WAREHOUSE MANAGEMENT
A COMPLETE GUIDE FOR RETAILERS
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INTRODUCTION

A solid warehouse operation is at the foundation of every successful retail brand. It’s an area that could either destroy your business. Or propel it into something customers trust time and time again.

But getting it right is no simple task. That’s why we put together this complete guide to warehouse management. We cover everything needed to run your warehouse like clockwork – from how to arrange it, to best picking and packing processes and even choosing an effective Warehouse Management System.

BigCommerce’s Omnichannel Retail Report found that: 80% of respondents ranked shipping cost and speed to be “extremely influential” in where they shopped. With price being deemed the only purchasing factor more persuasive.

Meaning the need for effective warehouse management is more important than ever.

Click here to view this blog post on our website
WHAT IS WAREHOUSE MANAGEMENT?

Warehouse management is the act of organising and controlling everything within your warehouse – and making sure it all runs in the most optimal way possible.

This includes:

- Arranging the warehouse and its inventory.
- Having and maintaining the appropriate equipment.
- Managing new stock coming into the facility.
- Picking, packing and shipping orders.
- Tracking and improving overall warehouse performance.
- Most high growth retailers would use automation tools (like some form of Warehouse Management System) to control this part of their supply chain.

However, there are many aspects that can and need to be considered from a manual standpoint. And so we cover this entirely in this guide.
According to MetaPack’s 2015 State of Ecommerce Delivery Report, 66% of shoppers bought goods from one retailer in preference to another because the delivery services on offer were more appealing. And Volume Five of that same report claims that 63% say delivery speed is important when searching for and selecting products, with 77% willing to pay for expedited shipping.

And 96% of the same shoppers said a positive delivery experience would encourage them to shop with a retailer again.

The UPS Pulse of the Online Shopper 2017 reports that 44% of consumers say speed of delivery is a reason they choose to shop at

Temando’s 2017 State of Shipping in Commerce Report claims that 54% of UK shoppers would buy from a competitor when the delivery service they seek isn’t provided – 10% more than US buyers.
ARRANGING YOUR WAREHOUSE

Probably the most important first step in optimising your warehouse operations is making sure you have everything in there arranged in the most efficient way. Here’s what you need to think about:

GENERAL WAREHOUSE LAYOUT

Planning the layout of your warehouse is centred on balancing two things: Providing enough storage space for your inventory; While still having enough working space for staff to move around and complete their tasks. And this generally requires (although it depends on individual business requirements) having a space designed to house the following areas:

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.

Using a grid system makes planning this a lot easier. 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.
Effective warehouse management can’t be done without set location names for stock that have been clearly labelled. Your team should be able to look at your warehouse system and see exactly where any product is located.

Practicality is king here. Sticking with simple alphanumeric combinations makes it easier to understand and decipher for pickers trying to reach that site location. For example, you can start by simply including labels for specific rows, shelves and then exact bin locations:

<table>
<thead>
<tr>
<th>Row</th>
<th>Shelf</th>
<th>Bin</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>A</td>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>A</td>
<td>B</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>1</td>
</tr>
</tbody>
</table>

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.
Bigger warehouses with more rows may need to add a little more detail:

<table>
<thead>
<tr>
<th>Row</th>
<th>Shelf</th>
<th>Bin</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>A1</td>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td>A2</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>A2</td>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td>B1</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>B1</td>
<td>B</td>
<td>2</td>
</tr>
</tbody>
</table>

And then even larger warehouses may even need to be split up into different areas for each row and the facility as a whole:

<table>
<thead>
<tr>
<th>Warehouse Area</th>
<th>Row</th>
<th>Row Area</th>
<th>Shelf</th>
<th>Bin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 1</td>
<td>A1</td>
<td>RA1</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>Area 1</td>
<td>A2</td>
<td>RA2</td>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td>Area 1</td>
<td>B1</td>
<td>RA3</td>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td>Area 2</td>
<td>A1</td>
<td>RA1</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>Area 2</td>
<td>A2</td>
<td>RA2</td>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td>Area 2</td>
<td>B1</td>
<td>RA3</td>
<td>C</td>
<td>3</td>
</tr>
</tbody>
</table>

How detailed you go with labelling depends on the size and complexity of your facility or site, complexity of your warehouse operations and a range of other factors. But in short: The bigger your facility, the more in-depth you’ll need to go with your location labelling to achieve optimal warehouse management.
So at this point we have a warehouse that’s laid out and labelled in the most optimal way for your business. But this now raises the question: How do you determine the exact location each product should be stored? The answer: Keep better selling products closer to the packing desk.

Research we conducted on over 20 Veeqo retailers 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. Tools like ABC Analysis tend to be used more in inventory management. But this can provide some handy information when it comes to this part of warehouse management too. Divide 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:

![Inventory Arrangement Diagram]
Some small and lightweight items may even be sold frequently enough to warrant being stored on shelves above the packing desks themselves. This means packers can quickly add these into relevant orders and pickers can focus on bigger items. 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.

DON’T BE AFRAID TO REARRANGE

A small final point in this warehouse management section is this: Don’t be afraid to rearrange your warehouse. Yes – it can take time and resources to implement and may seem like more hassle than it’s worth. But an optimally arranged warehouse can save bags of time overall and severely reduce costs for entirety of your supply chain management. While inefficiencies can seriously hamper growth. So regularly evaluate and – if necessary – rearrange or upgrade. For example, it may be that your best selling products in summer become your worst selling come winter, and vice versa. Or you sell more of specific products on Valentine’s Day or other key retail dates through the year. So it makes sense to rearrange these products in line with this when the time comes – moving some closer to the packing desks and others farther away.
RECEIVING AND MANAGING NEW STOCK

Stock doesn’t just appear out of nowhere. And so a critical part of warehouse management is being able to receive, unpack, put away and book in new inventory as efficiently as possible. The faster this happens, the sooner that stock becomes available for sale.

And what’s more, any errors or inefficiencies in this process will then cascade through the remainder of the entire supply chain. Here’s what you need to consider:

- **Have appropriate space**
  There needs to be enough space in your receiving area to both temporarily house newly delivered stock without risk of damage and for your team to perform the necessary tasks with it.

- **Record everything**
  It’s a good idea to record relevant details to fall back on if there are any problems – e.g. exact timestamps of when new stock arrives and is put away.

- **Have assigned workers**
  New stock needs to be dealt with as soon as possible – not left to build up. Make sure it’s clearly communicated whose job it is to do this.

- **Put away**
  Add any necessary labelling or barcodes before physically putting the stock away to be stored in its relevant warehouse place.

- **Inspect carefully**
  Make sure all the stock levels are correctly updated on each sales channel or inventory management system – meaning it’s live and ready for purchase.

RECEIVING VIA DIGITAL MOBILE SCANNER

It’s worth noting that a mobile scanner device can make this whole booking in process much quicker and more accurate.

Rather than needing to sit at a computer and individually find and update each product, you’d simply:

1. Scan a product or purchase order
2. Update inventory levels on the mobile screen - making the inventory available for sale
3. Put it away in the warehouse - making it a much easier and quicker process
Being able to fulfil orders quickly and accurately is an absolute staple of good warehouse management. After all, it’s pretty much the entire reason for the warehouse existing in the first place. Here’s what you need to think about when it comes to picking, packing, shipping and your distribution strategy in general:

Picking may seem like a simple concept at first. And it is – when you only have a few orders to deal with. But this becomes a much different story once you’re dealing with hundreds (or even thousands) of multiple item orders each day. In fact:

Research we recently conducted on 20 Veeqo retailers found that 70% of labour time when processing an order is spent on just picking the products. And 60% of a picker’s time is taken up by simply walking around the warehouse.

So getting a solid picking system in place can have a major impact on overall distribution productivity.

SEE ALSO: Warehouse Order Picking Systems: Everything You Need to Know
These are the **four main picking systems** or methods used by medium to large retailers:

**Single order**

This is the most basic picking method – typically only used by those just starting out. Quite simply, a picker will pick one order at a time in its entirety before moving on to the next.

**Best for:** Retailers just starting out who aren’t yet big enough to gain the benefits of more complex picking methods.

**Avoid if:** You ship more than 20 customer orders a day (or plan to in the near future).

**Batch picking**

The picker is assigned a batch consisting of a number of orders, picks them all in one go and then returns to a packing desk. The picker will then get assigned a new batch to pick. The number of orders allocated to each batch is generally between 10 and 30. But this really depends on the physical size of your products and average order size.

**Best for:** High number of orders with single or low number of products per order.

**Avoid if:** You have a high number of products per order (or are aiming for this in the near future).

**Zone picking**

This sees each picker assigned their own area (or zone) of the warehouse with them only picking products stored in that specific zone. An order is passed through all areas to have any required items added to it by pickers in that zone before being returned to a packing desk. Great for preventing multiple pickers getting in each other’s way, but it can also create a slight delay in shipping as each order needs to be passed around the warehouse.

**Best for:** Retailers typically shipping a high volume of multiple item orders.

**Avoid if:** You typically ship single or low item orders or have very few pickers.

**Wave picking**

Similar to zone, but all zones pick at the same time. The various items are picked in the according zone and are then given to a packer who will consolidate all the separate picks for each order. This is faster than zone, but labour costs increase due to the packer needing to spend more time combining orders at the end before needing to be shipped.

**Best for:** Retailers typically shipping a high volume of multiple item orders and still wanting to maintain a super-fast process.

**Avoid if:** You typically ship single or low item orders, have very few pickers or cost is more important than speed of dispatch.
Here’s a quick summary of all four methods:

<table>
<thead>
<tr>
<th>Picking Method</th>
<th>Order Volume</th>
<th>Items per Order</th>
<th>Best For</th>
<th>Setup Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single order</td>
<td>Low</td>
<td>Med-High</td>
<td>Startups</td>
<td>£</td>
</tr>
<tr>
<td>Batch</td>
<td>Low-High</td>
<td>Low-Mod</td>
<td>High volume of single item orders</td>
<td>£££</td>
</tr>
<tr>
<td>Zone</td>
<td>High</td>
<td>Low-Mod</td>
<td>High volume with a lot of products per order</td>
<td>££££</td>
</tr>
<tr>
<td>Wave</td>
<td>Med-High</td>
<td>Med-High</td>
<td>High volume with multiple items per order</td>
<td>£££££</td>
</tr>
</tbody>
</table>

OPTIMISE YOUR PACKING PROCESS

There’s more to packing than just throwing items in a box as quickly as possible. It’s an opportunity to make completely sure that you’re sending the right products to the right customers and in the most efficient way. Here’s what you need to consider:

Box size: More and more shipping companies are incorporating package dimensions into their pricing – rather than it being based solely on weight. Meaning box sizes could be having a direct impact on costs.

However, having 50 different box size options is a great way to overwhelm packers and severely slow down warehouse operations. So there’s a balance that needs to be struck here. Of course, it depends on your individual business needs. If you know every order is the same physical size then having one box size makes sense – and it’s a lot easier for the packer. But a typical retailer will usually do best with around 3-5 size options. This keeps things manageable for packers while still allowing room to minimise courier costs.
Packaging material

Another element to the packing process is choosing the most appropriate packaging material. This is all about striking a balance between keeping the goods protected during transit, minimising the overall weight of the package (and therefore courier costs) and keeping the cost of the packaging material itself down.

Obviously, shipping a Fabergé egg is going to warrant a better (and more expensive) packaging material than if shipping a book. So it’s worth analysing your product catalogue (and track record of delivering damaged items) to determine the range of packaging materials you need to have available.

Here are some of the most common ones:

- **Air pillow**: Plastic bag filled with air, very lightweight and good protection, but require work to inflate. 90% protection rating.
- **Shredded wool**: Loose fill wool which is lightweight but limited shock protection. 60% protection rating.
- **Packing peanuts**: Biodegradable or recycled foam peanuts. 90% protection rating.
- **Bubble wrap**: Two layers wrapped around products using sellotape to hold. 75% protection rating.
- **Shredded paper**: Cheap and lightweight, but limited protection. 50% protection rating.
- **Crunched paper**: From paper dispenser and crunched by packer. Limited protection. 50% protection rating.
MEASURING WAREHOUSE PERFORMANCE

Tracking performance and working to improve it is essential when it comes to all parts of supply chain management. And it’s no different when it comes to warehouse management. In general, this is all about two things:

1. Accuracy of fulfilling customer orders (without damage).
2. Speed of fulfilling customer orders (without damage).

SEE ALSO: 7 Essential Warehouse KPIs to Set Your Operations Manager
The main **KPIs** you want to be tracking to measure the success of your warehouse management process:

### Receiving efficiency

This is quite simply how long it takes for your team to complete the receiving and putting away of a newly delivered purchase order. It’s a good idea to record exact timestamps for:

- New stock being delivered.
- When this stock is ready for putting away.
- Then again once the stock has actually been put away.

You can then calculate the difference in time between each point and work out an average for the month – allowing you to see how performance is trending in this area of your warehouse operations.

### Rate of return

An order being returned isn’t always down to a problem in the warehouse – a customer may have just had buyer’s remorse. So the key to getting best use out of this is to segment by reason for return. This way, the warehouse or operations manager can start looking at exact reasons why this KPI may be high and put into place strategies to resolve.

Determine several different return reasons and use the following equation to analyse each one:

\[
\text{Rate of return} = \frac{\text{No. of units returned}}{\text{No. of units sold}}
\]

### Picking accuracy

Tracking and segmenting rate of return properly lets you also analyse picking accuracy – a particularly key piece of data.

To calculate picking accuracy, use your total number of orders in a period along with data from the rate of return KPI in the following equation:

\[
\text{Picking accuracy} = \left( \frac{\text{Total no. of orders} - \text{incorrect item returns}}{\text{Total no. of orders}} \right) \times 100
\]

### Order lead time

Order lead time (or average order processing time) is quite simply how long it takes for a customer to receive an order. You may want to divide this into various categories. For example, international orders, Amazon Prime orders or orders for special or larger products. But generally, the lower you can get order lead time, the happier your customers are going to be – so long as it arrives in perfect condition.
CHOOSING A NEW WAREHOUSE MANAGEMENT SYSTEM

It’s totally dependent on your individual business needs if/when you’re ready to upgrade your warehouse.

Warehouse Management Systems (WMS) or management software of some kind can basically take a huge chunk of the leg work out of all the above processes. They’ll automate and digitise as much as possible.

Making it much easier to:

• Keep everything organised, tracked and documented.
• Pick with as close to perfect accuracy as possible.
• Speed up your entire logistics operation.

But it can be tough sifting through all the information to decipher when to upgrade and what to actually look for in your management software.

When to upgrade to a Warehouse Management System.

As with many things, it’s totally dependent on your individual business needs if/when you’re ready to upgrade Warehouse Management Systems. Or even just start using a WMS rather than continuing to manage manually.
QUESTIONS TO HELP DECIDE WHEN TO UPGRADE WMS

• Is your current process achieving a 99.9% picking accuracy rate? If not, how costly is each incorrectly picked order to the business?

• What are your other warehouse KPIs looking like? And how beneficial would improving each one be?

• How many team members is it taking to run your current operation? And would it be more economical to replace some with a Warehouse Management System or piece of software?

• How many orders are you dealing with each day? And how much annual turnover is this generating?

• Have you been achieving growth targets? And how quickly do you plan to grow in the short to medium future?
Finding the correct Warehouse Management System for you depends on a variety of aspects unique to your business. But here are the main things medium to large retailers need to think about when deciding:

- **Warehouse organisation.** Stores exact locations for every SKU and can direct you on the best walking route to this place in the warehouse.
- **Digital barcode operations.** Uses mobile scanners and barcodes to minimise the need for paper and optimise accuracy when picking, packing and booking in new stock.
- **Desired integrations.** Has an integration (or an integration can be built) with all necessary stores, marketplaces, shipping partners, number of warehouses and anything else unique to your business.
- **Easy-to-use system.** Straightforward platform designed to be easy to operate and learn for all current, new and temporary team members.
- **All-in-one solution.** Capability to handle and manage other major areas of your retail operation – including orders, inventory and shipping.
- **Reporting and accountability.** Tracks and holds a history of every action in the warehouse and by which team member for high-level KPI reporting and staff accountability.
Warehouse management is a monumentally complex task with a wide variety of plates to keep spinning. But getting it right can be the difference between retail success or failure.

It all comes down to:

• Arranging your layout properly and then organising your inventory within this.
• Having a well-drilled system in place for staff to repeat time and time again when it comes to receiving stock and fulfilling orders.
• Measuring efficiency, then identifying and fixing problem areas.
• And knowing when it’s time to invest in a digital Warehouse Management System (WMS).

Get these aspects right and you’ll soon be running your warehouse like clockwork – and fulfilling customer orders quicker and more accurately than ever before.
Want to get your warehouse running like clockwork?

Veeqo’s Warehouse Management System can help organise, pick, pack and ship your inventory with masterful efficiency and speed.

Click here to see it in action