safety stock. The more optimized and sophisticated the calculations are, the less money there is tied up in inventory and the higher your customer service levels.

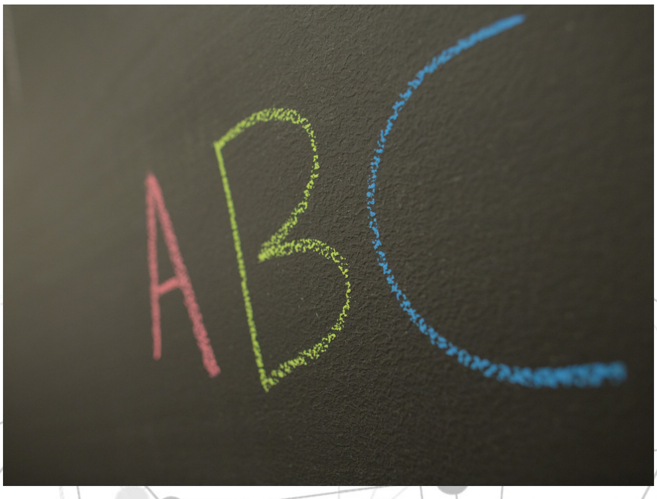
Safety Stock...

- Protects against unforeseen variation in supply and/or demand
- Covers forecast inaccuracies (when the demand is larger than the forecast)
- Prevents delivery disruptions due to problems with manufacturing or deliveries
- Eliminates stock-outs to keep customer service levels and customer satisfaction high

ABC/XYZ Analysis

ABC and XYZ analysis helps you calculate order quantities and allows you to stay on top of the value of your assets.

In short, this analysis is based on the Pareto Principle, also called the 80/20 rule, where the assumption is that the minority of items have a disproportionately high impact on your business revenue. Inventory is divided into ABC classes depending on the value and XYZ depending on the variation of consumption or sales over a specified time.



ABC/XYZ is outstanding when it comes to managing SKUs that aren't equal in value or order frequency. But this analysis is not comprehensive. For example, it can't distinguish between different demand types like slow, fast or intermittent. Another disadvantage is that it requires more resources to maintain than traditional cost systems. Keeping your classification updated requires regularly analyzing the high value inventory class "A" to make sure it still consists of high priority items and deciding whether any items should be moved to "B" or "C". This constant analysis also requires extensive data measurement and collection.

KPIs and their Importence in Stock Control

Key Performance Indicators are crucial for inventory control. Without implementing the right metrics you won't have a realistic view of your inventory.

If you don't measure your performance, you will never know what's actually going on in your business and consequently you won't be able to improve. But in today's data driven environment it's easy to end up with an array of graphs, and the number of KPIs you could potentially track is almost unlimited.

The question you should ask yourself is WHY to track a certain metric and HOW you are going to use the results. If the answer it that "it's nice to have", you might want to shift your focus to the metrics that are actionable and have a real impact on your business. So what are the most important KPIs to track? Here are some metrics to start with.

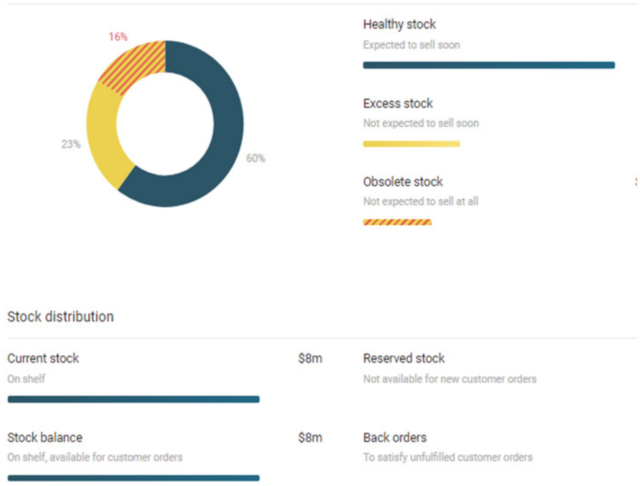
Inventory value

Inventory value is the monetary value of all purchased stock that remains unsold at the end of a given accounting period. This KPI is closely related to another key metric: stock turn.

Stock Turn

Stock turn, also commonly referred to as inventory turnover, is the number of times a distributor's investment in inventory is recouped during an accounting period. Normally a high stock turn number indicates sales efficiency and typically leads to a lower risk of carrying high levels of excess stock.

Both these KPIs, inventory value and stock turn, are directly connected to the ABC/XYZ analysis we saw above. If you only monitor these two metrics, you will instantly know when you have changes in your inventory that you need to address.



Service Level

Service level might be the most important KPI to track. Measuring and accounting for service level ensures that you will be able to deliver on time and thereby lower the risk of losing customers in addition to generating more sales.

Other KPIs

Once you have these metrics under control you might want to add some other KPIs to your dashboards. For example:

- Forecasted sales value
- Order overview
- Lead time
- Product demand

Take Control of your Inventory

As you can see, inventory management requires measuring and accounting for a variety of factors.

Of course, the more you factor into your inventory management, the more complex your inventory management will be – but the more accurate it will be as well. Accurate inventory management is already a challenge for many SMBs but it will only become more crucial as your business grows in the future.

As a CFO, you probably see the value of correct and updated forecasting, service levels, reorder levels, safety stock and order quantities to ensure inventory control and control of capital tied up in stock. Make sure you have the tools and processes you need to take control and keep your company ahead of the competition!

How EazyStock helps you Control your Inventory

EazyStock is built on Syncron's powerful platform with the small team in mind. We make sure the system has the power to manage your company's entire complex inventory optimization while still being fun and easy to use.

Seamless ERP integration

EazyStock integrates seamlessly with any ERP, giving you a clean flow of data between the systems that is needed to get up-to-date calculations.

Various demand types

The demand pattern for any given product is not constant. Usually it goes through a number of different stages throughout its lifecycle, and each stage can have a different type of demand.

EazyStock detects and classifies products automatically and it updates the forecast dynamically over time. This way, the system will recognize changes in the demand type and adjust the calculations.

Dynamic recalculations based on modified order sizes

EazyStock dynamically calculates inventory based on target service levels. This means that the system always calculates the optimal inventory to meet your customers' demand based on fresh data and adjusts it according to trend changes – giving you smarter and more accurate purchasing orders.

Automatic order proposals

EazyStock automatically calculates order proposals and inventory parameters such as safety stock, reorder level and order quantities. This makes your organization exponentially more efficient, modern and precise, and purchasers and planners will get time for more value adding tasks.

Take Control

with automated inventory optimization

Book your inventory analysis at:
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