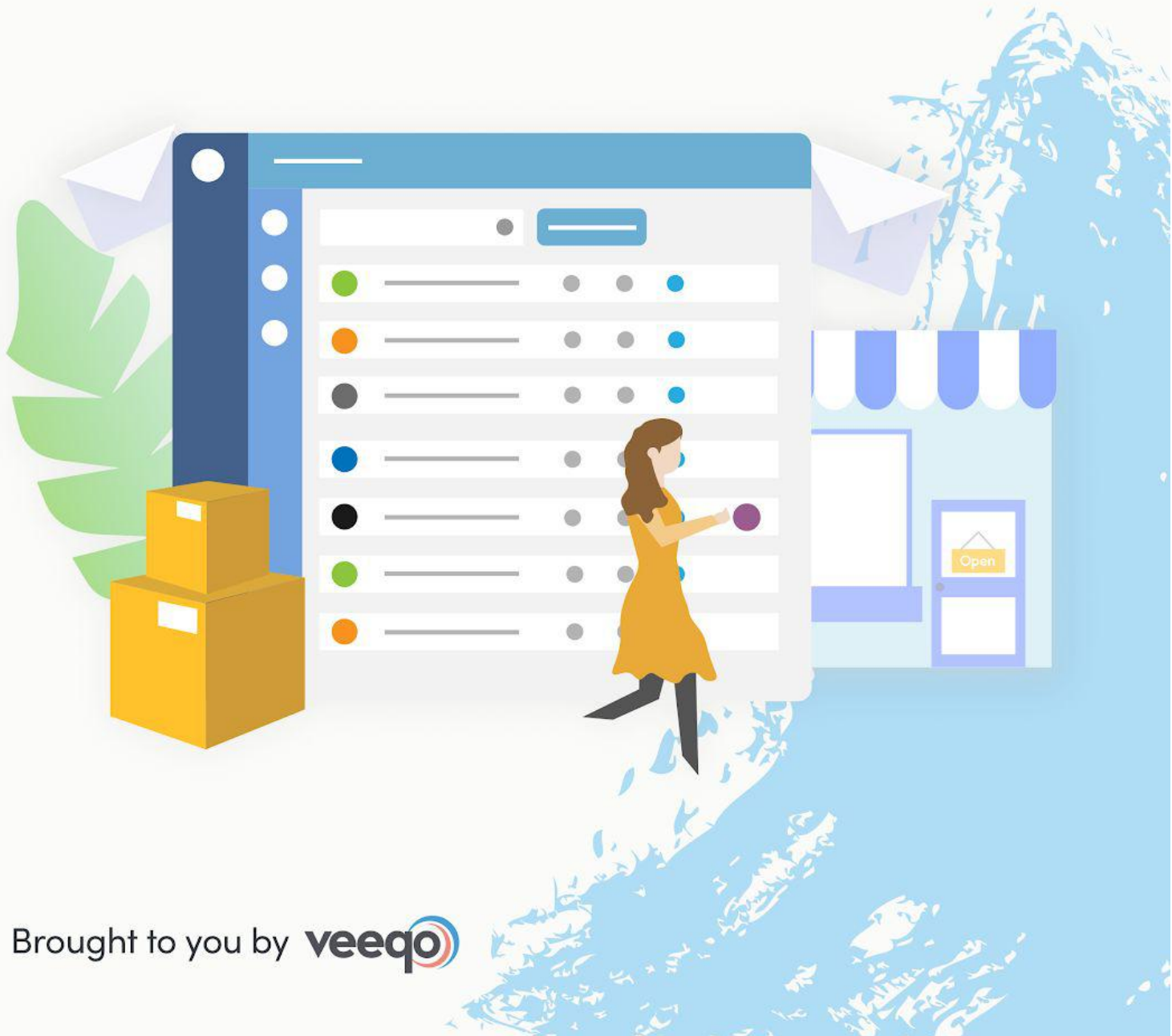


THE COMPLETE GUIDE TO

Inventory Management



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Chapter 1: What is Inventory Management?

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Inventory management is the process of ordering, handling, storing, and using a company's non-capitalized assets - AKA its inventory. For some businesses, this involves raw materials and components, while others may only deal with finished stock items ready for sale.

Either way, inventory management all comes down to balance - having the **right amount** of stock, in the **right place**, at the **right time**. And this guide will help you achieve just that.

Retail inventory management

Retail is the general term used to describe businesses that sell physical products to consumers. While not exclusive to retail, inventory management tends to play more of a role in this industry than any other.

We'll therefore be focusing mainly on inventory management from a retail perspective within this guide.

Retail can be split into several areas:

- **Offline.** Where a company sells via a brick-and-mortar store or physical location.
- **Online.** Where a company sells over the internet via an ecommerce website or marketplace.
- **Multichannel.** Where a company sells in multiple different places, usually a combination of online websites and marketplaces.
- **Omnichannel.** Where a company provides a [unified, integrated experience](#) for customers across all the different online and offline channels it sells on.

Businesses may also choose to trade via **wholesale** channels. This involves selling inventory (usually in bulk) directly business-to-business (B2B) or taking part in [B2B ecommerce](#).

A company's inventory will therefore need to be managed in accordance with which of these retail models it operates within.

Inventory management in action

We've covered the broad definition of inventory management. But what's *actually* involved when it comes to making good inventory management happen?

Bottom line:

You want to keep inventory levels balanced at all times without ever having too much or too little of each product in stock.

And there are a few key aspects in achieving this:

- **Types of inventory**. So you know what type of inventory is where and can have full visibility over it.
- **Forecasting**. So you know how much stock is needed to satisfy demand over an upcoming time period.
- **Purchasing**. So you know *when* and *how* to create purchase orders to re-order new stock.
- **Storage**. So you know how much of each inventory item can be suitably housed, and where to send it.
- **Analysis**. So you can use metrics to make more informed decisions about your inventory as time goes on.
- **Techniques**. So you can quickly and efficiently book-in, put away, pick, pack and ship inventory as and when needed at your various locations.
- **Tracking**. So you have visibility on where exactly your inventory is as well as additions (purchases) and subtractions (sales), to give as close to a live stock figure as possible.
- **Accounting**. So you can properly record your inventory on financial documents.
- **Systems & tools**. So you know which software is right for your business, and when the right time is to implement it.

These are the basic ingredients of quality inventory management. And you'll need to take a **systematic approach** to them in order to best equip your business for long term growth.

The importance of inventory management

A retail business is useless without its inventory. And so while it may not be the most exciting subject, inventory management is *vital* important to your business's longevity.

Good inventory management helps with:

1. **Customer experience**. Not having enough stock to fulfill orders you've already taken payment for can be a real negative.
2. **Improving cash flow**. Putting cash into too much inventory at once means it's not available for other things - like payroll or marketing.
3. **Avoiding shrinkage**. Purchasing too much of the wrong inventory and/or not storing it correctly can lead to it becoming 'dead', spoiled, or stolen.
4. **Optimizing fulfillment**. Inventory that's put away and stored correctly can be picked, packed and shipped off to customers more quickly and easily.

Key inventory management terms

Inventory management is a complex subject. And there's a lot of systems, processes and general pieces that go into the puzzle.

Here's a glossary of key terms you're likely to come across:

- **Barcode scanner.** A device used to digitally identify items via a unique barcode, then perform inventory and fulfillment tasks like booking-in, picking, counts, etc.
- **Bundles.** A group of individual products in an inventory that are brought together to sell as one under a single SKU.
- **Cost of goods sold (COGS).** Direct costs of purchasing and/or producing any goods sold, including everything that went into it – materials, labor, tools used, etc. Does NOT include indirect costs – like distribution, advertising, sales force costs, etc.
- **Beginning Inventory (BI).** The value of any unsold, on-hand inventory at the start of an accounting period.
- **Ending Inventory (EI).** The value of any unsold, on-hand inventory at the end of an accounting period.
- **Inventory valuation.** The process of giving unsold inventory a monetary value in order to show as a company asset in financial records.
- **First-in-first-out (FIFO).** An inventory valuation method that assumes stock that was purchased *first*, is also the first to be sold.
- **Last-in-first-out (LIFO).** An inventory valuation method that assumes the most recent products added to your inventory are the ones to be sold first.
- **Average inventory cost.** An inventory valuation method that bases its figure on the average cost of items throughout an accounting period.
- **Average inventory.** The average inventory on-hand over a given time period, calculated by adding Ending Inventory (EI) to Beginning Inventory (BI) and dividing by two.
- **Back order (BO).** An order for a product that is currently out of stock, and so cannot yet be fulfilled for the customer.
- **Sales order (SO).** A document created when a customer makes a purchase, detailing which products are to be received and how much has been paid or is owed.
- **Purchase order (PO).** A commercial document created by a business to its supplier, detailing quantities, items and agreed prices for new products to add to on-hand inventory.
- **Stock keeping unit (SKU).** A unique alphanumeric code applied to each variant in a company's inventory, helping to easily identify and organize a product catalogue.
- **Third-party logistics (3PL).** Refers to the use of an external third party to handle warehousing, inventory, fulfillment and/or customer service on behalf of a retail company.
- **Order fulfillment.** The process of getting a customer's sales order from your warehouse or distribution center to it being in their possession.

- **Order management.** The [systematic process](#) behind organizing, managing and fulfilling all the sales orders coming into a business. From receiving orders and processing payment, right through to picking, packing, shipping, handling returns and communicating with customers.
- **Inventory variant.** The variations of a single product that a company may hold in its inventory. For example, stocking a t-shirt in various colors and sizes.
- **Inventory visibility.** The ability of a person or business to see exactly where its inventory is and how it is being used.
- **Pipeline inventory.** Any inventory that has not yet reached its final destination of a company's warehouse shelves, but is currently 'en route' somewhere within their supply chain - e.g. currently being manufactured, or being shipped by the supplier.
- **Lead time.** The time it takes for a supplier to deliver new stock to the desired location once a purchase order has been issued.
- **Carrying costs.** The total costs associated with holding and storing inventory in a warehouse or facility until it is sold on to the customer.
- **Inventory count.** Also known as a stock take, this is the systematic process of [taking a physical count of inventory](#) in order to verify accuracy.
- **Dead stock.** Inventory that remains unsold for a long enough period of time for it to be deemed outdated and virtually unsellable.
- **Inventory shrinkage.** An accounting term to indicate inventory items that have been stolen, damaged beyond saleable repair or otherwise lost between the point of purchase and point of sale.
- **Supply chain.** The complete flow a product or commodity takes from origin to consumer - including raw materials, to finished goods, wholesalers, warehouses and final destination. A retailer might only be directly responsible for certain chunks of this supply chain, but should still be aware of it in its entirety for the products they sell.
- **Multichannel.** A retail model that sells in multiple different places, usually online via a combination of websites and marketplaces.
- **Omnichannel.** A retail model that goes beyond multichannel to integrate all of a company's online and offline sales channels into one, unified customer experience.
- **Overselling.** Taking online orders for a product that turns out to be out of stock (usually through poor inventory management). [Preventing overselling](#) is key to providing a high-quality experience for online customers.

Key inventory management formulas

It's not just common terminology you need to know when it comes to inventory management. There are some specific formulas to take note of too.

We'll be going into greater depth with how and when to use these formulas later on in this guide. But here's a quick run through to use as a reference point:

1) Inventory turnover

Inventory turnover measures the number of times a company has sold and replaced inventory over a given time period:



This gives an insight into the overall efficiency of a company and its inventory management processes. The higher the inventory turnover rate, the more efficient a business is at getting through its inventory.

2) Sell through rate

Sell through rate takes the amount of inventory a retailer receives, and compares it against what is actually sold over a given period. It's usually expressed as a percentage:



This helps analyze if your investment in a particular product is working out well. Low sell through rates indicate you either overbought or priced too high, while high sell through rates indicate you may have under bought or priced too low.

It's a great way to make decisions on future purchase quantities for a product or from a particular supplier.

3) Days of inventory outstanding (DIO)

Days of inventory outstanding (DIO) measures the typical number of days it takes for inventory to turn into sales.



It's hard to draw insights from just one calculation. But you should look into typical industry standards, and also keep track of whether you are trending up or down as time goes on.

4) Safety stock

Safety stock is the backup stock needed to meet unexpected supply problems and/or sudden changes in demand.



Bear in mind that you want to have enough safety stock to meet demand. But not so much that increased carrying costs puts a strain on cash flow.

5) Reorder point

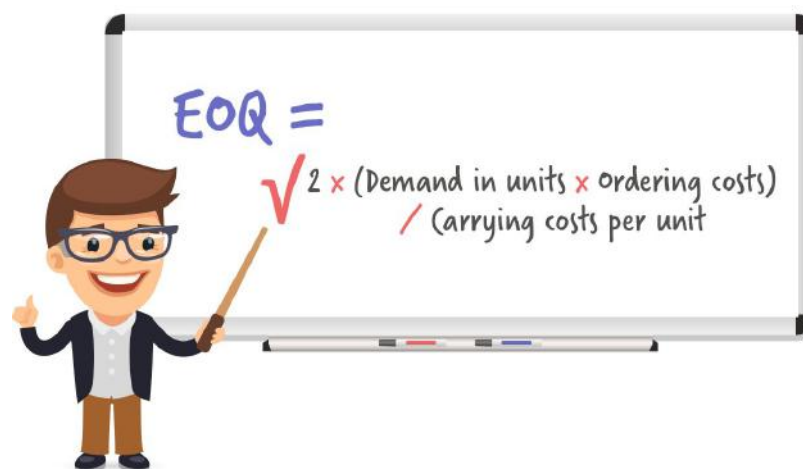
The reorder point helps determine *when* to order new inventory. It is a specific point in time that acts as a trigger to re-order as soon as stock has diminished to that certain level.



It's important to consider the lead time for new stock to be delivered when setting reorder points. Enough stock should be leftover to keep up with demand before the newly purchased inventory becomes available for sale.

6) Economic order quantity (EOQ)

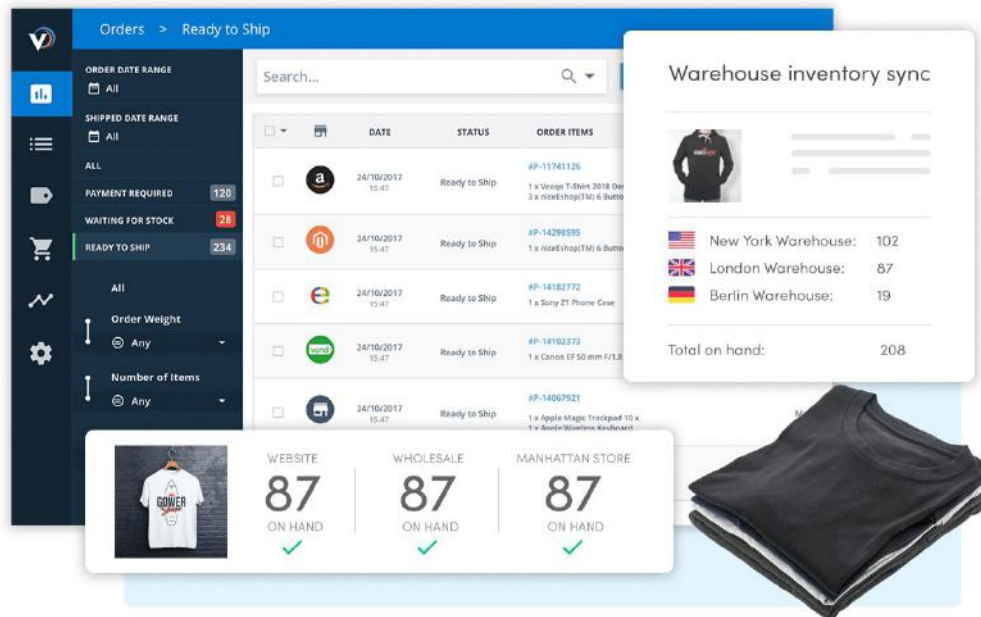
EOQ is a formula that helps calculate exactly how much inventory to order. It takes into account a company's typical demand, ordering costs and carrying costs to provide the most economical figure possible:



This is obviously quite a complicated formula to use. But we cover this in greater depth in [Chapter 4: Purchasing Inventory](#).

Inventory management software

An inventory management software or system does all the heavy lifting for a retail business when it comes to its inventory. It tracks inventory additions and subtractions automatically, *without* relying on manual, paper or spreadsheet processes.

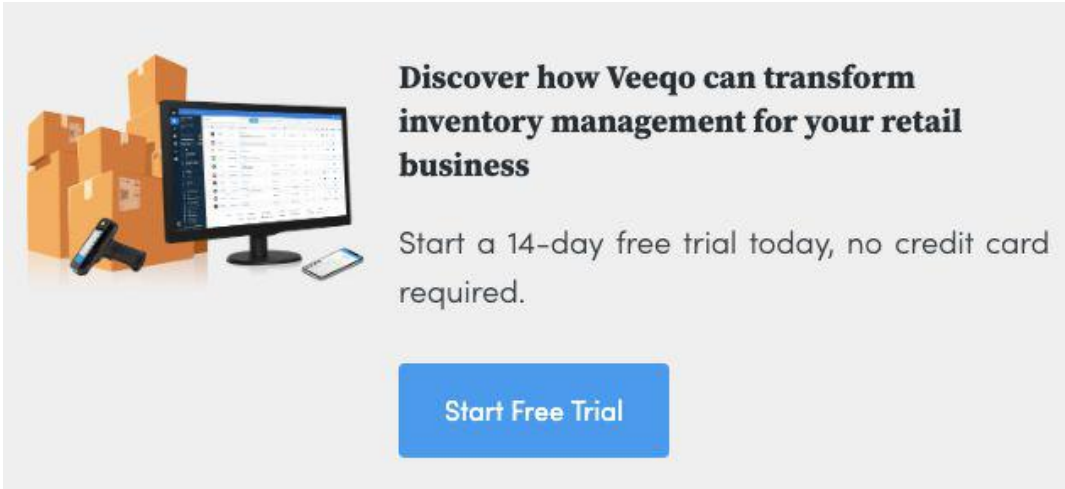


Systems like this are becoming more and more popular among growing businesses as they tackle the challenges of modern multichannel and omnichannel retail.

Choosing an inventory management system that's right for your business can be a tricky process. But here are a few pillar features of good software:

- **Real-time tracking.** Syncs a live inventory figure across all sales channels and warehouses.
- **Forecasting.** Uses past sales data to project estimated inventory requirements into the future.
- **Purchasing.** Helps manage all suppliers and purchase orders for quick and easy stock replenishment.
- **Rules & automations.** Allows creation of inventory rules, e.g. to dictate how much stock shows on each sales channel.
- **Cloud-based.** Accessed from anywhere with data never being overwritten by team members making changes.

Many systems (like Veeqo) will also help manage and automate a plethora of other operational tasks - like sales & wholesale orders, picking & packing, shipping, and returns.



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This initial guide covers all the basics of inventory management you need to know. But there's much more that goes into it that we'll explore in the coming additional chapters, starting next with the different types of inventory you need to be aware of.

Chapter 2: Types of Inventory

[Read this chapter online here](#)

There are several different types of inventory a company might come across. All are critical to understand in the pursuit of effective inventory management.

This chapter covers all these different types, so your business is best equipped to manage, plan and budget for stock going forward.

Basic types of inventory

There are five fundamental types of inventory when it comes to the products a business might sell.

1) Raw materials

Raw materials are any **items used to manufacture** finished products, or the individual components that go into them. These can be produced or sourced by a business itself or purchased from a supplier.

For example:

A business that makes its own bespoke furniture may purchase materials from a supplier. While a small business supplying specialty herbs may actually grow these itself.

Either way, raw materials are still considered a type of inventory. And so must be managed, stored and accounted for accordingly.

2) Work-in-progress (WIP) inventory

Work-in-progress (WIP) inventory again refers to retailers that manufacture their own products. These are unfinished items or components **currently in-production**, but not yet ready for sale.

For our furniture business, this may be products that have been put together without yet being painted or packaged.

3) Finished goods

Finished goods are products that are complete and ready for sale. These may have been manufactured by the business itself, or purchased as a whole, finished product from a supplier.

Most retailers will either purchase whole, finished products from a supplier, or have custom products manufactured for them by a third-party. Finished goods are therefore often (but not

always) one of the only types of inventory needing to be handled within retail inventory management.

4) Maintenance, repair & operations (MRO) goods

MRO goods are items used within the manufacture of products, but without directly making up any part of a finished product.

This can include items such as:

- Production & repair tools.
- Uniforms & safety equipment.
- Cleaning supplies.
- Machinery.
- Batteries.
- Computer systems.

And all items that are consumed or discarded during the production process.

Small types of inventory like this may seem menial. But MRO is inventory that still needs to be purchased from a supplier, stored somewhere and accounted for in financial records.

5) Packing materials

Packing materials are anything you use for packing and protecting goods - either while in storage, or during shipping to customers.

This is therefore particularly important for online retailers. And may include things like:

- Bubble wrap.
- Padding.
- Packing chips.
- A variety of boxes.

Many retailers don't think about packing materials when managing their inventory. But stocks of these items need to be used and maintained regularly - and it's therefore important to include them in overall inventory reporting and accounting.

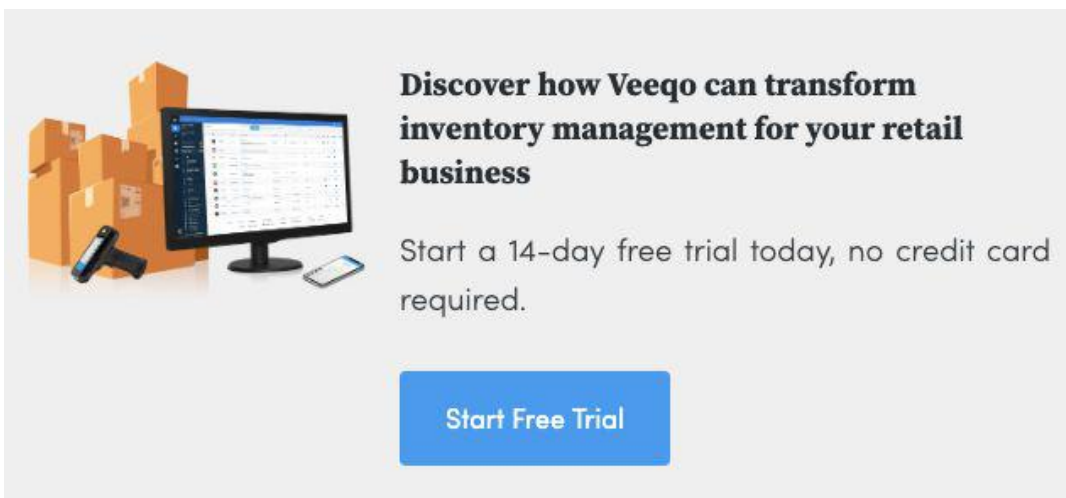
Finished good types of inventory

Within a retail context, it's also useful to further subdivide finished goods into a few other types of inventory. This gives a business much greater inventory visibility, allowing for improved allocation and management.

1. **Ready for sale.** Also known as 'available inventory,' this is stock that has been manufactured/purchased and put away in the warehouse ready for sale. It could be picked, packed and shipped without complication at any desired moment.

2. **Allocated.** This is inventory that has been bought by a customer and allocated to a sales order. It is therefore not eligible for sale again, and must be removed from the available inventory figure.
3. **In-transit.** This is unsold inventory that is currently on the move - e.g. a purchase order delivery in transit, or stock being moved to another warehouse.
4. **Seasonal.** Also known as 'anticipation stock,' this is inventory that has been manufactured or purchased to specifically cover a forecasted upturn in demand. For example, to cover Black Friday sales, or your peak season.
5. **Safety.** This acts as a buffer cushion of stock to cover you in the event of any unforeseen upturns in demand, or problems with supply.

Knowing (and using) these different types of inventory is critical to good inventory management. In the next chapter, we'll go into the art and science of inventory forecasting.



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Chapter 3: Inventory Forecasting

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Inventory forecasting is crucial to the financial success of any retail business. It helps strike a balance between sinking too much cash into inventory at once, while ensuring demand can always be satisfied without going out of stock.

However, this is also one of the most difficult aspects of inventory management to get right. So in this chapter, we outline all the techniques and best practices retailers can use to forecast inventory requirements.

What is inventory forecasting?

Inventory forecasting is essentially making an informed projection on how much stock will be needed to satisfy demand over a given time period. It starts with a simple [demand forecast](#), then uses what's already in stock to plan how much inventory is required going forward.

It's important to note that forecasting will always be educated guesswork. No forecast is set in stone, and there are several factors that can affect accuracy - such as seasonality and sales history.

Good demand and inventory forecasting will therefore take these factors into account, and be agile enough to allow for adjustments when circumstances change.

Setting forecast boundaries

The first step in predicting your inventory requirements is to create a simple forecast of your expected sales. For this, you'll need to set some forecast boundaries.

1) Forecast period

A forecast period is the specific amount of time into the future that a forecast will be attempting to predict.

We recommend at least the following three periods:

1. Annual.
2. 90 day.
3. 30 day.

These should then be reviewed each month. If market trends or actual sales performance is different than expected, then upcoming sales forecasts can be adjusted accordingly.

2) Base demand

Base demand is simply the exact current demand for a product at the specific point a forecast is due to begin from.

For example, a company may be doing a 30 day forecast for white Nike sneakers. If they sold 37 units over the previous 30 days, then base demand would be 37.

This just gives a starting point to work from in our forecast. To increase accuracy, we'll need to consider any trends and variables that may impact demand.

Incorporating trends and variables

It's not enough to forecast inventory based purely on current demand. There's a whole host of factors that could impact the data going forward.

Most businesses will therefore need to take a variety of trends and variables into account in order to achieve the most accurate inventory forecasting possible.

1) Sales velocity

Stock-outs *shouldn't* happen, but in reality they sometimes still do. And sales velocity takes this into account when it comes to looking over your past sales performance for inventory forecasting.

For example:

Maybe you only sold 20 units of a product in the past 90 days. But it doesn't tell the whole story if you actually had it listed as 'out of stock' for 89 of those days.

Forecast better for the upcoming period and you could sell much more.

We can therefore use the following calculation to omit out of stock days:



Note: The time periods are obviously not fixed here. You could work out 10 day sales velocity from 180 days of sales, but larger data sets tend to yield more reliable results.

All things being equal, sales velocity gives an indication of how much a product should sell if continuously in stock over a 30 day period. Something that can be very useful for forecasting inventory requirements into the future.

However, there are several other factors that can impact this too...

2) Marketing activity

It's also essential that you consider marketing and advertising activity when it comes to inventory forecasting. This should be taken into account in two ways:

1. Past marketing activity when looking at sales history.
2. Planned marketing activity when planning for future sales.

The main thing to watch out for is whether **planned** marketing activity is conceivably different or scaled up/down compared to **past** marketing activity.

For example:

It could be realistic to expect a 25% sales uplift if Facebook Ads worked well last Q3, and you decide to increase budget by 25% in this Q3. So you'll need to account for this when inventory forecasting.

3) Seasonality

Seasonality is absolutely critical for forecasting your stock requirements.

Winter coats tend to not sell well in summer months. Good gifts will tend to pique around the Holidays. Items you discount will possibly go through the roof during Black Friday.

But there may also be more subtle, not so obvious variations in demand for certain products.

This is where 12 month sales data is powerful.

You'll need to look back over the previous year (several years if possible) to see which specific months and periods in time certain items:

- Start to trend up.
- Plateau.
- Start to trend down.

This allows you to make data-backed decisions on seasonality, and how much inventory you might require during these periods.

4) Unexpected publicity

Unexpected media attention or publicity may be unlikely. But it's still something you'd need to forecast for if it happens.

For example:

You'll probably need to forecast an uptrend in sales if Kim Kardashian is pictured wearing some of your jewelry. Or be prepared for a possible downtrend if you get some bad press in a national newspaper.

Either way, unexpected publicity is definitely something you should be aware of and reacting to with your forecasts.

5) Industry-specific effects

Events and goings on within your industry and marketplace in general can also impact demand for products.

This could be a whole range of things, such as:

- A major competitor going out of business.
- A large company diversifying into your niche.
- Major changes to pillar marketing channels (if Facebook banned your Ad account, for example).
- Law changes in states/countries you operate/sell in.

Again, these are slightly ad-hoc and unpredictable. But anything that *does* happen should be reacted to with inventory requirements adjusted accordingly.

Forecasting for new products

As stated earlier, inventory forecasting is always going to be somewhat of a guess. And that becomes even more so when it comes to new products with limited sales data available.

The key is to try to inform your guesswork as much as possible.

So consider things like:

- Trends of similar products you've launched.
- Trends of other products within that category you've launched.
- Trends of all previous products you've launched.
- Using a tool like [Google Trends](#) to see seasonality of when people search for specific products most.
- Making use of market research, surveys and focus groups.

You can also build up your data set slowly. So launching new products with small amounts of inventory to judge initial reaction, then re-investing in greater stock numbers going forward.

Inventory planning and replenishment

Sales and demand forecasting is one thing. But true *inventory* forecasting needs to go a step further and actually plan out how you'll replenish stock for the upcoming period.

This means considering:

1. **Current stock levels.** How much is currently on-hand? There's no point purchasing 40 units to cover 40 forecasted sales if you already have 27 units on-hand.
2. **Pipeline inventory.** How many units have already been ordered and en route as pipeline inventory? You don't want to double buy stock.
3. **Lead time.** How long will it take for new stock to be delivered, received into inventory and made ready for sale? We'll cover lead time and reorder points with more detail in [Chapter 4: Purchasing Inventory](#) of this guide.

Automated inventory forecasting

Forecasting demand, sales and, in particular, inventory can be an incredibly complex task.

Luckily, one option is to use [automated inventory forecasting](#).

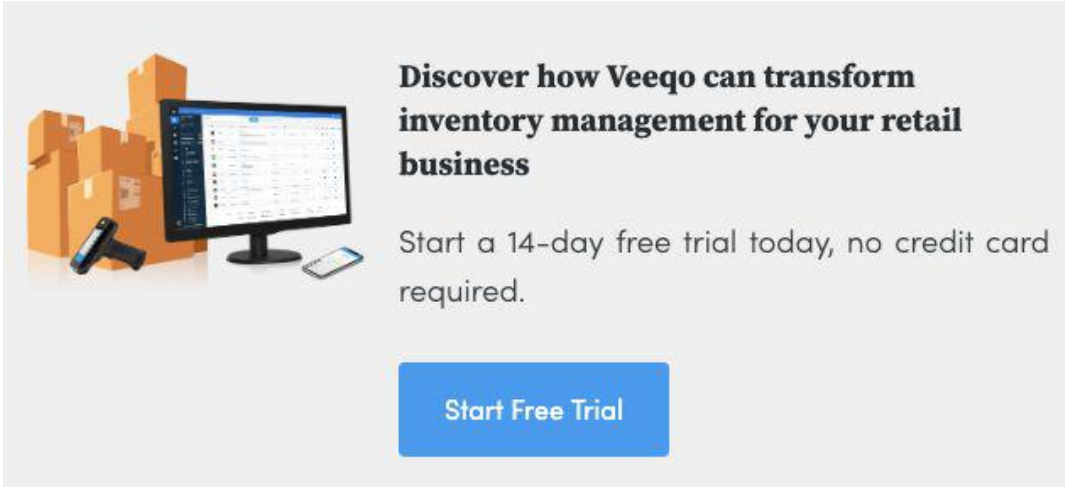
Tools like this won't do *all* the work for you - you'll still need to analyze data and consider any unexpected sales up or downturns. But they'll be able to take previous sales performance and run accurate reports on estimated inventory requirements.

Veeqo, for example, helps take the guesswork out of the process by using past sales history to calculate inventory requirements for your chosen upcoming period:

PRODUCT	SKU	PREVIOUS SALES (UNITS SALES)	SUPPLIER (LEAD TIME)	COST	AVAILABILITY	CUSTOMER BACKORDER	INCOMING	IN TRANSIT	AFTER	MIN STOCK	MAX STOCK	QTY ON HAND
Men's Grey Gower Shore Classic Logo T-Shirt (Medium)	1879-2	£331.16 (20)	Custom Apps (2 days)	£ 7.41	-42 (1)	0	0	0/0	-42 (1)	150	300	233 (24 orders)
Men's Grey Gower Shore Classic Logo T-Shirt (Small)	1879-1	£331.16 (20)	Custom Apps (2 days)	£ 7.41	-8 (1)	0	0	0/0	-8 (1)	150	300	233 (24 orders)
Men's Grey Gower Shore Classic Logo T-Shirt (Large)	1879-3	£331.16 (20)	Custom Apps (2 days)	£ 7.41	150 (7 weeks)	0	0	0/0	150 (7 weeks)	150	300	83 (9 orders)

As you can see, there's a lot of estimating that goes into forecasting inventory. But the more you can base decision making on data, the more accurate you're going to be.

Many guides on inventory planning simply look at reorder point and economic order quantity (EOQ) calculations, without addressing how to actually forecast demand like done here. However, we do look at reorder points and EOQ in the next chapter on purchasing inventory.



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Chapter 4: Purchasing Inventory

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Purchasing inventory is about more than just raising a purchase order. Serious businesses pay close attention to *how much* inventory they should order and exactly *when* to do it in order to minimize carrying costs and achieve steady growth.

This whole practice is therefore a critical aspect of effective inventory management. And something we discuss how to optimize in this chapter.

Methods of purchasing inventory

There are several methods you can use for purchasing inventory. Each one has its own benefits and drawbacks, and so what might work for one business may not for another.

1) Bulk buying

Also referred to as 'just-in-case' inventory purchasing, this is where a company would buy its inventory in bulk batches. Stock will then be held at a warehouse, third-party logistics (3PL) facility or location of some kind in order to supply a forecasted demand.

Bulk buying is perhaps the most well-known way of purchasing inventory. It could involve purchasing finished products or raw materials in a vast array of quantities - depending on what's best for a business at that particular time.

Pros:

- Take advantage of bulk buying discounts.
- Potential for greater profit margins due to smaller cost-per-unit.
- Relatively simple purchasing system to set up.

Cons:

- Costs associated with a warehouse or 3PL partner for inventory storage.
- Risk of sinking cash into too much stock if forecasting is inaccurate.

Best for: Growing or established businesses that have a good handle on expected demand and profit margins.

2) Dropshipping

Dropshipping is a method of purchasing inventory where the retailer doesn't keep any of the products it sells in stock. Instead, items are purchased from a third-party supplier as and when each customer order comes in, with the supplier shipping products directly to the customer.

As a result, the retailer usually doesn't ever see, handle, stock or own any of the inventory themselves. This method may sound appealing, but it does have several drawbacks too.

Pros:

- Effectively removes the need for any inventory management by the retailer.
- Removes risk of cash getting tied up in inventory that doesn't sell.
- Lower overall costs of not needing a warehouse, 3PL or fulfillment team.
- Easy to find, source and test new products.

Cons:

- Profit margins can be thin from lack of bulk buy savings.
- Little to no control over fulfillment speed and product/package branding.
- Products are easily accessible to other dropshippers, meaning you'll likely be facing stiff competition.

Best for: Startup retail brands, or more established brands wanting to test the waters for a new product without investing in lots of inventory.

3) Just-in-time (JIT)

Just-in-time (JIT) is usually better associated with retailers that manufacture their own products. This would involve ordering raw materials and assembling each product as and when an order comes in - hence, it's produced 'just-in-time' for fulfillment.

This method can result in holding much less 'on-hand' inventory, but requires seamless management of the manufacturing process and a highly reliable supply chain.

Pros:

- Reduced warehouse costs from needing to store on-hand inventory and materials.
- Maintain control of your product quality and branding.
- Less waste of raw materials.

Cons:

- Any supply chain hiccup can have large effects on production.
- Supply chain lead times will need to be factored into overall order fulfillment speed.
- Requires highly sophisticated management and processes to get right.

Best for: Larger businesses manufacturing their own products with sophisticated production processes in place. These businesses will also tend to rely on fewer orders that contain many quantity units in each one.

When to order new inventory

Dropshipping and JIT speak for themselves when it comes to placing a new purchase order - you do it as and when each sales order comes in.

But most growing retailers will most likely be going down the bulk buying route. And this begs the question, when's the right time to place a new bulk buy order?

There are three methods to use:

1. **Order pattern method.** This would involve simply making regular fixed purchases of the same amount. It's perfect for retailers who know they're sales numbers will rarely change, with a review taking place maybe 1-2 times a year.
2. **Control rhythm method.** This would involve checking inventory at fixed intervals and purchasing inventory amounts that have been adjusted accordingly. It's perfect for retailers that have a good grasp of their demand and inventory forecasting.
3. **Reorder point method.** This involves reordering stock once it gets below a certain level, usually set via a calculation. It tends to work better for retailers with fewer products, and who aren't reliant on bulk buying discounts from large purchase orders of multiple products at a time.

Determining which method to use depends completely on how your business operates.

For example:

Order pattern method could be catastrophic if you have products that are highly seasonal or fluctuate in sales. But the reorder point method might not make sense if smaller, more regular purchase orders means you'd miss out on significant bulk buying discounts.

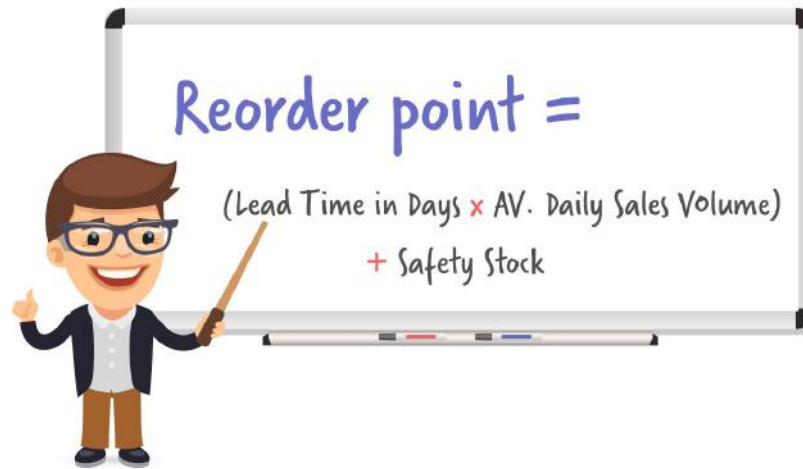
Calculating reorder point

Purchasing inventory based on reorder points is a very common method to use.

In essence, an item's reorder point needs to be as soon as its safety stock levels are hit.

But we also need to make sure we don't run out of stock in the time it takes for our new inventory to be delivered. So the lead time between ordering and receiving the order needs to be taken into account.

Here's the formula to use:



For example:

Imagine we typically sell 11 blue t-shirts each day. If we aim to always keep 50 in safety stock, and it usually takes seven days to receive and put away new inventory - then reorder point would look like this:

$$\text{Reorder point} = (7 \times 11) + 50$$

$$\text{Reorder point} = 77 + 50$$

$$\text{Reorder point} = 127$$

So a new purchase order needs to be created for our blue t-shirts as soon as inventory levels hit 127 units.

How much new inventory to order

We've covered when the best time is to place a new purchase order. Next comes the question, how much stock is best to order at one time?

To answer this, there are several things to consider:

- Forecasted demand.
- Bulk buying discounts.
- Carrying/storage costs.
- Ordering costs.

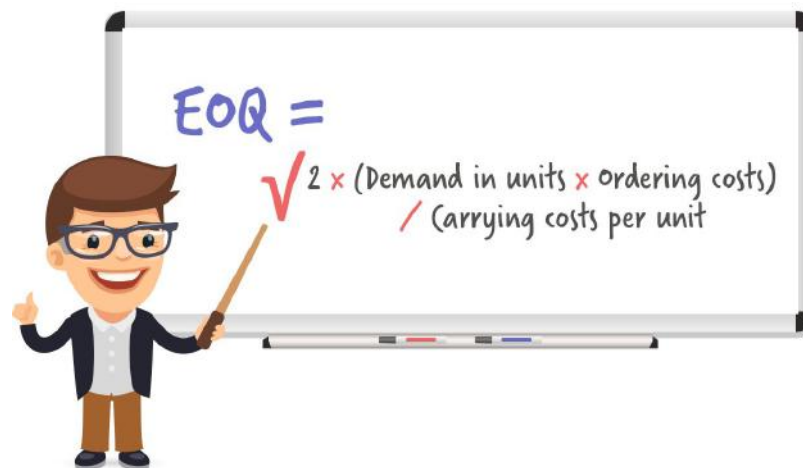
One option is to manually take these into account with your thought process each time you go about purchasing inventory.

But we can also use a more scientific method known as economic order quantity (EOQ).

EOQ is a calculation that helps work out the most economical quantity of inventory to order for a specific product. The three variables involved are:

1. **Demand.** The number of units sold over a given time period (usually a year).
2. **Relevant ordering cost.** Total ordering cost per purchase order. This includes all staff, transportation and any other costs associated with making each purchase order - but *not* the actual cost of the order itself.
3. **Relevant carrying cost.** Assume the item is in stock for the entire time period in question and decipher the carrying cost per unit.

You'll then put this into the following equation:



This helps to determine the best amount of inventory to order each time. Helping to strike a balance between minimal ordering and carrying costs, while still satisfying demand.

Automated inventory purchasing

Purchasing inventory is another task that can be brought into the digital world. This helps to automate a lot of the repetitive, manual tasks, while also taking care of some of the complicated forecasting and mathematics involved.

Veeqo, for example, allows you to:

- Manage all your suppliers in one CRM-like database.
- Manually add and remove products to digital purchase orders.
- Auto-populate purchase orders with items low on stock and/or below re-order point.
- Email the purchase order off to suppliers:

Inventory Forecast Sales data updated at July 4th 2019, 9:08:20 am

Forecast based on: Previous sales Previous sales

Previous sales: 05/04/19 - 03/07/19

I want enough to stock cover: 8 weeks

PRODUCT							
PRODUCT	SKU	PREVIOUS SALES (UNITS SOLD)	SUPPLIER (LEAD TIME)	COST	AVAILABLE	CUSTOMER BACKORDER	INCOMING
<input type="checkbox"/> Men's Modern Surf Long Shorts Blue X-Large	67265-4	£0.00 (88)	Custom Appa (7 days)	£ 5.61	29(4 weeks)	0	1
<input type="checkbox"/> Men's Modern Surf Long Shorts Blue small	67265-1	£0.00 (90)	Custom Appa (7 days)	£ 5.61	33(1 month)	0	0
<input type="checkbox"/> Men's Surf Shorts Blue Green White X-Large	69265-4	£0.00 (104)	Custom Appa (7 days)	£ 5.61	12(1 week)	0	35
<input type="checkbox"/> Men's Modern Surf Shorts Red medium	68265-2	£333.16 (109)	Custom Appa (7 days)	£ 5.61	46(1 month)	0	8
<input type="checkbox"/> Men's Surf Shorts Blue Green White medium	69265-2	£0.00 (99)	Custom Appa (7 days)	£ 5.61	44(1 month)	0	0
<input type="checkbox"/> Men's White Gower Shore Classic Logo T-Shirt Medium	1779-2	£333.16 (108)	Custom Appa (7 days)	£ 5.41	54(1 month)	0	0
<input type="checkbox"/> Men's Grey Gower Shore Classic Logo T-Shirt	1879-2	£333.16	Custom Appa	£ 7.41	58(1 month)	0	0

You can then manage all active purchase orders in one place to see when delivery is expected. And even send reminder emails to suppliers for any order that's past due.

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In the previous two chapters of this guide, we've talked about how to plan, forecast and purchase new inventory.

The next chapter moves on to optimizing your inventory storage procedures. We'll cover how to book-in and look after your stock in order to have it ready for sale as soon as possible and minimize spoilage and shrinkage.

Chapter 5: Inventory Storage

[Read this chapter online here](#)

Inventory storage is critical to long term retail success. Fail to look after your stock properly, and you run the risk of it getting lost, stolen or damaged - wasting cash that could be used on other important business expenditures.

So this chapter is all about how to most efficiently store, organize, maintain and generally preserve the life of your inventory.

Broad inventory storage options

The first thing to assess is exactly where you'll be storing inventory. To do this, you typically have a few options.

1) Dropshipping

Dropshipping is a way of purchasing inventory where the retailer doesn't keep any of the products it sells in stock. Instead, items are purchased from a third-party supplier as and when each customer order comes in, with the supplier shipping products directly to the customer.

It therefore entirely negates the need for inventory storage or keeping stock on-hand.

Pros:

- Inventory storage is entirely taken care of by the supplier.
- Supplier is liable for any inventory shrinkage.
- Lower overall costs of not needing a warehouse, 3PL or fulfillment team.
- Less risk when starting out.

Cons:

- Little to no control over product quality or branding.
- Puts someone else in control of how well products are stored.
- Shipping speeds can be incredibly slow.
- Highly competitive with razor thin margins.

Best for: Startup retail brands that want to test the waters before investing in bulk inventory.

2) Third-party logistics (3PL) service

A third-party logistics (3PL) service allows retailers to effectively rent space in another warehouse. You can then send inventory units directly to the 3PL location for them to store and ship on your brand's behalf.

This usually incurs housing and shipping fees, but again eliminates the need to worry about having to store inventory.

Pros:

- Inventory management is entirely taken care of by the 3PL service.
- Can take advantage of bulk inventory discounts without the need for a self-fulfillment warehouse.
- Usually involves significantly faster shipping times and more control over product quality compared to dropshipping.

Cons:

- Monthly storage fees can eat into profits for slow moving stock.
- Trusting someone else to ship products on your brand's behalf.
- Usually requires investing in bulk stock quantities.

Best for: Growing retail brands that have proven, consistent sales and want to buy stock in bulk without a dedicated warehouse.

3) Self-fulfillment warehouse

A self-fulfillment warehouse is a location set up by a retailer in order to specifically store its own inventory and ship orders.

This usually comes with significant up-front investment of both capital and time - like signing a lease and hiring a team. But if the sales are there and numbers make sense, then the result is more control and lower operational costs in the long run.

Pros:

- Complete control of the fulfillment experience delivered to customers.
- Initial investment can result in long term savings compared to a 3PL.

Cons:

- Usually involves signing a long term lease, which can be risky.
- Will need to hire and train a team, and possibly invest in [WMS software](#).
- May require moving to new locations several times as the business grows.

Best for: Established retail brands planning for long term growth.

Setting up your warehouse

The main goals of [setting up your warehouse](#) for optimal inventory storage are:

1. **Safety.** Any inventory should be stored safely to prevent both injury to staff members and damage to the inventory itself.

2. **Security.** Warehouses with large amounts of valuable stock will be a target for thieves, so this should be prevented as best as possible.
3. **Accessibility.** Inventory will need to be stored in a way that's easy to receive and put away when new, then pick, pack and ship out to customers later on.

In order to do this, there are several things to think about:

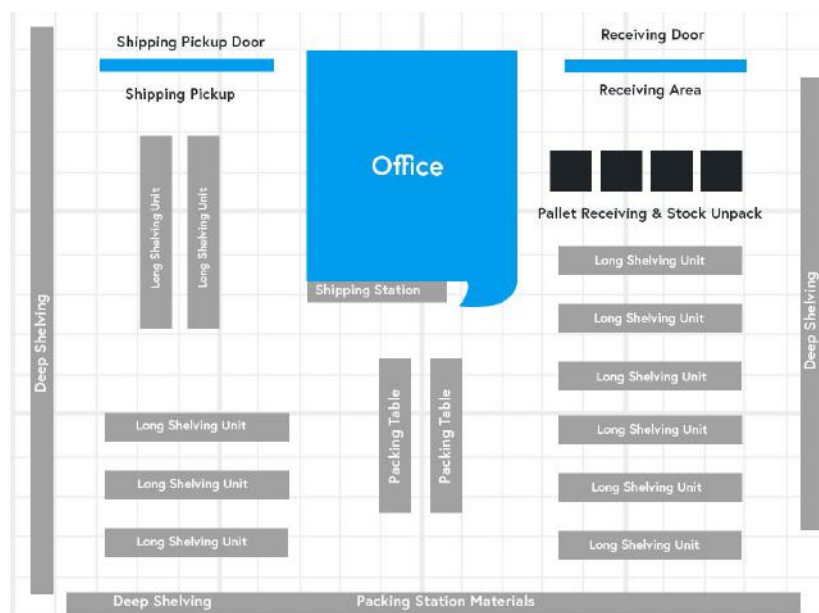
1) Warehouse layout

Your warehouse will need to balance having enough **storage space** for inventory, while providing enough **working space** for staff to move around and complete tasks.

Exact requirements will depend on each individual business, but the following areas tend to be needed in a warehouse layout:

- Delivery/receiving area.
- Unpacking and book-in area.
- Warehouse office.
- Main storage area.
- Area for excess, obsolete or dead stock.
- Packing table(s).
- Shipping station(s).

This can be tricky – especially when dealing with a limited space. So it's best to sketch out your warehouse layout to scale before setting it up or changing what you already have.



Space and manoeuvrability is a key thing to remember.

Pickers need to be able to walk up and down aisles without getting in each other's way. And should also have enough room to actually pick items.

2) Warehouse labeling

Specific locations and clear labeling are essentials for effective inventory storage. Your team should be able to look at your [inventory system](#) and see **exactly** where any product is located.

Practicality is king here.

Stick with simple alphanumeric combinations labeling specific rows, shelves and then exact bin locations:

Row	Shelf	Bin
A	A	1
A	A	2
A	B	1
B	A	1
B	A	2
B	B	1

So you always know, for example, that all your blue t-shirts sized medium will be in Row A – Shelf B – Bin 1. And the pattern can be continued like this.

Larger warehouses can extrapolate forward as much as needed with the same concept:

Warehouse Area	Row	Row Area	Shelf	Bin
Area 1	A1	RA1	A	1
Area 1	A2	RA2	B	2
Area 1	B1	RA3	C	3
Area 2	A1	RA1	A	1
Area 2	A2	RA2	B	2
Area 2	B1	RA3	C	3

The bigger your facility, the more in-depth you'll need to go with your location labeling to achieve optimal inventory storage.

3) Arranging inventory

Another key part of inventory storage is determining the exact location each product should be stored within your warehouse.

Ideally, sales volume should be taken into account for this.

[Veeqo research](#) found that 60% of a company's sales tend to come from just 20% of their products. Meaning you can severely reduce picker walking time by:

- Identifying that 20% of products from past sales data in your business;
- and then storing these as close to the packing desk as possible.

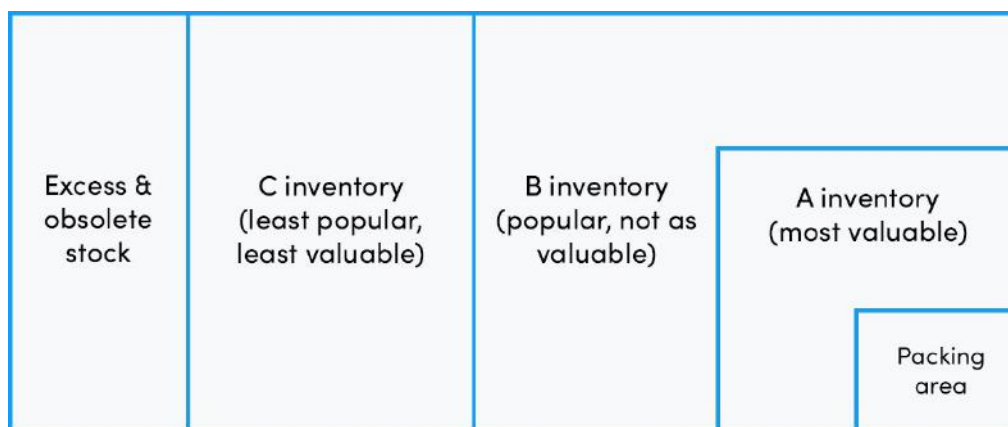
ABC Analysis is an inventory management technique that can become very useful here. This divides all on-hand inventory into three groups – A, B and C:

A Items: Are of high value with low sales frequency.

B Items: Are of moderate value with moderate sales frequency.

C Items: Are of low value with high sales frequency.

You can then decide that 'C items' will be placed closest to the packing desk, while 'A items' will be farthest away. Like this:



Some small and lightweight items may even be sold frequently enough to warrant being stored on shelves above the packing desks themselves.

Finally:

You can take this concept another layer deep by also identifying which products are most commonly sold together.

So faster selling products are stored closer to the packing desk and products commonly purchased together are stored close or next to each other. Meaning you're doubling down on reducing walking time for each picker.

Inventory storage equipment

Storing inventory in the safest and most practical way is almost impossible without investing in some form of equipment.

This can differ heavily depending on the goods in question. Retailers selling refrigerators, for example, may require large locations, forklifts and heavy-duty shelving racks. While selling t-shirts or jewelry can usually be done with simple shelves in a smaller space.

With that being said, here's a look at some of the general equipment to consider:

Shelving units. Some warehouses can work with simple block stacking of products on top of each other, but most will need some kind of shelving to place products on. The most common ones have metal frames with wooden shelves, are easy to build, yet robust. Access to both sides can also be very useful - one side for putting in, one for taking out.

Bins. Warehouse bins are where your individual product variants go into, particularly for smaller items. Each bin will be labeled and assigned to a specific variant to make it easy to locate in the warehouse.

CCTV. Inventory is a business asset, and should be protected as such. Make sure to get a good Closed Circuit Television (CCTV) system set up with signage to indicate it's in use in order to deter thieves as much as possible.

Barcode scanner. A quality [barcode scanner](#) will help with booking-in, picking, packing, conducting inventory counts and generally keeping your inventory accurate and aligned with what's recorded in your [inventory management software](#).

Picking cart. Pickers will need a cart on which to carry all the items that are being picked before returning to the packing station. This is particularly useful if you commonly sell multiple items per order, or when using a batch [picking system](#).

Totes. These will sit on the picking cart and carry items for individual orders during a batch picking route. Totes are usually simple plastic containers and will only ever hold items for one order at a time.

Packing desk. A professional packing desk is very solid, larger than a normal office desk and has rolls so that you can get easy access to your packaging materials. It's worth having at least two, so someone else can jump in during busy periods.

Packaging materials. This will involve your different sized shipping boxes - we recommend around 3-5 options to strike a balance between speed and shipping

costs. Plus, tape and all the protective inner packaging - like bubble wrap, shredded paper or air pillows (determined by how fragile your items are in transit).

Printers. You'll need a good quality A4 laser printer for invoices, and a typical 6x4" shipping label printer ([Dymo](#) is great for this). For your A4 printer, think about speed of printing the first page, speed of printing multiple pages and cost per page.


Shipping computer. This is a dedicated computer *solely* for shipping out orders - printing out labels, marking orders as shipped, sending out tracking details and/or using shipping software. It's best to opt for a touchscreen to remove the need for keyboard and mouse in this fast-paced environment.

Shipping scales. These weigh all packed shipments and send details to your shipping computer via a direct connection. [Dymo](#) are, again, a great option for scales.

Of course, retailers need to consider this equipment from the point-of-view of their own business. Selling certain foods may require a refrigerated unit or cold store, while very high value jewelry may need extra security measures.

The key is to use this guide as a blueprint to build upon and mould to your own business.

We've now covered how to plan, replenish and store inventory as a retailer. Next, we'll move on to inventory analysis in order to use the best and most useful metrics for keeping on top of your stock management going forward.



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Chapter 6: Inventory Analysis

[Read this chapter online here](#)

Inventory analysis is the regular auditing of inventory in the pursuit of continuous improvements to how it is managed. This can be done through a variety of commonly used inventory KPIs and ratios.

Regular monitoring of these metrics is a key part of inventory management, and so we explore each one in-depth within this chapter.

The goals of inventory analysis

Before getting into any metrics, it's important to understand what the specific goals are when it comes to doing inventory analysis.

The general objective is to improve overall inventory efficiency. But breaking this down even further would involve aiming to:

- **Identify improvement areas.** Metrics should be compared to past results and industry benchmarks to identify where problem areas lie.
- **Reduce stock-outs.** Stock-outs should be seen as huge red flags for retailers, and inventory analysis will help minimize them as much as possible.
- **Improve cash flow.** Analysing inventory now will prevent sinking too much cash into stock at any one time going forward.
- **Waste less inventory.** Analysis and improvements will help minimize inventory shrinkage, such as stock that gets lost, stolen or damaged beyond repair.

This all has the bottom line effect of making the business **more profitable**, while also **improving the experience** for customers.

ABC analysis

ABC analysis is a commonly used inventory analysis method that helps to identify your most valuable inventory.

It's based on the [Pareto principle](#) - AKA the 80/20 rule. Applied to retail, this would suggest that around 80% of sales would typically come from 20% of a company's total inventory.

ABC analysis uses this theory to sort inventory into three buckets:

A inventory. Is inventory with the highest value - typically your 20% that brings in 80% of sales/profits. These are usually items with the best profit margins and/or most sales revenue.

B inventory. Is inventory that sells regularly, but doesn't have quite as much value as A - often due to having slimmer margins or higher carrying costs.

C inventory. Is the remainder of inventory that doesn't sell as much as A or B, generates the least revenue and is generally least valuable.

This kind of analysis helps identify the key players in a retail business's inventory.

A inventory, for example should rarely (if ever) stock-out and be given the highest priority and focus. While C inventory may not warrant quite so much attention.

Inventory analysis metrics

ABC analysis isn't the only way to draw conclusions from your inventory. There are several key metrics that can be used to measure performance and uncover ways to optimize operations.

Average inventory

Average inventory measures the **average volume of inventory kept on-hand** throughout a given period.

It comes from adding together the *beginning inventory (BI)* value at the start of a period and the *ending inventory (EI)* value at the end of the period. Then simply dividing by two to find the average:



This helps to even out seasonal fluctuations to see whether too much or too little inventory is typically kept on-hand at any one time.

Inventory turnover

Inventory turnover measures **how many times your inventory is sold** over a given time period. It's therefore a critical metric showing how effectively inventory is being managed overall.

The formula takes *cost of goods sold (COGS)* over a specific period, and divides it by *average inventory* over the same period:



This is affected by two key factors:

1. **Purchasing.** Getting forecasting and inventory buying correct to ensure the right amount of stock is purchased in the first place.
2. **Sales.** Ensuring the marketing and conversion sides of the business are on point in order to back up the projected sales with actual orders.

Poor inventory turnover performance could be stemming from failures in either one (or both) of these elements.

Generally speaking, higher inventory turnover rates indicate better performance and efficiency. This is because the company would be getting through its inventory stocks more often - minimizing carrying costs per unit.

Inventory write-off

Inventory write-off is a measure of any unsold inventory that has become defunct or **no longer has any value** for the business over a given period. Usually due to loss, theft, damage or generally becoming obsolete and unsellable.

It involves identifying the inventory, disposing of it and officially writing off its value in accounting records. So is more a procedure and final value, rather than a specific formula.

But it's worth regularly reviewing and tracking how much inventory is being written-off.

High or continually increasing amounts could indicate problems with forecasting for certain products, or how inventory is being stored in the warehouse.

Gross margin return on investment (GMROI)

GMROI is a simple ratio to measure the profitability of your inventory over a certain period. It gives the gross profit a retailer makes for every dollar of inventory that's purchased.

Here's the formula:



(Note: *gross margin* is found by subtracting *COGS* from *net sales*.)

Any GMROI ratio below 1.0 means a business is not profitable, and is losing money for every dollar invested in inventory. Anything above 1.0 means a business is selling goods for more than what it costs the firm to acquire them.

It's important to note that this is **not a measure of bottom-line profitability** - as only COGS is taken into account as a cost, not total expenditure.

But this does give a clear indication as to how profitable your inventory is with current price points and buying procedures.

Sell through rate

Sell through rate takes the amount of inventory a retailer receives, and compares it against what is actually sold over a given period. It's usually expressed as a percentage:



This can be used on a 'per product' (or even 'per variant') basis to analyze how quickly the investment in inventory is paying off.

It's useful when comparing one product or variant against another. Or when comparing the sell-through of a specific product from one month to another.

Low sell through rates indicate you either overbought or priced too high, while high sell through rates indicate you may have under bought or priced too low.

Days inventory outstanding (DOI)

Days of inventory outstanding (DOI) is simply how many days it typically takes to create or buy inventory and turn it into a sale. It's even sometimes referred to simply as *average days to sell*.

The formula involves dividing average cost of inventory over a time period by COGS over the same period, then multiplying by number of days in the time period (all usually a year):

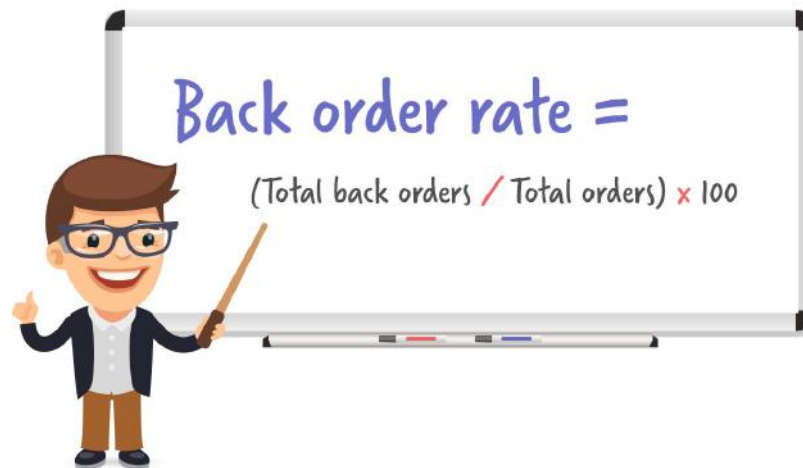


It's hard to draw insights from just one calculation. But you should look into typical industry standards, and also keep track of whether you are trending up or down as time goes on.

Increases and/or poor performance could indicate a problem with manufacturing/purchasing and/or the sales process.

Back order rate

Back order rate shows the percentage of your total orders over a given period that ended up being placed on back order.



This gives an indication of how well you forecast, replenish and track inventory. A high back order rate could stem from:

- Not buying the right amount of inventory.
- Not re-ordering at the right time.
- Not syncing and tracking multichannel inventory efficiently enough.

As well as a host of other reasons.

However, it's also important to note this doesn't account for sales that may have been lost from poor inventory management. You could still have a zero back order rate, but have lost sales from having to mark online store products as 'pre-sale' or 'out-of-stock'.

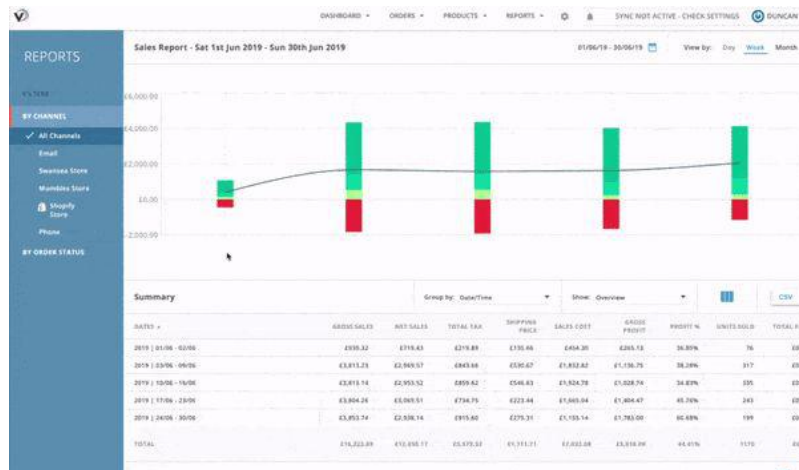
Conducting inventory analysis

Inventory analysis is not about simply looking at these equations once. It's about setting aside regular time to properly track, monitor and draw conclusions from them.

It's worth creating a spreadsheet, then setting aside monthly time to compare trends and truly analyze the data.

Good [inventory management software](#) should come with extensive reporting features. Allowing you to automatically track and easily pay attention to vital KPIs within the platform.

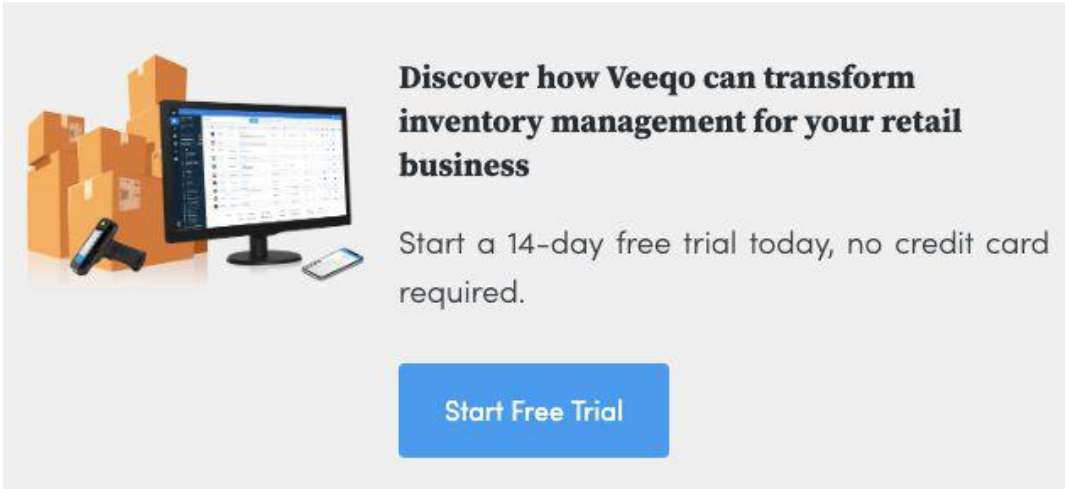
Veeqo, for example, lets you run all kinds of reports. From sales:



To products and inventory:

Group by: By Product		Show: Overview		
	COST PRICE	PRICE PER UNIT	COVER 30	SE THROUGH
	£29.65	£73.39	0	about 2 year
	£5.00	£142.79	0	less than a n
	£0.00	£14.00	0	
	£138.00	£450.00	0	
PC	£4.00	£4.00	0	over 6 year
	£0.00	£57.22	0	
	£288.46	£0.01	0	less than a n
	£0.00	£41.58	0	3 month
	£0.00	£100.00	0	3 month
	£5.00	£0.00	0	
	£-1,819.30	£25.00	0	
dssets USB 3.5mm LED with Mic for PC/MAC Blue Led Light Sades Retail Gift Box(W	£0.00	£140.00	0	

Right through to warehouses and team performance.



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This chapter should have provided you with some key insights on how to analyze and understand your inventory better. The next chapter will focus on the crucial inventory management techniques you need to know about to handle stock in the most optimal way possible.

Chapter 7: Inventory Management Techniques

[Read this chapter online here](#)

In essence, all the inventory management techniques a retailer needs are covered throughout the different chapters of this guide. These span across a number of different areas and tasks within the field of inventory management - forecasting, purchasing, storing, analysing, etc.

So in this chapter, we give a summary of key techniques and ideas you can use to control and manage your inventory in the best way possible.

Inventory management techniques

For ease of consumption, here's a quick run-down of all the inventory management techniques we mention in this article:

1. Choose an appropriate fulfillment option.
2. Take forecasting seriously.
3. Set reorder points for each product.
4. Use EOQ for optimal order quantities.
5. Give each variant a dedicated warehouse bin.
6. Sell older inventory first.
7. Prioritize with ABC analysis.
8. Always track your metrics.
9. Verify accuracy with regular counts.
10. Automate as much as possible.

Let's explore each one of these further below:

1) Choose an appropriate fulfillment option

As a retailer, the whole point of having inventory is to sell it. And with ecommerce, this usually means having to store and ship it somewhere too.

So deciding exactly how this fulfillment process will be done is one of the most crucial inventory management techniques to get right.

Your general options are:

- **Dropshipping.** This is where you never see or hold inventory yourself. Instead, it is purchased as each sales order comes in, and shipped directly to the customer.
- **Third-party logistics (3PL).** This is where you would purchase inventory in bulk, but have it sent to a 3PL service. They would then manage inventory and ship orders to your customers for a monthly fee.

- **Self-fulfillment.** This involves setting up your own facility and team. You'd be totally responsible for controlling, managing and shipping inventory.

Each of these options has its own benefits and drawbacks, with the best one depending entirely on individual business requirements. We discuss this in greater depth in [Chapter 5: Inventory Storage](#) of this guide.

2) Take forecasting seriously

It's tempting to skim out on forecasting inventory requirements. Instead, many retailers will simply guess, or just buy inventory and hope they sell it.

The problem?

This leaves you extremely susceptible to ending up with way too much (or too little) stock on-hand at any one time. And the extra carrying costs involved will be eating into profits every single day.

Make sure to use your past sales data in two ways:

1. **Short term.** Look at sales over the past 30-90 days to indicate your short term sales trends and demand for the inventory you hold.
2. **Long term.** Look at what sales were like at particular points in the year to indicate where sales tend to spike and dip.

We discuss this in greater depth in [Chapter 3: Inventory Forecasting](#) of this guide.

3) Set reorder points for each product

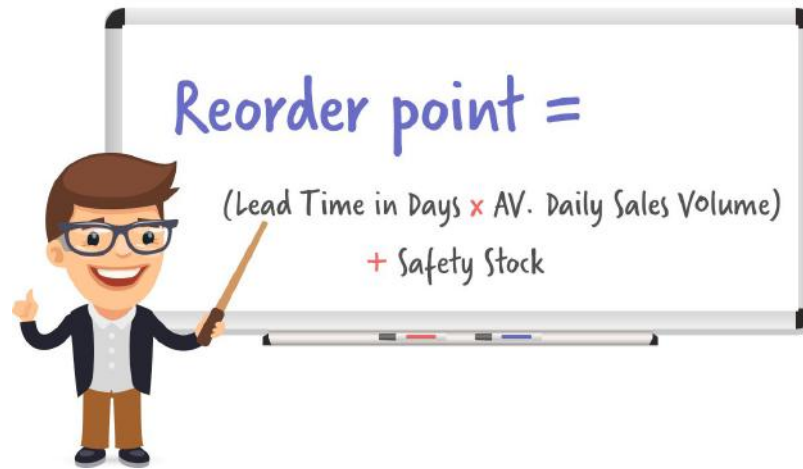
Reordering your products needs to be done in a timely manner.

Leave it too long and you'll run out of stock. Go too early and you'll pile up way more inventory than you need.

This is why each product (and ideally each product variant) should have its own reorder point, taking into account:

- **Safety stock.** So you don't eat into this emergency, backup stock unnecessarily.
- **Lead time.** So you can still cover sales demand while new products get shipped to your warehouse.

Here's the formula to work out exact reorder points:



Apply this to each product in your inventory. As soon as a product hits this level, it's time to place a new purchase order with suppliers.

4) Use EOQ for optimal order quantities

It's not enough to know *when* to place a new purchase order. You need to work out exactly how much stock to order at once to keep carrying costs to a minimum.

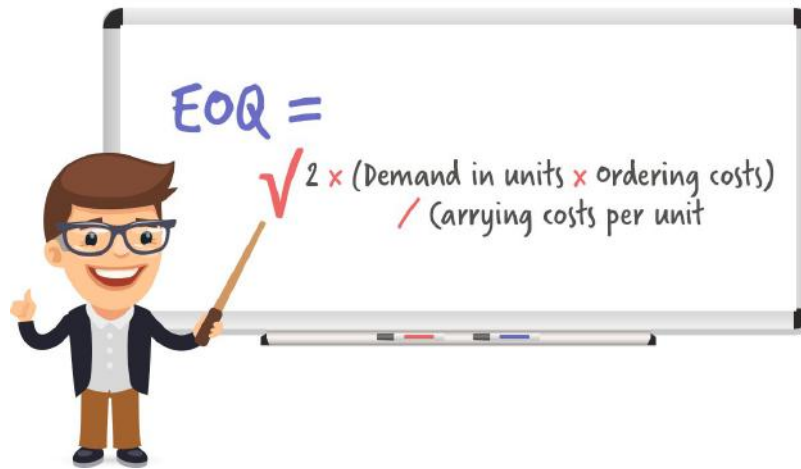
And economic order quantity (EOQ) is one of the best inventory management techniques to help here.

This is a calculation that helps determine the best amount of inventory to order each time. Helping strike a balance between minimal ordering and carrying costs, while still satisfying demand.


The three variables involved are:

1. **Demand.** The number of units sold over a given time period (usually a year).
2. **Relevant ordering cost.** Total ordering cost per purchase order. This includes all staff, transportation and any other costs associated with making each purchase order - but *not* the actual cost of the order itself.
3. **Relevant carrying cost.** Assume the item is in stock for the entire time period in question and decipher the carrying cost per unit.

You'll then put this into the following equation:



We cover reorder points and EOQ further in [Chapter 4: Purchasing Inventory](#) of this guide.



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5) Give each variant a dedicated warehouse bin

Organizing and arranging items in the warehouse is a key part of good inventory management. Your team should be able to look at your system and easily see where any product is located.

This means creating bin locations with clear labels for each product variant.

It's best to avoid fancy names – simplicity and ease of understanding is king here. Numbers and letters are therefore the best route to go.

Start by labeling each row, shelf, then bin location:

Row	Shelf	Bin
A	A	1
A	A	2
A	B	1
B	A	1
B	A	2
B	B	1

So you always know, for example, that all your blue t-shirts sized medium will be in Row A – Shelf B – Bin 1. And the pattern can be continued like this.

We discuss this in greater depth in [Chapter 5: Inventory Storage](#) of this guide.

6) Sell older inventory first

For most retailers, the last thing you want is to be always using the newest stock to fulfill orders. This leaves older inventory sitting in the warehouse and susceptible to damage, decay or passing best before dates.

So it's worth making a rule to store new inventory from the back of shelves and then take from the front - automatically enforcing a first-in-first-out (FIFO) system:



However:

It's always worth discussing this with your accountant too as they may use a different inventory valuation method for your end-of-year accounts.

7) Prioritize with ABC analysis

ABC analysis is a very common inventory management technique that helps to identify your most valuable inventory.

This means retailers can prioritize inventory better. Allowing them to place greater focus on the particular items and products that bring in the most revenue.

The whole process is about sorting inventory into three buckets:

- **A inventory.** Inventory with the highest value – typically your 20% that brings in 80% of sales/profits. These are usually items with the best profit margins and/or most sales revenue.
- **B inventory.** Inventory that sells regularly, but doesn't have quite as much value as A – often due to having slimmer margins or higher carrying costs.
- **C inventory.** The remainder of inventory that doesn't sell as much as A or B, generates the least revenue and is generally least valuable.

It might not make sense to prioritize like this at first. Surely all inventory is important - otherwise you wouldn't have it, right?

But in reality, some products will sell much better than others. And these are the ones to focus on most to ensure they are readily available and *never* stock-out.

8) Always track your metrics

Tracking simple metrics and KPIs is one of the inventory management techniques that often gets lost amongst other fancy ideas. But it can still be one of the most powerful.

It's essential to regularly track at least the following metrics:

- **Inventory turnover.** Measures how many times your inventory is sold over a given time period, giving a critical insight into overall inventory management performance.
- **Inventory write-off.** A measure of any unsold inventory that has become defunct or no longer has any value for the business over a given period.
- **Gross margin return on investment (GMROI).** Measures the profitability of your inventory over a certain period, giving the gross profit made for every dollar of inventory that's purchased.
- **Sell through rate.** Takes the amount of inventory a retailer receives, and compares it against what is actually sold over a given period.
- **Days of inventory outstanding (DOI).** Measures how many days it typically takes to create or buy inventory and turn it into a sale.
- **Back order rate.** Shows the percentage of your total orders over a given period that ended up being placed on back order.

We discuss ABC analysis and these metrics (including the actual calculations needed) in greater detail in [Chapter 6: Inventory Analysis](#).

9) Verify accuracy with regular counts

Unfortunately, errors are inevitable when it comes to your stock. Even with all the inventory management techniques and automations mentioned in this chapter.

So [taking a physical count of inventory](#) with regular stock takes is critical.

The traditional way of doing this is to shut the warehouse down for a night (or longer) and complete a big count once or twice a year. But this can be an extremely time-consuming and complex task, especially for large inventories or facilities.

Instead, try spreading it out through the year:

- **Cycle counting.** This is where team members would be given 'counting tasks' of a small number of items to do each week. Over the year, each product has then usually been counted and verified several times.
- **Spot checking.** This isn't done with any specific regularity. It can simply be done if a product is proving particularly problematic or if a team member finds they have some spare time and needs something to do.

Good inventory systems will manage this for you. Assigning regular counting tasks to your team and allowing for easy corrections via [digital barcode scanners](#).

10) Automate as much as possible

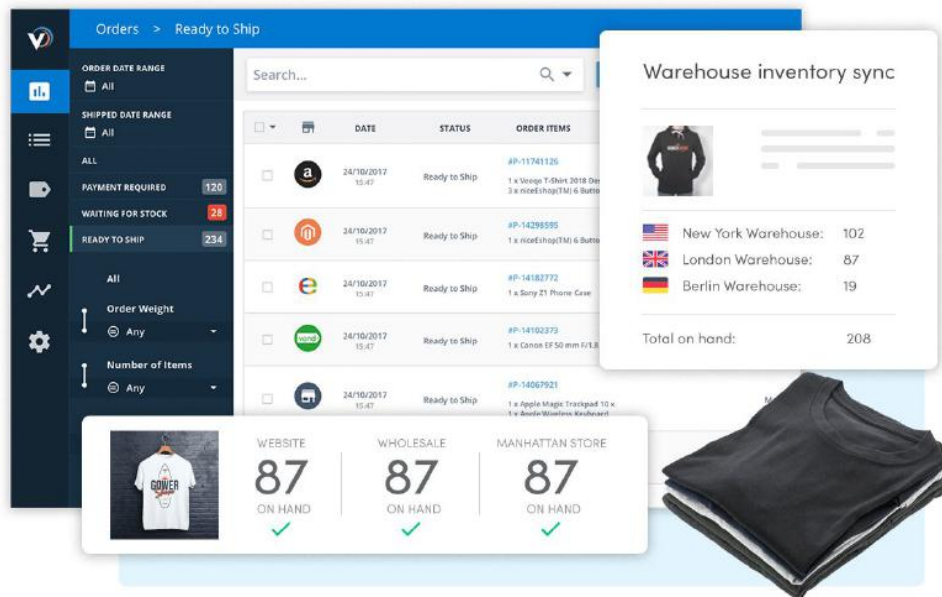
Inventory management is a complex job. And it becomes even more complex the more you grow and the more products that get added into your catalogue.

So taking advantage of automation can be possibly the most important inventory management technique out there.

This means utilizing quality [inventory management software](#) to do most of the heavy lifting for you. Helping take care of tasks like:

- **Tracking.** So you can sync inventory in real-time across multiple channels without overselling and back orders.
- **Forecasting.** To remove the guesswork and never have too much or too little inventory on-hand.
- **Purchasing.** So you can handle all suppliers and create and manage POs in one place.
- **Counts.** To keep inventory numbers accurate by automatically assigning weekly cycle counting tasks to your team.

- **Organization.** Recording exact bin locations for variants so you can find and pick inventory quickly and accurately.



Quality systems like Veeqo will also let you create automation rules, handle orders and shipping, run reports and push data to accounting software - all in one platform.

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Hopefully, this article has provided you with a solid summary of inventory management techniques to utilize in your retail operation. The next chapter will go into detail on efficient multichannel inventory tracking, and how to perpetually keep an accurate live inventory figure.

Chapter 8: Multichannel Inventory Tracking

[Read this chapter online here](#)

Inventory tracking is the art and science of monitoring stock levels and exactly where inventory is at any one time. It is therefore one of the most fundamentally critical aspects of overall inventory management.

So this chapter of our guide covers the best practices in tracking inventory. We run through detailed instructions on how to do this via manual spreadsheets (and provide a free template), as well as when to start looking at an automated system.

What is inventory tracking?

Inventory tracking is the recording of stock levels for each individual SKU across every location items are stored and sold in. This can be done in several different ways - from pen and paper, to computerized spreadsheets, and even automated systems.

Tracking inventory was once a *relatively* simple task. But it becomes more and more complex as further sales channels and/or warehouses get added to a retail operation.

Failing to track inventory properly can lead to:

- Selling inventory you don't actually have in stock.
- Purchasing inventory you don't actually need.
- Filing inaccurate financial records and accounts.

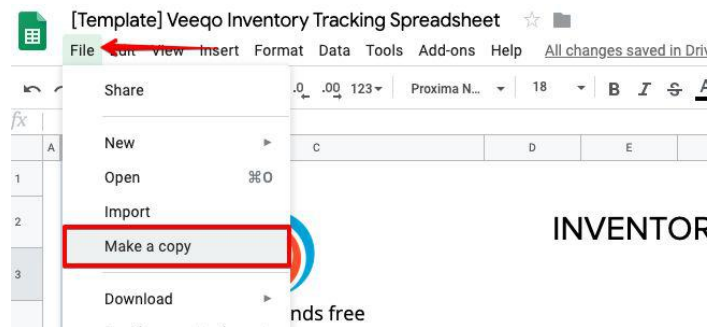
Putting a system in place to track inventory (whether manual or automated) is therefore imperative for ecommerce brands wanting to scale successfully.

Inventory tracking via spreadsheet

A commonly used inventory tracking option is to record everything via spreadsheet.

This is a form of periodic inventory system. So someone would be responsible for periodically (usually at the end of each business day) updating the spreadsheet with the latest inventory goings in and out (i.e. new sales and purchases).

We put together a sample inventory tracking spreadsheet, which you can [see here on Google Sheets](#). Just go to *File >> Make a copy* to save a version of your own to edit and use:

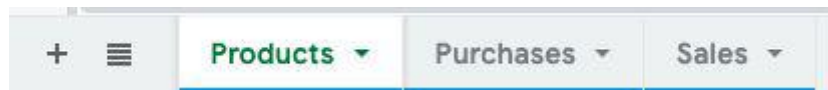


Setting up your inventory tracking spreadsheet

A basic inventory tracker will cover three pillars:

1. **Product data.** Including details like names, variants, SKUs, cost price, selling price and beginning inventory.
2. **Purchase data.** To track all purchase orders being made, each causing an addition to inventory levels.
3. **Sales data.** To track all sales orders being made, each causing a reduction to inventory levels.

We've created three separate tabs in our spreadsheet, one for each of these data pillars:




You'll need to periodically enter and adjust information in all the tabs for optimal inventory tracking. But the formulas will pull data between tabs, helping to automate the actual tracking process as much as possible.

The 'Products' tab

The 'Products' tab is where the most up-front work is done. You'll need to input details about every single product and variant that you have on-hand.

Enter your product details for all the blue columns, and the dark columns will be calculated automatically:



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INVENTORY TRACKING SPREADSHEET
Products

PRODUCT DETAILS												
Product Name	SKU	Size	Color	Beginning Inventory	Reorder Point	Cost Price	Markup	Retail Price	Total # Orders	Orders awaiting shipment	Stock to be received	On-hand stock
2019 Veeqo T-Shirt - Small, White	2019-VeeT-SW	S	Wh	12	15	\$ 12.00	\$ 10.00	\$ 22.00	0	0	0	52
2019 Veeqo T-Shirt - Medium, White	2019-VeeT-MW	M	Wh	5	20	\$ 12.00	\$ 10.00	\$ 22.00	0	0	0	40
2019 Veeqo T-Shirt - Large, White	2019-VeeT-LW	L	Wh	10	15	\$ 12.00	\$ 10.00	\$ 22.00	3	1	0	41
2019 Veeqo T-Shirt - Small, Black	2019-VeeT-SB	S	Bl	10	25	\$ 10.00	\$ 10.00	\$ 20.00	2	1	0	29


Key tips:

- Be consistent with how you format product names, sizes and colors.
- Make sure the SKUs match across everywhere this data is used.
- Calculate your reorder point for each product scientifically.
- Do not edit the black columns, these are calculated automatically from inputted data.

The ‘Purchases’ tab

The ‘Purchases’ tab is simply a running list of purchase orders in order to record and calculate incoming inventory for each product variant.

Enter each variant within a PO as a separate line. Again, just focus on adding data to the blue columns and the dark ones automatically generate:



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INVENTORY TRACKING SPREADSHEET
Purchases

PURCHASE DETAILS								
Purchase Order#	Product Name	Purchase Date	Delivery Date	Supplier	Quantity	Cost per Unit	Purchase Amount	
10001	2019 Veeqo T-Shirt - Small, White	01/24/2020	02/14/2020	Wholesaler 1	40	\$ 12.00	\$ 480.00	
10001	2019 Veeqo T-Shirt - Medium, White	01/24/2020	02/14/2020	Wholesaler 1	35	\$ 12.00	\$ 420.00	
10001	2019 Veeqo T-Shirt - Large, White	01/24/2020	02/14/2020	Wholesaler 1	35	\$ 12.00	\$ 420.00	
10002	2019 Veeqo T-Shirt - Small, Black	01/29/2020	02/19/2020	Wholesaler 2	20	\$ 10.00	\$ 200.00	
10002	2019 Veeqo T-Shirt - Medium, Black	01/29/2020	02/19/2020	Wholesaler 2	20	\$ 10.00	\$ 200.00	
10002	2019 Veeqo T-Shirt - Large, Black	01/29/2020	02/19/2020	Wholesaler 2	20	\$ 10.00	\$ 200.00	
10003	2018 Veeqo T-Shirt - Large, Black	02/06/2020		Wholesaler 1	25	\$ 10.00	\$ 250.00	
10003	2018 Veeqo T-Shirt - Medium, Black	02/06/2020		Wholesaler 1	25	\$ 10.00	\$ 250.00	
10003	2018 Veeqo T-Shirt - Small, Black	02/06/2020		Wholesaler 1	25	\$ 10.00	\$ 250.00	

To keep data consistent, there’s a drop down menu provided that pulls variant information in from the ‘Products’ tab:

10002	2019 Veeqo T-Shirt - Small, Black	01/29/2020	02/19/2020	Wholesaler 2	20
10002	2019 Veeqo T-Shirt - Medium, Black	01/29/2020	02/19/2020	Wholesaler 2	20
10002	2019 Veeqo T-Shirt - Medium, Black	01/29/2020	02/19/2020	Wholesaler 2	20
10003	2019 Veeqo T-Shirt - Small, White	02/06/2020		Wholesaler 1	25
10003	2019 Veeqo T-Shirt - Medium, White	02/06/2020		Wholesaler 1	25
10003	2019 Veeqo T-Shirt - Large, White	02/06/2020		Wholesaler 1	25
10003	2019 Veeqo T-Shirt - Small, Black	02/06/2020		Wholesaler 1	25
10003	2019 Veeqo T-Shirt - Large, Black	02/06/2020		Wholesaler 1	25
10003	2018 Veeqo T-Shirt - Small, White	02/06/2020		Wholesaler 1	25
	2018 Veeqo T-Shirt - Medium, White				
	2018 Veeqo T-Shirt - Large, White				
	2018 Veeqo T-Shirt - Small, Black				
	2018 Veeqo T-Shirt - Medium, Black				
	2018 Veeqo T-Shirt - Large, Black				

The Delivery Date should also only be added when the product has actually been received and put away ready for sale.

As soon as *any* delivery date is entered, the ordered amount will add to *On-hand stock* in the 'Products' tab. Leaving delivery date blank will keep it in the *Stock to be received* column:



PRODUCT DETAILS												
Product Name	SKU	Size	Color	Beginning Inventory	Reorder Point	Cost Price	Markup	Retail Price	Total # Orders	Orders awaiting shipment	Stock to be received	On-hand stock
2019 Veeqo T-Shirt - Small, White	2019-VeeF-SW	S	Wh	12	15	\$ 12.00	\$ 10.00	\$ 22.00	0	0	0	52
2019 Veeqo T-Shirt - Medium, White	2019-VeeF-MW	M	Wh	5	20	\$ 12.00	\$ 10.00	\$ 22.00	0	0	0	40
2019 Veeqo T-Shirt - Large, White	2019-VeeF-LW	L	Wh	10	15	\$ 12.00	\$ 10.00	\$ 22.00	3	0	0	41
2019 Veeqo T-Shirt - Small, Black	2019-VeeF-SB	S	Bl	10	25	\$ 10.00	\$ 10.00	\$ 20.00	2	0	0	29

Key tips:

- Enter each variant within a PO on a separate line.
- Leave *Delivery Date* blank until delivery is confirmed.
- Use the product drop down menu to ensure tabs can interchange accurate data.

The 'Sales' tab

The 'Sales' tab is a running list of sales orders in order to record and calculate outgoing inventory for each product variant.

Just like the 'Purchases' tab, enter each variant within an order as a separate line. Once again, enter data to only the blue columns and let the dark ones automatically generate:



INVENTORY TRACKING SPREADSHEET

Sales

SALES DETAILS							Retail Unit Price	Total Amount
Sales Order#	Product Name	Order Date	Sales Channel	Shipped Date	Customer	Quantity		
10001	2019 Veeqo T-Shirt - Large, White	02/17/2020	Shopify	02/18/2020	Bobby A	3	\$ 22.00	\$ 66.00
10002	2019 Veeqo T-Shirt - Small, Black	02/17/2020	Shopify	02/18/2020	Jonny B	1	\$ 20.00	\$ 20.00
10003	2019 Veeqo T-Shirt - Medium, Black	02/17/2020	Amazon	02/18/2020	Belinda C	5	\$ 20.00	\$ 100.00
10003	2018 Veeqo T-Shirt - Medium, White	02/17/2020	Amazon	02/18/2020	Belinda C	15	\$ 22.00	\$ 330.00
10004	2018 Veeqo T-Shirt - Large, Black	02/18/2020	eBay	02/19/2020	Helen D	5	\$ 20.00	\$ 100.00
10005	2019 Veeqo T-Shirt - Large, White	02/18/2020	Shopify	02/19/2020	Brian D	1	\$ 22.00	\$ 22.00
10005	2018 Veeqo T-Shirt - Medium, White	02/18/2020	Shopify	02/19/2020	Brian D	1	\$ 22.00	\$ 22.00
10006	2018 Veeqo T-Shirt - Large, Black	02/19/2020	Amazon		Henry E	2	\$ 20.00	\$ 40.00

You'll again be able to choose products from a drop down menu. But this time, only enter a *Shipped Date* once the order has actually shipped.

As soon as *any* shipping date is entered, the quantities will subtract from *On-hand stock* in the 'Products' tab. Leaving shipping date blank will keep the order recorded in the *Orders awaiting shipment* column:

Retail Price	Total # Orders	Orders awaiting shipment	Stock to be received	On-hand stock
\$ 22.00	0	0	0	52
\$ 22.00	0	0	0	40
\$ 22.00	3	1	0	41
\$ 20.00	2	1	0	29
\$ 20.00	1	0	0	27

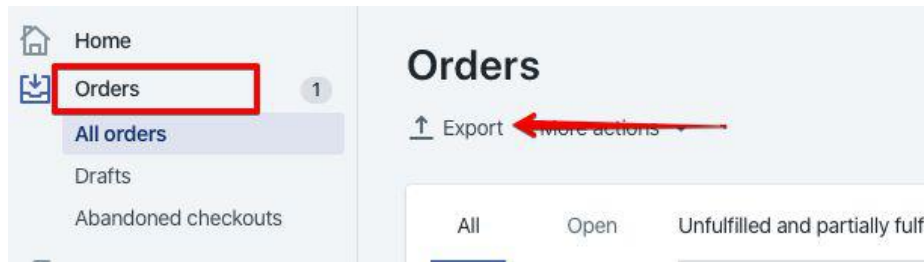
Key tips:

- Enter each variant within a sales order on a separate line.
- Leave *Shipped Date* blank until shipment is confirmed.
- Use the product drop down menu to ensure tabs can interchange accurate data.

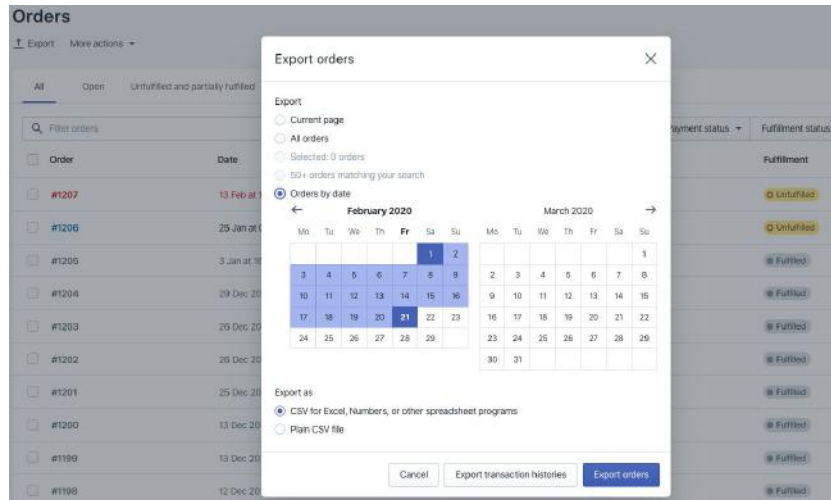
Using the inventory tracking spreadsheet

Entering each sales order manually should be avoided if possible. Most ecommerce platforms will allow you to filter orders over a specific timeframe, then export all data to a CSV file.

With Shopify, for example, you simply head to the 'Orders' screen and then select the *Export* button at the top:



You'll then be able to export all orders from different time ranges directly into a CSV file or Excel spreadsheet:



Simply tweak the exported data to fit your inventory tracking spreadsheet, then copy and paste it in. You can repeat this with every sales channel to import sales data as quickly as possible.

Once done, you should have correct inventory data reflected for each variant in your 'Products' tab.

As soon as the pre-set *Reorder Point* is hit for any variant, the *On-hand stock* figure will turn red:



INVENTORY TRACKING SPREADSHEET
Products

PRODUCT DETAILS												
Product Name	SKU	Size	Color	Beginning Inventory	Reorder Point	Cost Price	Markup	Retail Price	Total # Orders	Orders awaiting shipment	Stock to be received	On-hand stock
2019 Veeqo T-Shirt - Small, Black	2019-VeeT-SB	S	Bl	10	25	\$ 10.00	\$ 10.00	\$ 20.00	2	1	0	29
2019 Veeqo T-Shirt - Medium, Black	2019-VeeT-MB	M	Bl	12	25	\$ 10.00	\$ 10.00	\$ 20.00	1	0	0	27
2019 Veeqo T-Shirt - Large, Black	2019-VeeT-LB	L	Bl	26	25	\$ 10.00	\$ 10.00	\$ 20.00	1	1	0	46
2018 Veeqo T-Shirt - Small, White	2018-VeeT-SW	S	Wh	24	25	\$ 12.00	\$ 10.00	\$ 22.00	1	1	25	24
2018 Veeqo T-Shirt - Medium, White	2018-VeeT-MW	M	Wh	22	25	\$ 12.00	\$ 10.00	\$ 22.00	2	0	25	6
2018 Veeqo T-Shirt - Large, White	2018-VeeT-LW	L	Wh	21	25	\$ 12.00	\$ 10.00	\$ 22.00	0	0	26	21



Meaning you can easily see as soon as new inventory needs ordering. And helping to keep the cycle of inventory tracking and management as seamless as possible.

The key thing is to keep the information up-to-date.

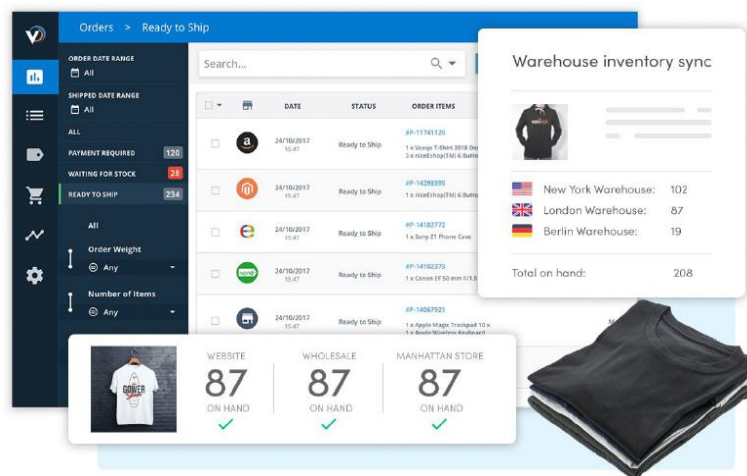
This means committing to (at least) daily updates and housekeeping if you choose to utilize this method of inventory tracking. Do this, and you should be able to manage and track multichannel inventory a lot better than with siloed data.

Having said this, sustainable and manageable ecommerce growth will likely need a more automated solution.

Inventory tracking via automated system

An automated inventory tracker effectively does the work of a spreadsheet, but without the manual input needed.

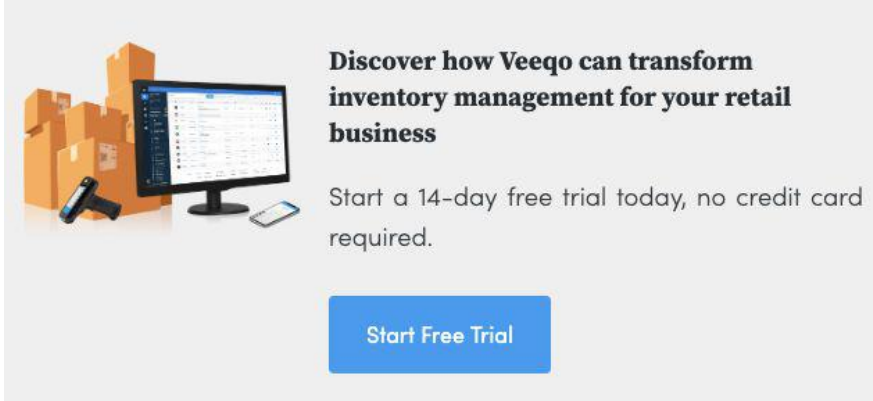
It would connect to all sales channels together, and sync one live inventory figure between them all. Meaning as soon as a sale is made **anywhere**, inventory levels are updated **everywhere** else in real-time:



Exact functionality will depend on the specific system being used.

But quality ones, such as Veeqo, will also be able to do things like:

- Manage purchase orders to stay on top of incoming inventory.
- Sync across multiple warehouses, locations and channels.
- Sync data in real-time - not hourly or daily.
- Handle orders, shipping and returns in the same platform.
- Control exactly how much inventory shows for each sales channel.
- Combine products together to sell in kits and bundles.



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Choosing an inventory management system can be a big job. And one that either positively or negatively affects your business for years to come.

We talk more about this in the final chapter of this guide.

Automated vs manual inventory tracking

There are pros and cons to both spreadsheet and automated inventory tracking methods. Let's have a look through a few of the highlights:

Spreadsheet pros

- Most of us know how to use and edit a spreadsheet.
- Many templates available to help you create your own.
- Cheap and cost-effective option for start-ups.
- Can be updated fairly quickly.

Spreadsheet cons

- Inputting data and checking accuracy is **hugely** time-consuming.
- Spreadsheets (and your sales channels) won't be updated automatically as stock levels change, meaning you can easily [oversell](#) without realizing.
- Different employees may edit and update spreadsheets without making others aware of changes, causing confusion and disrupting the order process.

Automated system pros

- Saves time by near-eliminating manual data entry.
- Frees up resources that can be re-directed towards company growth.
- Brings a consistent, scalable experience for customers across every sales channel.
- New sales channels can be easily opened up without adding to workload.
- Many systems offer an extensive portfolio of features beyond simple inventory tracking – such as order management, picking and packing, etc.

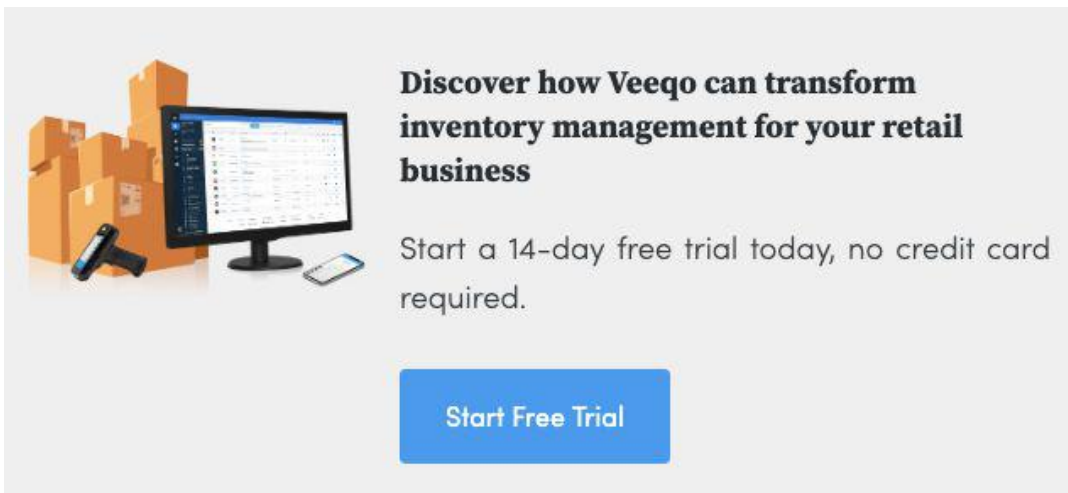
Automated system cons

- Pricing must be factored into your current financial plan.
- Staff may require training (though minimal, depending on the system used).

Overall, spreadsheets may be a viable short term solution for startups dealing with low order numbers and a small product catalogue. In today's digital age, however, it's generally accepted to not be a scalable option for most ecommerce businesses.

An automated system typically requires some level of monetary investment. But it's one that will prove its worth several times over when it comes to savings in both time and resources.

This chapter should hopefully have given you some clear insights into how to keep track of inventory across your retail operation. Next, we'll move on to some best practices for inventory accounting.



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Chapter 9: Inventory Accounting

[Read this chapter online here](#)

On-hand inventory isn't simply stock that hasn't sold yet - it's a business asset, and must legally be treated as such. Inventory accounting is the practice of correctly valuing this business asset, so it can be properly documented in end-of-year financial records.

This chapter covers the basics of inventory accounting for greater understanding of inventory management as a whole. But it is highly recommended to seek the services of a professional accountant and/or bookkeeper when it comes to submitting any financial documents.

What is inventory accounting?

Inventory accounting is all about how a business would show the stock it holds in its financial records - balance sheets, profit & loss (P&L) reports, etc. This is typically more complex than it sounds as inventory is often a 'live figure' that's constantly changing as sales are made and more stock purchased.

In retail, this can cover three types of inventory or production phases:

1. Raw materials.
2. In-progress items.
3. Finished products ready for sale.

Your on-hand, unsold inventory needs to be included as an asset in end-of-year financial records. Meaning the crux of the matter in all this is to correctly track both the cost of any inventory sold **and** place an **accurate value** on the unsold inventory being held at the end of each accounting period.

Any increase or decrease in the value of goods affects your inventory value figure. This then, in turn, affects the value of your overall business.

Inventory accounting key terms

There are two key terms retailers need to be aware of when it comes to inventory accounting:

1. **Cost of goods sold (COGS)**. The direct costs of producing any goods sold by a company.
2. **Ending inventory (EI)**. The value of any *unsold*, on-hand inventory at the end of an accounting period.

Let's take a deeper look at each of these...

1) Cost of goods sold (COGS)

Cost of goods sold (COGS) is a core element of measuring a retail business's profitability and inventory value.

As the name suggests, COGS refers to the amount it cost a business to produce the products it sold, including everything that went into it - materials, labor, tools used, etc. But (crucially) without factoring in costs not directly tied to the production process - like shipping, advertising and sales force costs, etc.

As a result, COGS helps you determine the amount of gross profit made in one or more sales.

For example:

If you sell an item valued at \$50 and the COGS is \$30, your company has achieved a gross profit of \$20. It's a simple formula, though it can become more complex if manufacturing your own products.

All inventory sold will be listed under the COGS account in your income statement at the end of each business year.

Calculating COGS

To calculate *cost of goods sold (COGS)* for an accounting period, you'll need to:

1. Determine what costs can be associated with the production process of your specific products - like labor, raw materials, tools, etc.
2. Take the cost of beginning inventory (BI).
3. Add the cost of newly purchased inventory during the period in question.
4. Subtract leftover, unsold inventory at the end of the accounting period.



2) Ending inventory (EI)

It's highly likely that a business will not sell the entirety of its inventory at the end of each accounting period. Meaning any on-hand, unsold stock becomes an asset that must be **valued** and included in financial statements.

This is referred to as *ending inventory (EI)*, and is actually quite simple at first glance.

1. Take the beginning inventory (the units carried over from the end of the previous financial period).
2. Add any newly purchased inventory throughout the accounting period.
3. Subtract any units sold.
4. And this leaves the final inventory figure to be included as a company asset.



However:

We need to **assign an actual value** to the unsold inventory figure (i.e. how much this company asset is worth in monetary terms). And this is where it can become a lot more complicated.

This is because:

- Numerous purchases of new stock and raw materials are usually made during a typical 12-month accounting period.
- Each purchase may have come at a different cost per unit.
- Sales are also being made at the same time, turning inventory into cash.

So which cost per unit figure do you use to value unsold inventory when there are so many moving parts in a typical accounting period?

This is where inventory valuation methods come into play.

Inventory valuation methods

Sticking to a **specific method for inventory valuation** is *critical* for consistent, accurate and (most importantly) legally acceptable financial statements.

There are three main valuation methods retail companies use for inventory accounting:

1. First In, First Out (FIFO).
2. Last In, First Out (LIFO).
3. Average Cost Method.

You'll just need to **stipulate which one is being used** when submitting financial records and accounts.

1) FIFO

FIFO is a useful inventory management technique to actually use in the handling of stock in your warehouse. But it's also a method of valuing unsold inventory.

It assumes inventory that was purchased **first**, is also the first to be sold. So the oldest on-hand inventory available is what will be used to fulfill an order.

There are a number of benefits to the FIFO method. Primarily, companies selling perishable goods (food and drinks) face less risk of their products spoiling or crossing best-before sale date. They can establish a smooth supply chain and ensure their clients receive the freshest items in their inventory.

All products received and sold must be recorded individually when using the FIFO accounting method. It's possible that the FIFO system can lead businesses to under or overestimate the value of inventory in the future, due to market changes down the line.

2) LIFO

The LIFO approach works on the assumption that the most recent products added to your inventory are the first ones to be sold first.

This system works well for retail businesses specializing in non-perishable goods or those with a low risk of obsolescence. It can also increase COGS and lessen net profit (therefore reducing annual tax liability) if more recently purchased goods are more expensive.

Note: LIFO is an acceptable inventory accounting method in the US only.

3) Average Cost

Average Cost (or weighted-average) inventory accounting method is totally different to the previous two.

This applies to businesses that choose *not* to track cost per inventory unit for each separate purchase delivery. Instead, inventory value is based on the **average cost of items** throughout the relevant period.

You can work out the average cost by simply dividing the overall cost of products for sale by the total number in the inventory.

Using inventory accounting software

Inventory accounting can be a time-intensive, frustrating process for retail businesses - especially small or independent teams.

But it doesn't have to be a rush of spreadsheets and paper receipts the week before every tax deadline. There's reliable accounting software available to help automate and digitize as much as possible, the main two being:

1. [Xero](#)
2. [QuickBooks](#)

These programs won't 'do your accounts for you'. But they will make it much simpler to organize and present come the end of tax year.

Both Xero and QuickBooks do also have tools available to help with the inventory side of accounting.

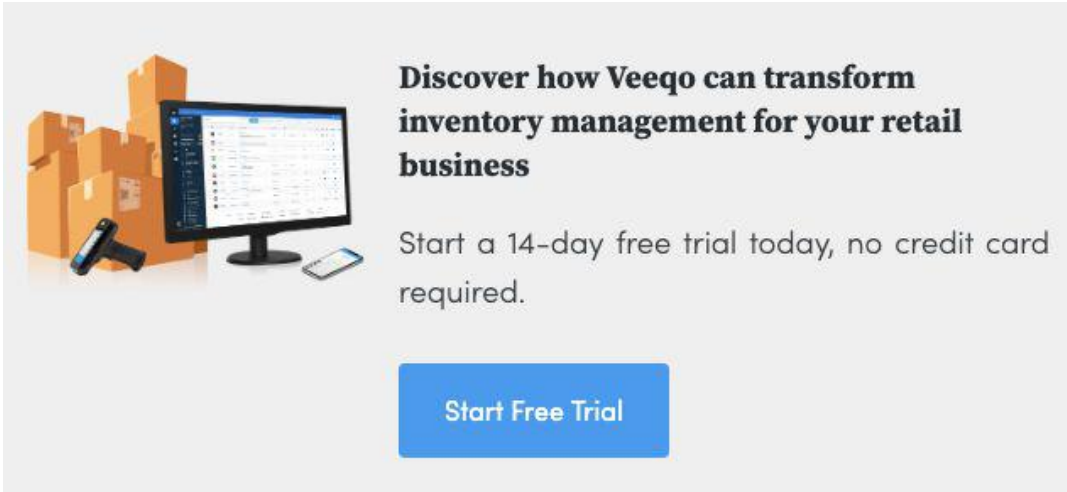
However:

They are **accounting softwares** at heart. Meaning the inventory management functionality within them is relatively basic and underdeveloped.

So for growing retail and ecommerce businesses, it's recommended to:

1. Utilize a high-quality [inventory management software](#) as master of stock.
2. Ensure this software has a direct [Xero integration](#) or [QuickBooks integration](#) to push relevant data across.

This leaves you with the best of both worlds - two high-quality softwares automating as much of your inventory and accounting processes as possible.



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Hopefully, this chapter has given you a good insight into the best inventory accounting practices.

That being said, this can still be a hugely complicated task for retailers. So we highly recommend employing the services of a professional bookkeeper and/or chartered accountant when it comes to compiling financial records and submitting tax returns.

In our next and final chapter, we'll take a look at inventory management systems - including how to determine when it's time to start using an automated system, and choosing the best one for your company.

Chapter 10: Choosing An Inventory Management System

[Read this chapter online here](#)

As we've seen throughout this guide, inventory management is a phenomenally complex aspect of running a retail business. An inventory management system can simplify this entire process by automating many of the manual tasks and calculations involved.

In this final chapter, we discuss what exactly an inventory management system is, some of the features to look out for, and also how to choose the right one for your business.

What is an inventory management system?

An inventory management system is a piece of software used to track inventory items in a business, and oversee all the processes involved in stock optimization. Any system's bottom line goal is to ensure the **right inventory** is available, in the **right amounts**, at the **right time** - with as few manual tasks involved as possible.

Benefits of using an inventory system

Any business selling and storing physical goods *must* track inventory in one way or another. Otherwise, items would be in complete chaos with stock consistency and fulfillment made almost impossible.

Tracking can be done via pen & paper or spreadsheets. But using an automated, computerized system has many benefits:

- Less time wasted on manual tasks.
- More consistent customer experience.
- Stock levels updated in real-time.
- Reduced labor costs.
- More insightful analytics and reports.
- Faster fulfillment from being better organized.
- Less cash wasted on unnecessary inventory and storage.
- Company becomes more easily scalable.

Overall, automated inventory management systems are powerful tools for retail businesses.

In the short term, they help overcome the operational challenges associated with modern day multichannel and omnichannel ecommerce. While in the long term, they make growth easier by reducing the reliance on manual processes and individual people.

Key inventory management system features

It's important to note that systems can be very different from one another. So when choosing an inventory management system, retailers should ensure that all the necessary features are included.

Here's an overview of what to look out for:

- **Live syncing.** A live, central stock figure is kept in one system, and accurately reflected across all sales channels and warehouses in real-time.
- **Forecasting.** Past sales data can be used to forecast demand and plan for upcoming inventory requirements.
- **Re-ordering.** Purchase orders can be created and managed so stock can be replenished quickly and easily.
- **Suppliers.** All suppliers and vendors can be organized in one system, and easily contacted if purchase orders need creating, changing or chasing up.
- **Barcode scanning.** System is compatible with barcode scanning to enable easier tracking and identification of products.
- **Stock notifications.** Can set up notifications and alerts to signify when a product has hit its pre-defined reorder point and needs replenishing.
- **Reports.** Provides insightful data and analysis on sales, products and warehouses in order to make better inventory decisions going forward.
- **Returns processing.** Return orders can be handled with returned inventory easily written-off or added back into stock.
- **Multiple warehouses.** Manage stock across several warehouses, stores and locations in one system.
- **Integrations.** Connect the system to all necessary sales channels, POS systems, shipping carriers, accounting softwares, etc. - and/or can build desired integrations via an open API.
- **Cycle counts.** Assigns weekly inventory counting tasks to your warehouse team so stock is perpetually kept up-to-date with minimal discrepancies.
- **Automations & rules.** Stock rules can be created to show different available amounts for individual sales channels and locations.
- **Bundles.** Products can be grouped together to sell in kits and bundles while still maintaining an accurate central inventory figure.

Additional features for retailers

Managing a retail business isn't *all* about inventory. There are many other aspects that companies might need to handle in order to run a smooth operation.

So when choosing an inventory management system, it's important to also consider what **additional features** it has beyond just stock control.

It's not unreasonable to expect a system to be able to handle:

- **Order management.** Automatically importing orders from all your sales channels to easily view and edit in one centralized place.
- **Shipping & fulfillment.** Directly integrating with shipping carriers to view quotes, print labels and ship orders.
- **Picking & packing.** Creating and organizing picking lists and packing tasks via either paper printouts or digital scanner.
- **Warehouse management.** Organizing warehouse inventory, creating automations and handling tasks like new stock put away, pick & pack, physical counts, etc.
- **Returns management.** Giving all your teams one place to handle return tasks from start to finish - like creating returns, booking back into stock and processing refunds.
- **Wholesale orders.** Creating and issuing invoices, taking phone orders, processing payments, and then actually fulfilling and shipping B2B orders.
- **Accounting.** Either in the system itself, or by integrating directly with specific accounting tools to push sales and inventory data across.

These are all key operational tasks when it comes to running a retail and/or ecommerce company. And they will all likely need some kind of software to handle them in a **scalable way** and to an **acceptable standard** for customers.

It's important to note that having as few systems in place to manage all these operational tasks can be a huge benefit.

Choosing an inventory management system

Here are the key points to take into consideration when choosing an inventory management system:

- **Timing.** There are several signs you've outgrown a standard inventory tracker and require a more automated system. These include things like constant overselling, inventory errors and spending more time on manual operational tasks than on growth.
- **Integrations.** Create a list of must-have integrations, e.g. ecommerce platform, marketplace, shipping, POS, 3PL, etc. It's important that any new inventory system integrates with these **directly** (and doesn't require an additional app or piece of software managed by another company). Failing this, is there an open API to create new integrations?
- **Features.** Create a list of must-have features from the ones we've discussed above. Do you need/want your new inventory system to be able to also ship orders or enable digital picking? Do you do a lot of wholesale orders and need this managed well? Do you manufacture your own products and need a system to handle raw material types of inventory?

- **Ease-of-use.** It's possible that you'll need some less technically-minded staff members to use your inventory system. So is it relatively easy for these people to learn and understand the software's UI?
- **Support.** You'll likely need support getting set up and to receive help quickly if something goes wrong. Does the system you're looking at offer support during your typical working hours? Does this include phone, chat or just email support? And what's the quality rated like online?
- **Development.** Any software used is going to be powering a critical part of your business, so finding one driven by innovation and built on the latest technology is critical. Is the software you're looking at being actively developed and improved on a regular basis? How often are new features being released and bugs being fixed?

Every business is slightly different. So take these things into consideration when choosing an inventory management system, but also do it within the context of what's necessary for your individual business needs.

Inventory system options

In this section, we'll look at some of the popular inventory management system options for online retailers.

Veeqo

Veeqo is an all-in-one system to help retailers manage multichannel orders, inventory and shipping from a single platform. It also has a barcode scanner to improve speed and order accuracy in the warehouse when it comes to tasks like picking, receiving new stock and inventory counts.

DATE	STATUS	ORDER ITEMS	CUSTOMER
24/10/2017 15:47	Ready to Ship	#P-11741125 1 x Vespa T-Shirt 2018 Design 3 x Acer Aspire 5	Jodie Luntley GB
24/10/2017 15:47	Ready to Ship	#P-14288355 1 x Acer Aspire 5	Phil Reynolds US
24/10/2017 15:47	Ready to Ship	#P-14182772 1 x Easy 21 Phone Case	Marc Greststone GB
24/10/2017 15:47	Ready to Ship	#P-14102373 1 x Canon EF 50mm F1.8 EF STM for Canon	Jodie Gouris GB
24/10/2017 15:47	Ready to Ship	#P-14957921 1 x Apple Magic Trackpad 13x 1 x Apple Wireless Keyboard	Marc Warren GB
24/10/2017 15:47	Ready to Ship	#P-13856430 1 x Sony C1 Phone Case	Calvin Hughes US
24/10/2017 15:47	Ready to Ship	#P-10040124 3 x Galaxy S6 Edge	Vera Handle GB
24/10/2017 15:47	Ready to Ship	#P-14102304 1 x Canon EF 50mm F1.8 EF STM for Canon	Matthew All GB


Built-in features: Orders, inventory, purchase orders, shipping, digital pick & pack, warehouse management, wholesale, returns.

Direct integrations: Strong, direct integrations with a range of major sales channels, shipping carriers, 3PLs, POS systems, accounting softwares.

Pricing: From \$156 per month

Capterra score: 4.5/5

Trustpilot score: 4.7/5



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Brightpearl

Brightpearl's system handles orders and inventory for multichannel retailers and wholesalers. It also has a built-in accountancy module, but needs third-party software to manage shipping and warehousing.

Order ID	Reference	Status	Tax date	Contact	Amount	Paid	Channel	Delivery Postcode	Actions
5822	200001440676602	New Commerce order	27 Aug 2015	Tanja Milne	£66.00	£66.00	ebay	DH3 0PH	Actions
5821	2000014406763658	Back order	27 Aug 2015	Sirve Bermet	£108.00	£108.00	ebay	ME19 4DT	Actions
5820	2000014404578912	Back order	27 Aug 2015	Isabelle Koo	£62.40	£62.40	amazon	PL9 8RD	Actions
5819	2000014406764165	New Commerce order	27 Aug 2015	Ellen Kiv	£62.40	£62.40	Shopify	NV15 5DB	Actions
5818	2000014312240446	Ready to ship	27 Aug 2015	Edward Stejan	£66.00	£66.00	Big Commerce	G40 4BH	Actions
5817	2000014012089746	Tracked	27 Aug 2015	Nina Yakin	£62.40	£62.40	ebay	ST4 1EB	Actions
5816	2000014414578319	Tracked	27 Aug 2015	Destiny Madem	£84.00	£84.00	amazon	CM4 1DQ	Actions
5815	2000014321516894	Tracked	27 Aug 2015	Yun Paletta	£66.00	£66.00	Magento	LS1 5HY	Actions
5814	2000014496723658	New Commerce order	27 Aug 2015	Doug Mouse	£62.40	£62.40	Magento	G75 8YR	Actions
5813	2000014470999500	New Commerce order	27 Aug 2015	Patricia Lander	£60.00	£60.00	amazon	BS14 3AF	Actions

Built-in features: Orders, inventory, purchase orders, wholesale, returns, accounting.

Direct integrations: A range of sales channels, 3PLs, POS systems, accounting softwares. Will need to connect to third-party shipping software and WMS systems in order to handle these tasks.

Pricing: Unspecified monthly cost + implementation fee

Capterra score: 4.3/5

Trustpilot score: 4.8/5 (Excellent)

Tradegecko

Tradegecko is an inventory and order management platform for multichannel retailers. It can also handle manufacturing and wholesale orders, but requires third-party integrations for functions like shipping and warehousing.

ORDER #	COMPANY NAME	STATUS	TOTAL	SHIP DATE	CREATED	LAST UPDATED
SO0359	Snapple	FINALIZED	\$24.08	Aug 31 2016	Aug 10 2016	Aug 31 2016
SO0364	Capcom	FULFILLED	\$25.99	Aug 31 2016	Aug 23 2016	Aug 30 2016
SO0360	Activision	ACTIVE	\$566.03	Aug 11 2016	Aug 11 2016	Aug 11 2016
SO0357	Snapple	DRAFT	\$1,190.38	Jul 31 2016	Jul 5 2016	Jul 31 2016
SO0358	Asus	FINALIZED	\$781.10	Jun 20 2016	Jul 20 2016	Jul 27 2016
SO0356	Chechen	ACTIVE	\$41.15	Jun 20 2016	Jun 20 2016	Jun 30 2016
SO0355	British Govt	FULFILLED	\$214.00	Jun 17 2016	Jun 15 2016	Jun 17 2016
SO0352	Snapple	ACTIVE	\$928.10	Jun 7 2016	Jun 7 2016	Jun 7 2016
SO0350	Diamond Dogs	FINALIZED	\$21.40	Jun 2 2016	Jun 2 2016	Jun 2 2016
SO0349	Capcom	DRAFT	\$2,339.10	Jun 2 2016	Jun 2 2016	Jun 2 2016
SO0348	Snapple	FULFILLED	\$650.03	Jun 2 2016	Jun 2 2016	Jun 2 2016
SO0325	Snapple	DRAFT	\$417.30	Jun 1 2016	Mar 3 2016	Jun 1 2016
SO0346	Snapple	ACTIVE	\$133.75	Jun 1 2016	May 27 2016	Jun 1 2016
SO0347	Corazon	FULFILLED	\$1,476.60	Jun 1 2016	May 27 2016	May 27 2016

Built-in features: Orders, inventory, purchase orders, wholesale, manufacturing.

Integrations: A range of sales channels, 3PLs, POS systems, accounting softwares. Will need to connect to third-party shipping software and WMS systems in order to handle these tasks.

Pricing: From \$39 per month

Capterra score: 4.4/5

Trustpilot score: Unrated

Linnworks

Linnworks is a system to manage inventory, orders and shipping in one place. It used to be a desktop software, but has recently started being transitioned into a cloud-based system like the others mentioned in this guide.

IMAGE	SKU	TITLE	UNITS	IN STOCK	AVAILABLE	CATEGORY
	562793	Genuine Ford Fiesta MK VI Front Suspension Arm Roll Bar Sway Bar 2068476	4	0	4	Default
	1072246	Genuine Ford Focus MK1 Motorcraft Air Filter Element 1996 - 2005 1072246	11	0	11	Air Intake & Fuel Delivery/Air Filters
	1722164	Genuine Ford Engine Mount 1722164	6	0	6	Engines & Engine Parts/EngineMounts
	1065472	Genuine Ford Focus MK2 G-Wear Exhaust Pipe Mounting Bracket 1065472	13	0	13	Exhaust/Partic/Clamps, Flanges & Hangers
	4918689	Genuine Ford Transit MK VI Wiring Clamp Retainer Spring 4918689	3	0	3	Electrical & Lighting/Other Electrical Components
	1679779	Genuine Ford Parking Distance Control Retainer Bracket 1679779	17	0	17	GPS, Audio & In-Car Technology/Parking Sensor Kits
	7284774	Genuine Ford Mondeo MK1 MK1.1 Rear Suspension Bump Stop 7284774	6	0	6	Steering & Suspension/Bearings, Bushings & Bush Kits
	1191976	Genuine Ford Timing Cam Belt 1191976	2	0	2	Engines & Engine Parts/Belts
	5042832	Genuine Ford Front Bumper GPS Impact Beam 5042832	6	0	6	Exterior & Body Parts/Bumpers & Rubbing Strips

Built-in features: Orders, inventory, shipping, product listing.

Integrations: A variety of sales channels and shipping carriers. Will need third-party software and apps for WMS and accounting software connections.

Pricing: From \$150 per month

Capterra score: 4.0/5

Trustpilot score: 3.9/5

Stitch Labs

Stitch Labs provide order and inventory management for multichannel retailers that have grown to a size to be able to justify the relatively high starting price. There's also a wholesale element, but you'll need third-party software to manage shipping and warehouses.

Order 1001

Awesome Shirt Store
489 Clementina St.
San Francisco, CA 94103
(555) 543-2131
support@shirtstore.com

Order No. 1001
Date: May 17, 2017
Reference No. 1550-23
Warehouse SF Warehouse
Imported from Shopify
Total \$122.87

To: Doris Kong, 555-369-2403
Billing: 100 Main Street, San Francisco, CA 94114
Shipping: 100 Main Street, San Francisco, CA 94114

Description	Available	Qty	Price	Tax	Total
Mens Basic T-Shirt (Black, L)	131	1	17.90	1.34	\$19.24
Mens Basic T-Shirt (Blue, L)	87	1	17.90	1.34	\$19.24
Mens Basic T-Shirt (Green, L)	102	1	17.90	1.34	\$19.24

Line Items	3
Units Ordered	3
Subtotal	53.70
Tax	4.02

Built-in features: Orders, inventory, purchases orders, wholesale.

Integrations: A range of sales channels, 3PLs, POS systems, accounting softwares. Will need to connect to third-party shipping software and WMS systems in order to handle these tasks.

Pricing: From \$799 per month

Capterra score: 4.5/5

Trustpilot score: 3.6/5

This chapter concludes our guide on the subject of inventory management. These 10 chapters should give you all the information necessary to manage your inventory with reduced costs and minimal manual practices.

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