BUYER'S GUIDE

SELECT THE RIGHT WMS FOR YOUR BUSINESS

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Hi!

I'm Fred Boström, the founder and CEO of Bitlog, a leading Nordic cloud Warehouse Management System (WMS) vendor.

With more than 25 years of experience in the software industry, (having previously worked as a system engineer, ERP consultant, CTO, developer, system designer, project manager, and more,) I've seen a lot of different companies and systems, so I know what works and what doesn't when it comes to purchasing a WMS.

In this guide, I'll share my thoughts and advice on the DO's and DON'Ts of choosing the best WMS for your business.

I hope you find it useful and informative!

Enjoy!

- Fred Boström
CEO & Founder, Bitlog

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Is your warehouse mature enough?

A good way to assess the maturity of your warehouse processes and setup is to use a five-step-scale. When we meet with companies that are ready for the nest step, they are typically somewhere along this maturity scale. But, just to be clear, being on the first level is not always a bad thing; in fact, it may be the best solution for a smaller warehouse with limited resources.

However, in order to gain efficiency and expand and evolve your operations, your company will most likely need to advance in maturity. When purchasing a WMS, you should consider your warehouse system's maturity level, as well as your business's needs and resources.

Five levels of warehouse maturity

1. ERP with printed picking lists

This is lowest level of system support, using the ERP and printing picking lists. Manual processes for stock taking and inbound goods from supplier.

2. ERP system with mobile solution

Often, the mobile system is directly connected to, is part of, or is integrated with your ERP.

At this level:

→ You may be limited to the functionality in your ERP system.

→ The efficiency gain is not significant, but the investment is quite low.

→ You may be limited to the functionality in your ERP system.

→ For smaller warehouses with low volumes, this may be the right fit, but be aware that this will limit your potential growth and you may need to replace the solution when you grow.

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3. A WMS solution

A WMS can enhance a mobile solution by improving efficiency and handling large volumes of users.

At this level:

→ Features include picking routes, multi-order picking, tracability, and KPIs.

→ Consider a long-term investment over a mobile solution.

→ Beware of legacy WMS systems that lack upgrades and may be installed on-premise.

→ This will increase your Total Cost of Ownership (TCO) significantly because it is a long-term investment. You will most likely keep your WMS for many years.

4. WMS solution with conveyors and/or voice picking

A WMS solution integrated with conveyor belts.

At this level:

→ Add conveyor belts to improve parcel sorting, and in some cases, picking bins.

→ Voice picking could be useful in some cases where you need free hands during the picking process.

→ A larger investment than a sole WMS, but will improve efficiency and save resources in the sorting and moving of packed parcels in particular.
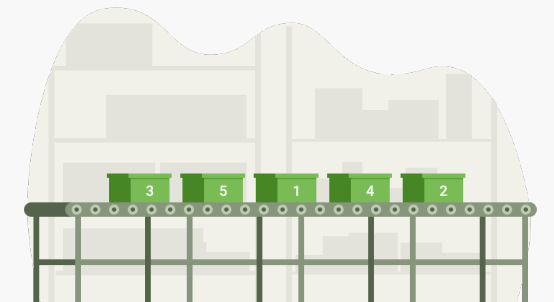
5. WMS solution for conveyors and picking automation

WMS solution combined with picking automation, such as AutoStore or robots.

At this level:

→ Consider implementing goods-to-man features to reduce walking distance and time for pickers.

→ Will increase your warehouse operations even more.

→ A much larger investment that will cost your business millions of euros.

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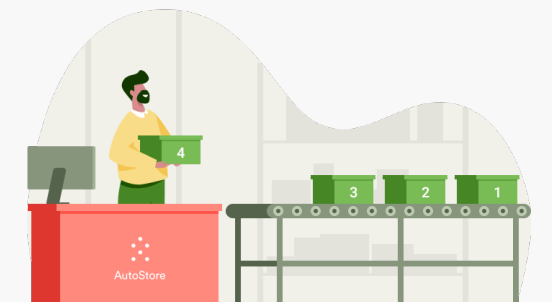
Custom or standard WMS solution?

Customization may be appropriate in some situations, but it is rarely the best option.

Here is why...

To begin with, building a custom solution is usually very expensive (in our experience, most likely a bigger cost than you budgeted for). You will have to bear the cost of tailoring the entire system. And this takes none of the risk into account. If you manage to get the system built, you risk relying on a small group of people to run your entire warehouse operations and WMS.

You should also consider whether or not building a WMS is part of your core business. Are you a provider of software? If the answer is no, we recommend that you look for a standard solution before building your own WMS solution.,

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Cloud-based or on-premise?

If we asked you whether you should generate your own electricity or use electricity from the grid... What would you do? Of course, connect to the existing electricity grid.

Nowadays, the choice is obvious. but when electricity was first introduced to our world, the answer could have been very different. Consider this in the same way that you would on-premises installations vs. cloud.

What about upgrades?

Another thing to investigate is whether upgrades are included in the monthly cost. If not, you could end up with a legacy WMS with expensive upgrades that will increase future costs.

MANUAL UPGRADES & QUALITY CONTROL

→ Lack of rigorous quality control processes can result in production issues.

→ Inadequate testing and validation can lead to stability issues that disrupt day-to-day operations.

FREQUENCY OF UPGRADES

→ Automatic upgrades provide timely access to new features and improvements.

→ Infrequent upgrades may result in missed opportunities for enhancements and optimization.

CUSTOMIZATIONS

→ Customization can complicate manual upgrades for WMS and ERP systems.

→ Custom code may conflict with new system versions, necessitating additional development work.

→ Upgrading customized systems can be more expensive than building a implementing a new WMS.

OUR RECOMMENDATIONS

→ Cloud-based solutions, particularly those with automatic updates, reduce upgrade challenges.

→ Assess long-term scalability and operational efficiency.

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Cloud or on-premise?

"There are many different types of "cloud," ranging from private to public, such as Microsoft Azure, AWS, and Google Cloud. For me, the answer is simple: use the cloud, preferably public cloud, if you do not have any special regulatory requirements.

One thing to investigate is whether upgrades are included in the monthly cost. If not, you could end up with a legacy WMS with expensive upgrades that will increase future costs."

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Integrations to ERP & E-com

To run your WMS system, you must integrate it with your e-commerce solution or ERP. Most WMS solutions include ready-made integrations with the majority of common ERP systems. It may also be possible to run the WMS as a stand-alone solution, which means you can manually enter sales and purchase orders without relying on an external system.

Let's take a quick look at the different methods.

Integration methods

1. WMS integration to ERP

This is probably the most common way of running your WMS system. Using an out-of-the box integration will save you money on integration work.

2. WMS integration to E-com platform

If you run a 3PL warehouse, this may be more common because integration with your 3PL company is not as necessary than if you run your own warehouse. The difference is that purchase orders are frequently handled manually in the WMS or by an external system designed specifically for purchasing and forecasting.

Explore Bitlog's integrations

3. WMS as a stand-alone solution

If you want to integrate much less, you can run the WMS as a stand-alone solution and simply import sales orders from your e-commerce site. If you run a small warehouse and are having trouble integrating with your ERP, this may be the right approach.

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Bitlog plays a vital role and **seamlessly integrates** our entire warehouse operations.

Johan Torudd
Nordic Nest

Learn more about Nordic Nest

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Picking automation & conveyors

Goods-to-man or Picking automation is capital intensive; you will need to invest significant amounts in, say, Autostore to achieve automation in goods-to-man. When combined with conveyors that allow you to pick specific items in different zones, efficiency increases further.

If you are considering Picking Automation, conduct a thorough investigation and calculation of the entire process. It's easy to lose sight of the entire picking automation process, resulting in lower efficiency gains than you might have hoped for.

What to investigate

1. Inbound Process

You still need to receive your products and load them into the automation system. Completing the inbound process is frequently underestimated and takes a lot more time than just delivering a pallet to a picking location.

2. Replenishment

You may also need to fill up the automation from the buffer area; ensure you have a good process in place for this task.

→ Make sure you receive the appropriate replenishment tasks, not too much or too little of what is required.

→ What are your typical product sizes and orders? If you can only fit 50% of your products into the automation, and your customers frequently order products from outside the picking automation, you will end up with a less efficient solution.

→ **Exceptions:** If you have a good WMS and use it in combination with a conveyor system, you can implement relay picking logic so you can pick the same order in different areas efficiently.

2. Bottle Necks

Ensure you can move products into and out of the picking automation; if you have campaigns and high volumes, your automation may become a bottleneck, resulting in delays in customer deliveries. Remember, adding extra manpower is much easier than increasing capacity in your Picking Automation.

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Your guide to warehouse picking

Bitlog WMS can be configured to handle all types of picking, from the simplest to the most advanced types normally only available in high-end WMS systems.

In this guide

→ Equipment you need to started with a digital WMS

→ The steps of traditional order picking

→ Our seven most-used picking methods

→ How Relay Picking actually works

→ Why route optimization is crucial

→ How box calculation helps you be more cost-effective

Open Guide as PDF

Your guide to
WAREHOUSE
PICKING

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Total Cost of Ownership (TCO)

The total cost of ownership (TCO) is an estimate of the costs associated with purchasing, deploying, using, and retiring a product or piece of equipment. To calculate the Total Cost of Ownership you need to take into consideration all the investments and expenses that goes into it.

What to include in your TCO calculations:

1. Hardware

On-premises requires server hardware, whereas cloud requires only client hardware and printers.

2. Licence fees

Licences can be purchased and then accompanied by a separate service agreement; this is the most common configuration in on-premises environments. In the case of SaaS, you often pay a monthly fee that includes all licenses, maintenance, and support.

3. Maintenance agreement

This is a tricky one if you run on-premises. First, you have a maintenance (and probably support) agreement for your WMS software, and then there are hidden costs such as server maintenance and backup.

4. Support agreement

If you have problems with your WMS, you need support. Don't simply add the support fee. Instead, think about the quality of support you receive as part of the TCO. For example, poor support that does not understand your business and cannot effectively assist you with your problems. Add costs because you will need to contact your consultant for assistance or hire additional internal resources.

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5. Upgrades - The elephant in the room!

Does your WMS system support upgrades? Otherwise, this is a significant hidden cost that your WMS provider is unlikely to discuss openly. If you have a truly modern WMS, upgrades should happen automatically - even if you have a large company!

When calculating TCO, it is critical to include upgrades. When calculating upgrade costs, it is not only about the consultant's time; a lot of internal testing, uncertainty, and sometimes new hardware are required to get a successful upgrade project into place.

6. Additional services

Services are required to get new features up and running, or when your business requirements change and you need to adapt your WMS. The ease of use and configuration of your WMS system can have a significant impact on the demand for services.

If you have a custom solution or a system that lacks functionality, meeting new business demands can be extremely costly. On the other hand, if you have a user-friendly cloud-based WMS that is simple to configure, the need for services will be significantly reduced.

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TCO examples for WMS

Cloud-based WMS, Standard, 50 users

	One-time fee	Yearly fee	Total cost over 5 years
Implementation	€ 50 000		€ 50 000
Licence Fee		€ 0	€ 0
SaaS Fee incl. Support		€ 45 000	€ 225 000
Maintenance & Upgrades		€ 5 000	€ 25 000
Total Cost			**€ 300 000**

On-Premises WMS, Standard, 50 users

	One-time fee	Yearly fee	Total cost over 5 years
Implementation	€ 100 000		€ 100 000
Licence Fee	€ 100 000		€ 100 000
SaaS Fee incl. Support		€ 20 000	€ 100 000
Maintenance & Upgrades		€ 30 000	€ 150 000
Total Cost			**€ 450 000**

Custom-Built WMS, 50 users

	One-time fee	Yearly fee	Total cost over 5 years
Implementation/Coding	€ 500 000		€ 500 000
Licence Fee	€ 0		€ 0
Internal Support Staff		€ 80 000	€ 400 000
Maintenance		€ 80 000	€ 400 000
Total Cost			**€ 1 300 000**

Summary & last words
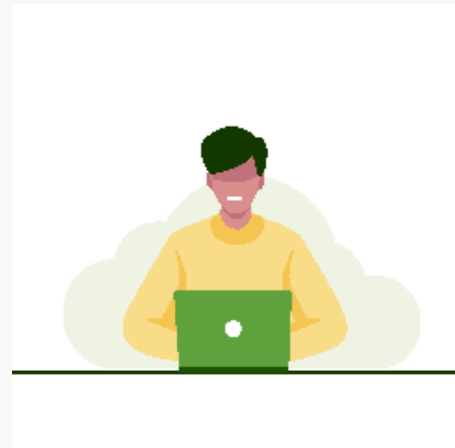
So, here are our thoughts on what to consider before investing in a WMS. We hope this has helped you figure out what is important to your company when purchasing a WMS. If you have any feedback or questions, don't hesitate to reach out to us at Bitlog; we are happy to help you improve your warehouse operations. **The list below summarizes this guide.**

Key takeaways

1. **Define your warehouse and WMS maturity level**
   This will help set the foundation and base criteria of your upcoming WMS purchase and determine whether the scope is bigger "than a WMS", or less depending on your needs.

2. **Decide if you're looking for a standard or custom solution**

3. **Cloud or on-premise - what fits your operations?**
   To be future-proof, make sure you set the appropriate infrastructure for your installation. We recommend going cloud, but don't forget to ask if the vendor has a private or public cloud, along with assessing the pros and cons of each.

4. **Upgrades - make sure it's included**
   We recommend going cloud, but don't forget to ask if the vendor has a private or public cloud, along with assessing the pros and cons of each. Upgrades add to your TCO in many ways, but they also trap you with old features because of the inability to upgrade to the latest version.

5. **ERP & E-commerce integrations - map out which data you need**
   How should you transfer data to and from your WMS? A good integration is critical.

6. **Picking automation - is your warehouse mature enough?**
   If you need picking automation, make sure that it is the right approach for your company and worth the big investment.

7. **Calculate the right TCO - which variables apply to your business?**
   When buying a WMS, knowing the cost is important. To get the right cost, don't forget the different parameters such as upgrades, hardware, and support.

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Ready to get started?

Select and option below to get in touch, or learn more about Bitlog WMS.

We'll listen to your challenges, answer your questions, and discuss how Bitlog WMS can help you run your business more smoothly.

Get in touch

Visit www.bitlogwms.com

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