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Warehouse Scaling



How to Maintain Efficiency
and Organization

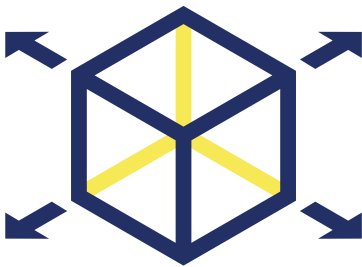


Introduction

Scaling your warehouse is a necessity of business growth and increasing demand, but the process can be problematic if not handled correctly. From data accuracy to efficient workflows, there are areas that commonly break down when a business expands operations. But just as there are common issues experienced in scaling, there are tactics that can help you maintain efficiency and organization while allowing you to reach your goals.

Rapid changes in supply chains, from the growth of ecommerce, demands for omnichannel fulfillment, and the globalization of supply chains have pushed warehouse management in new directions. More demand and quicker delivery timeframes mean that warehouses need to expand their operations and run more efficiently at the same time.

Whether you are scaling within your existing space or branching out to multiple warehouses, the benefits you experience can be the same. But so too can the scaling issues you encounter.



Common issues with warehouse scaling

Inventory inaccuracies

Changing warehouse layouts, transferring or consolidating data, and dispersed stock with distributed warehousing can all lead to inventory inaccuracies. Having a system that maintains accurate data, even with high order volumes, large SKU counts, or multiple warehouse locations, is critical when scaling, as even the smallest inconsistencies can have a trickle down effect to all areas of operations and particularly onto the customer.

It can also mean that you are relying on inaccurate data to dictate important decisions while scaling. Not having a true record of your inventory is messy on a small scale, but potentially detrimental as you expand.

Shipments delays

Once scaling issues start affecting the warehouse, it directly impacts how quickly and accurately you can deliver goods to your customers. This is a problem not only at the time but also in the future, as it has the potential to do long-lasting damage to your reputation.

By monitoring KPIs like on-time shipping rate and total order cycle time, you can determine if your operations are healthy or if you're struggling to keep up with the demands of scaling.

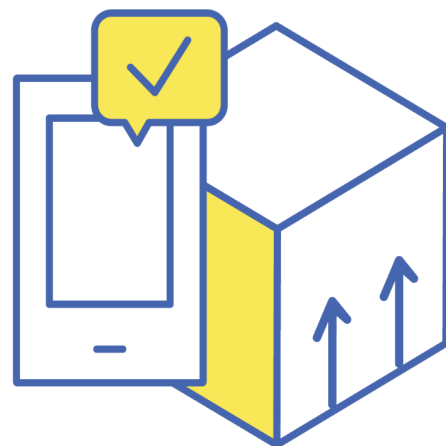
Unsuitable warehouse management systems (WMS)

Your WMS is a critical player in your scaling success. Many businesses assume that the

systems they have in place can handle their expanding needs. Unfortunately there are a lot of warehouse management systems that can't efficiently handle scaling, or require costly customizations to be able to manage increasing capacity.

An unsuitable WMS can cause havoc when you're scaling, as they may not have the automation capabilities to streamline workflows or be able to handle increased order volumes, growing SKU counts, or complex 3PL customer accounts.

While these are all common issues that can happen when scaling warehouse operations, they are not inevitabilities. There are many ways that you can avoid them or help to mitigate any negative impacts.



5 Tips For Scaling Efficiently

1. Invest in your data infrastructure

Scaling doesn't just mean expanding warehouse space and order volume. Data management and storage is critical to any scale-up, regardless of whether you have been using a manual system or a WMS. From SKU tracking to dock door scheduling, data is intrinsic to warehouse operations, and how you handle your data can have a big impact on your ability to scale efficiently.

The reality is that many companies aren't prepared for the data challenges that come from scaling up. One of the key reasons is that their data infrastructure isn't built to handle rapid growth, particularly high order volumes, large SKU counts, multiple warehouse locations, and expanding 3PL customer accounts.

Your data infrastructure, like your warehouse management system, is responsible for collecting, storing, and transforming data, as well as sending data to and from other platforms in your tech stack. Finding flexible and robust warehouse data management is the best way to avoid issues and inconsistencies when scaling your operations.

Unfortunately, small data inaccuracies in your systems, from your inventory to your customer accounts, can become amplified when you scale. These inaccuracies can mislead your KPIs and reporting, affect key business decision making, and require extra time and labor to amend manually.

Efficient data infrastructure should allow you to continue working normally as you scale your operations—a true success indicator of data scalability is that you don't actually notice it happening. For instance, if your performance metrics aren't impacted when you increase the frequency and complexity of your queries, your infrastructure is built to be scalable.

Using data automation and avoiding manual entry wherever possible is one of the best ways to streamline and safeguard your data records. To reduce costs and scaling issues, you should prioritize a data infrastructure that improves efficiency and eliminate redundancy. A comprehensive WMS will provide the ability to capture, store, control, and scale data with your business, while maintaining accuracy and flexibility at the same time.

2. Optimize warehouse spaces

Trying to increase your inventory and order throughput within your existing warehouse set-up is not effective in the long-term. The layout or warehouse locations that worked with smaller volumes likely won't be compatible when these volumes exponentially increase, and your productivity will very quickly feel the impact.

The organization of your warehouses is critical to running operations efficiently, as well as flexible and seamless scaling. Regardless of whether you are reorganizing your current space, moving into a larger warehouse, or scaling into distributed warehousing, optimizing your warehouse

space is always applicable.

There are many tactics that help you make the most of your space, it's not just about simply stacking things vertically to create more room. Always come back to your main goal as a warehouse: to ship every order on time, without fail. The way you manage your space should assist with this goal, whether that's storing popular items near packing stations, using kittings to consolidate products, or utilizing automated replenishment for fast moving products.

You should also consider your employees when organizing your warehouses. Make sure products are accessible and easy to find, there is enough room to work comfortably, and you have allocated adaptable spaces that can be utilized during peak periods. It can also be supported with automated storage and retrieval processes using your WMS, making it easier to create and maintain the most efficient warehouse layout.

Optimizing your warehouse spaces not only improves operations for expanding businesses, it prepares them for future growth and adaptability in an increasingly competitive market. While organizing your warehouses, account for the existing customer volume growth as well as space to bring on new business. This will help you future proof your operations so you're not constantly having to play catch up.

■ 3. Use automation for labor efficiency

Your business depends on growth, but with rising demands comes a greater need for warehouse efficiency. When you have more orders to send out, a wider product range, and more warehouse locations to manage, it's more critical than ever that operations run smoothly.

Increased workloads without the proper processes in place can quickly lead to labor

and cost inefficiencies. That is why automation is key when operating at scale. Automation helps you easily scale things like workflows, inventory tracking, picking and packing processes, and labor data collection and analytics.

Relying on manual workflows when your warehouse capacity is expanding and evolving will not let you adapt quickly enough. You need a system in place that can support the changing work environment and demands on warehouse staff.

Powerful warehouse management systems come with labor efficiency methods in-built. Using smart algorithms you can streamline workflows automatically and keep them flexible enough to adapt to changing daily demands. Automated picking methods like wave picking reduce operational cost and turnaround time while increasing the accuracy of your order process. This is particularly important in ecommerce warehouses, where there can be a high volume of small orders to pick and pack and time is of the essence.

The time burden of added volume can be detrimental to warehouses that are relying on established ways of working. What takes staff 10 minutes in a smaller warehouse could increase exponentially in larger and less familiar environments. Advanced automation methods like cartonization and directed putaway take the guesswork out for staff and predetermine the most efficient and effective way to complete each task.

Not only does automation improve productivity, it helps to keep staff more satisfied and engaged as they have clear direction in their role and can focus on core business initiatives. Automation also helps to make tasks safer, reducing the risk of error and removing unnecessary steps.

The labor efficiency benefits of automated warehouse management systems mean that expanding businesses can easily increase

throughput without the need to raise headcount. With the addition of a labor management system (LMS), expanding warehouses can also track labor performance and budgeting to inform business decisions.

■ 4. Streamline your yard with a YMS

As capacity expands, demands will increase in all areas of your business. Scaling efficiency isn't restricted to the walls of your warehouse, it should span the full scope of your operations. From your shipping containers to dock doors, your yard is an essential part of your business and critical to its success.

Growing too quickly can have a ripple effect, causing problems with delivery delays, shipment disorganization, overworked drivers, and disappointed customers. The real challenge for warehouses is scaling at a speed that doesn't impact business margins and negatively affect productivity.

At a basic level, expanding to multiple warehouse locations will mean more dock doors, which in turn means more shipments received and dispatched simultaneously. While you might have previously used manual data entry to manage a single dock door, multiple doors, locations and simultaneous shipments become much more complex. Effectively scheduling these moving parts is impossible without a yard management system (YMS).

Yard management provides a network view of your yard deployments, rather than relying on disparate systems for individual areas. This gives you full visibility across trucks, drivers, and shipments and how these impact the overall productivity of your operations.

Integrated insights across your yards not

only help control the movements of inbound and outbound containers, it helps to improve safety for yard personnel. Reducing manual methods means less physical checks and unnecessary movement across the yard.

Rapidly scaling warehouses can't afford to ignore their yards. The operational status, location, and utilization of yard assets directly impacts the speed of distribution and can either inhibit or accelerate successful scaling. A YMS will provide real-time data and advanced technology to support business expansion and the ability to handle on-the-fly changes and disruptions across multiple locations.

■ 5. Use a Cloud-based WMS

Small operations might be able to get away with simple, generalized management systems, but as a business scales its requirements will change. You will need a dedicated and specialized warehouse management system that can handle the increase in capacity and has the capabilities to adapt to market changes.

Cloud-based WMS makes scalability practically limitless, giving you control over configuration, and the resources and storage to meet complex, omnichannel requirements. You will need your tech stack to scale seamlessly with your business and be flexible enough to support an agile warehouse. Uncertainty is now a common theme in the market, so you need to be able to scale your WMS along with your business as your needs change.

Warehouse management systems that rely on onsite hardware can end up weighing scaling businesses down. The time and money needed to upgrade or customize these systems can restrict and delay growth, not to mention affect profit margins at a time when you are trying to achieve cost efficiencies. Cloud WMS on the other

hand will automatically deploy the latest version and new features without operators having to manually customize their software.

The revolution of “big data” across the globe has been powered by the rise of scalable cloud data storage. This way of managing data not only allows businesses to do it on scale, it provides the security that large enterprises with hundreds of customer accounts require, and makes it easy to deploy the software to any new locations.

Partnering with a powerful Cloud WMS is one of the first investments you should make when you begin scaling. They will provide the full scope of capabilities that you need as you grow and provide the adaptability to configure features to suit your operations. Your WMS is one of the most important investments that will have a big impact on warehouse efficiency and service levels.



Conclusion

Expanding your business can be an exciting time, whether it's by necessity or due to strategic planning. But with expansion can come a list of problems and setbacks that you might not foresee. From data inaccuracies to labor inefficiencies, good growth intentions can quickly backfire.

The goal in any scaling project is to maintain efficiency and meet growing demands, while also increasing profitability. There are many ways that you can do this and avoid the common issues of scaling. At the center of these tactics is a WMS that performs while you scale, handling everything from high order volumes, large SKU counts, multiple warehouse locations, and many 3PL customer accounts.

Your warehouse management system can support seamless and successful operational changes, helping you to scale everything from inventory levels to shipments without any disruptions to day-to-day performance.

To learn more about Da Vinci's powerful WMS, organize a free demo of our Cloud software capabilities today!

