



Guide to improving the efficiency of in-house logistics

How to handle your company's material
and product flows efficiently



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Functional in-house logistics improve the efficiency of the entire value chain

The flows of materials and goods around the world have increased exponentially from the 1980s to the 2020s. Rapid digitalization in recent years has multiplied the amount of data available in logistics, and there seems to be no end to this development. However, the other side of the development is that ocean deliveries that last for weeks mean the buffer warehousing of incoming large batches of raw materials and intermediate products. In addition, huge data masses require efficient data processing and analytics to extract the essential information.

Companies often pay less attention to assessing the entire value chain when the focus is on passing through an individual production phase. If the company's own processing of materials and products, i.e. in-house logistics, still has a long way to go, the improvement of the efficiency of logistics and the flow of information cannot be fully utilized. Functional in-house logistics improve the efficiency of the entire logistics value chain and the flow, i.e. the product's lead time from order to delivery to the customer, as the finished product flows smoothly and efficiently through production. By outsourcing in-house logistics to a logistics partner, a company can achieve even wider benefits when all logistics services are under one roof.

This guide offers ways to improve the efficiency of your in-house logistics and your company's competitiveness throughout the value chain. In addition, we highlight the in-house logistics services we offer that will support your company throughout the logistics value chain.





What is in-house logistics?

In-house logistics means the processing of the company's materials and products that take place on the company's own premises. The management of information flows is also essentially linked to in-house logistics, so that operations can be carried out precisely on time. In-house logistics traditionally does not include transports outside the company's premises, to which the term logistics is usually linked. Companies often take care of their own in-house logistics, but many also buy it as an outsourced service from a logistics partner.

What is in-house logistics in practice?

In practice, in-house logistics involves reception of goods, shelving, warehousing, transport and transfers in production, as well as collection, packaging, loading, shipping and recycling. In addition to employees and equipment, the IT systems and facilities used are also an essential part of the in-house logistics process. The process may also include value-added services, such as the assembly of sales racks, pre-installation of products, maintenance of product information and special handling of textiles.

In-house logistics as an outsourced service

When a company buys in-house logistics as an outsourced service from a logistics partner, the partner usually provides the tools in addition to the employees. In this case, it is the logistics partner's responsibility to take into account the customer's quality and safety requirements and to ensure the competence of the personnel.

The cost savings achieved by outsourcing in-house logistics can be

10–30 %

A logistics partner makes everyday life more efficient and smooth and brings savings. A solid partnership makes it possible to achieve results together through active cooperation. In a performance-based pricing model, a logistics partner can, for example, free up capital when fixed costs become variable costs and the company only pays for the work performed. Depending on the starting level, the cost savings achieved by outsourcing in-house logistics can be 10–30 per cent. The logistics partner's experts and professionals ensure that the necessary expertise is available when needed. The logistics partner's development work improves the efficiency of the company's processes and speeds up operations. This is why the company can focus on its core business without having to worry about recruitment or the functionality of in-house logistics.



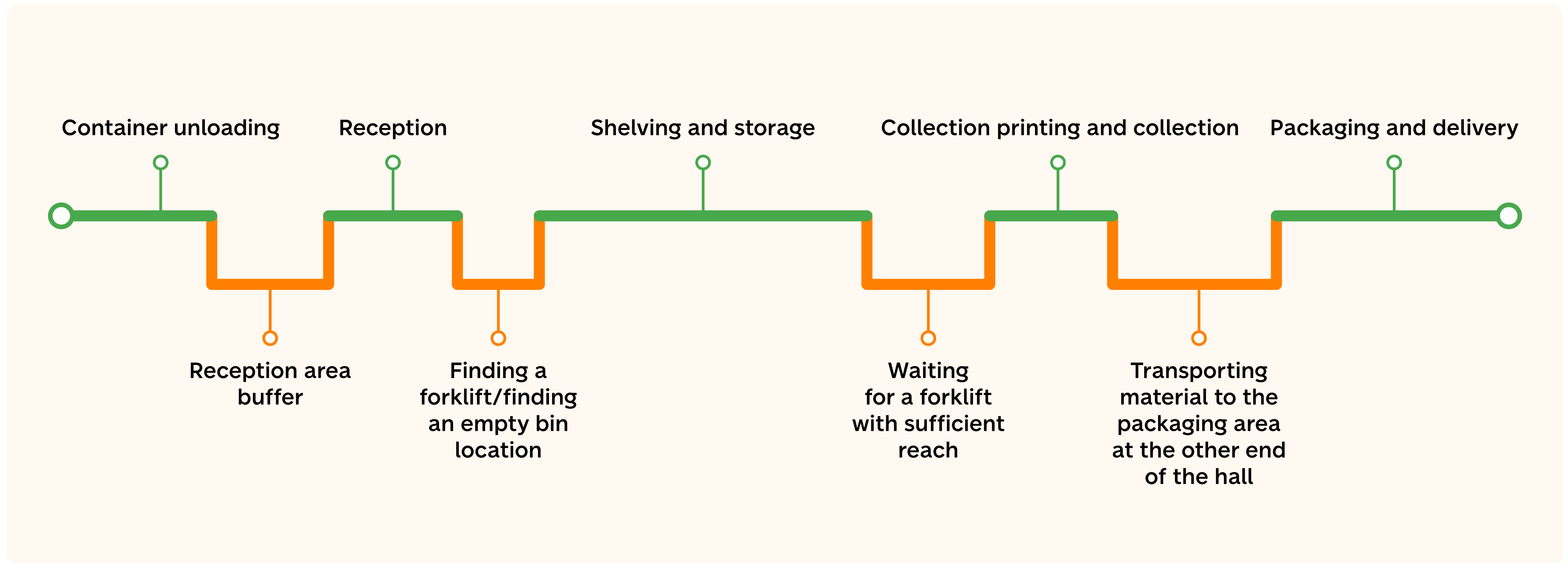
How to make in-house logistics more efficient yourself and with the help of a competent partner

At the heart of a company's operations is often a product whose development and production receives the most attention. The development of in-house logistics is not seen as a key objective, even if improving it would actually improve the efficiency of the entire production chain.

Inefficient in-house logistics has many

- The work slows down, which causes unnecessary warehousing. As a result, the warehouse's stock rotation also slows down and the amount of capital tied to the warehouse increases.
- Goods and semi-finished products accumulate between work phases, for example, and production lead time slows down.
- Production-related work phases include logistics work phases, in which case the efficiency of both work phases suffers and production phase capacity is lost.
- Delivery times become longer, delivery accuracy suffers and the product is not delivered according to the customer promise.
- At worst, inefficient in-house logistics has a negative impact on the company's net sales, sales and market share.

How in-house logistics waste affects time spent



Eight ways to improve the efficiency of in-house logistics

We have listed ways to improve the efficiency of your company's in-house logistics yourself or with a competent logistics partner. We will explain them in more detail on the following pages of the guide.

1. Identify and measure the **volume fluctuation** of the work so that you can use it to predict the resource needs.

2. Separate the **costs of in-house logistics** from production or general costs.

3. Standardize the **processes** to be person-independent.

4. Evaluate and develop the **production environment, production system and processes** from the perspective of in-house logistics' effectiveness.

5. Extend your **warehouse management system (WMS)** to work and focus on **daily management**.

6. Find out the content of the work phases with the help of **work research**.

7. Promote the **multiple skills of the personnel** and make use of regional **cooperation** with the neighboring unit.

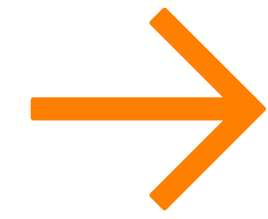
8. During peak times, use temporary part-time workforce and outsource the needed work to a **logistics partner**.

Understand the importance of volume fluctuation

Due to the increased variability and seasonal fluctuation of trade, peaks in demand are increasingly larger and occur more frequently. Shorter response and delivery times are required from manufacturing and warehouse operations. In order to improve the efficiency of your company's in-house logistics, it is necessary to identify what the company's volume fluctuation is like.

The volume may vary from season to season or be seasonal. For example, production volumes or warehousing needs can be high at a certain time of the year or fluctuate rapidly on a weekly or even daily basis. In some work phases, the volume fluctuates during the working day, which means that certain times of the day and work shifts are constantly busier than others.





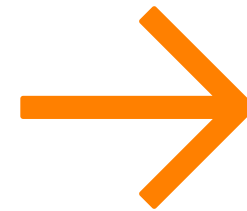
Solutions

Identify and measure volume fluctuation, as it plays a key role in timely resourcing. The measurable factors affecting volume variation are:

- Volume peaks, their level and frequency
- Performance at different stages
- The competence of personnel and its assessment, promoting multiple skills and training needs
- Assessment of the working environment: the impact of volume fluctuation on the layout, furniture and equipment, for example
- Assessment of qualitative factors: collection errors, breakages, delays in delivery times
- Occupational safety: the impact of volume fluctuations and peaks on occupational safety risks
- The impact of the flexibility and adaptability of the working environment on good lead time despite volume fluctuations

Find out the costs of in-house logistics

Identifying the costs of in-house logistics is an important starting point when assessing the company's situation. If the costs of in-house logistics have not been separated, they may be included in the costs of production or recorded in the general expenses – alongside the costs of sales and marketing, for example. If the logistics costs are known, it is good to examine whether they vary in relation to the volume and whether they have flexibility.



Solutions

You can achieve cost savings in many ways by separating the costs of in-house logistics from production or general costs.

- Separating in-house logistics from production makes the cost of in-house logistics visible, improves flow and increases production capacity without necessarily having to invest any money in production technology.
- Outsourcing in-house logistics turns fixed personnel expenses that are independent of volume fluctuations into variable costs. At the same time, the costs become performance-based when they are calculated on the basis of the received performance, for example. Experience has shown that the cost savings are approximately 10–30 per cent, depending on the starting level.
- Outsourced in-house logistics often cover the equipment and sometimes also the WMS system and premises, in which case these expenses are included in the performance price. Therefore, outsourcing in-house logistics frees up capital to be used for the company's core business.



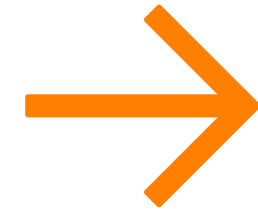
Invest in the areas of in-house logistics

In-house logistics includes many areas, each of which is worth investing in from the perspective of increasing their efficiency:

- Work processes
- Systems
- Performance measurement and daily management
- Operating environment: buildings, warehouses, machinery and equipment
- Personnel
- Occupational safety

Identify the work processes and their fluency

Are the work processes standardized or random? Are the processes different depending on the worker or, for example, due to the wide variation of goods arriving in the warehouse? It is important to know these things, as only standardized processes can be systematically developed. When the process is standardized, i.e. everyone does a certain thing in the same way, it is possible to develop its details. The development of even the smallest detail then has a significant impact on the whole, and the change can be reliably measured. However, if the process has not been standardized, development will be focused on correcting occasional deficiencies.



Solutions

The smoothness of current processes is revealed through, for example, **work research** that monitors an employee's work. The aim of the work research is to determine the elements of the time spent on work and to identify the causes of waiting and disruption times. This allows for more efficient use of time and minimizes waiting and disruption times.



CASE

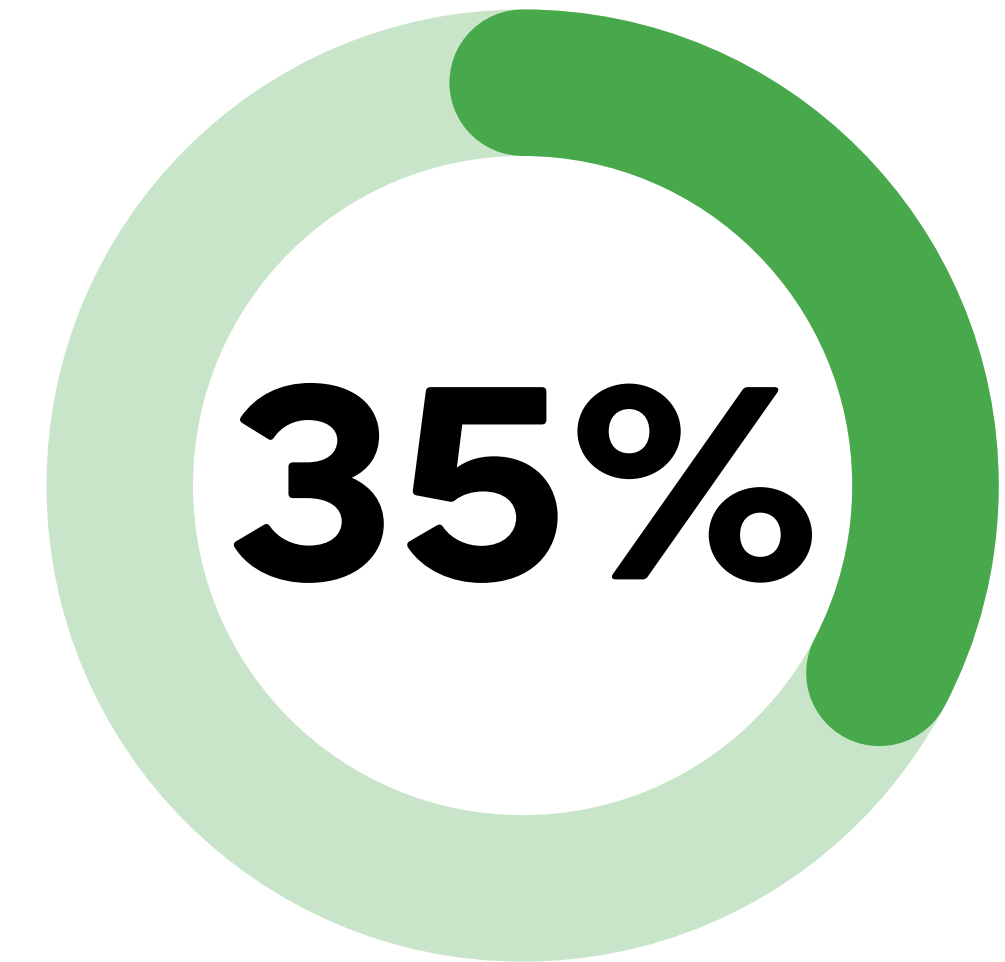
Standardization of packaging saved time and money

As a result of the work research, the unit discontinued boxes with special measurements and implemented ten standard boxes without increasing annual cubic volumes. Thanks to the redesign of the packaging, the number of used packaging boxes dropped by around 500 pieces per year as several products can be safely packed in the same box. The packing time also decreased by 15 minutes per box.

Unit price reduction for standardized packaging



The amount of packaging waste and the tare weight of packaging decreased



3,200

Working time saved h/year

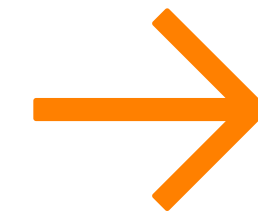
Evaluate the production and warehouse management systems

Are the operations guided by the production and warehouse management system (ERP and WMS), or is the work reliant on memory and guided by the employees' experience, such as product knowledge? If the operations are not guided by a system and are instead based on the employees' experience, it is difficult to achieve flexibility and the situation becomes vulnerable. In the worst case, the overall process can be set back if an inexperienced substitute for a permanent employee does not receive the support they need from the system and can

therefore not perform their work smoothly and systematically in a proactive manner.

If the warehouse management system is in use but there are no interfaces, the information does not flow where it is needed and used, i.e. work guidance, work and employees' terminal devices. This may result in the employee supporting the system and the system not helping the employee as it should. There may be shortcomings in, for example, the placement of products and the control of the warehouse's internal processes.





Solutions

Invest in **ERP and warehouse management** which contain the information employees need in an easy-to-use format. Improve the efficiency of work with the tools and technology you need, such as terminals, scanners and voice control.

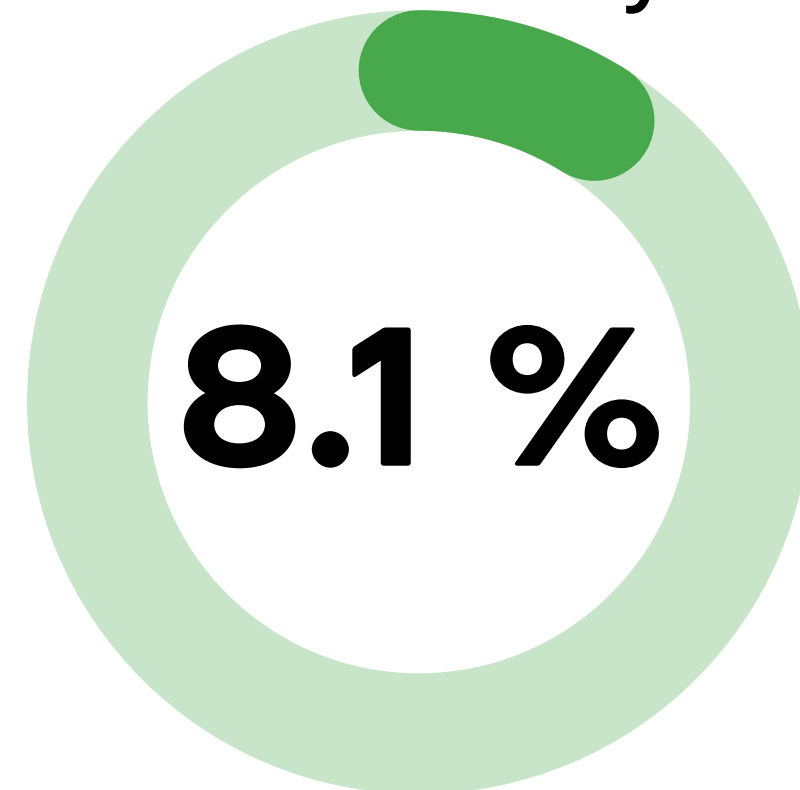
CASE

New WMS system decreased the amount of balance and delivery errors

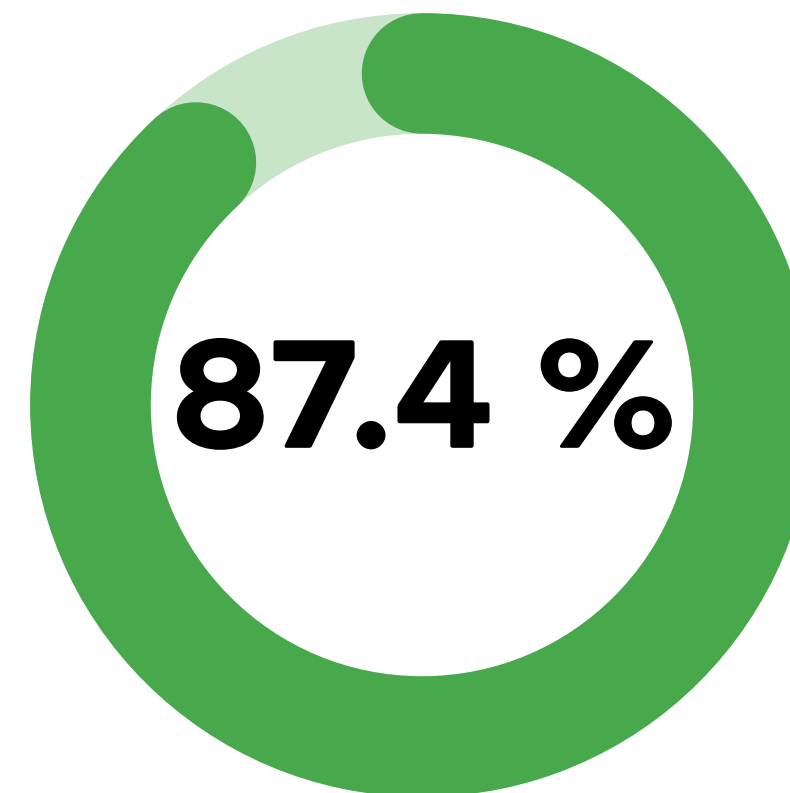
The new warehouse management system introduced in connection with the replacement of the old ERP system made in-house logistics more efficient. The access rights of the new WMS system were strictly restricted, which made it

easier to monitor changes to balances and orders. Instead of the total balance, each item received a more detailed storage location-specific balance. The new system also made it possible to review employee-specific efficiency.

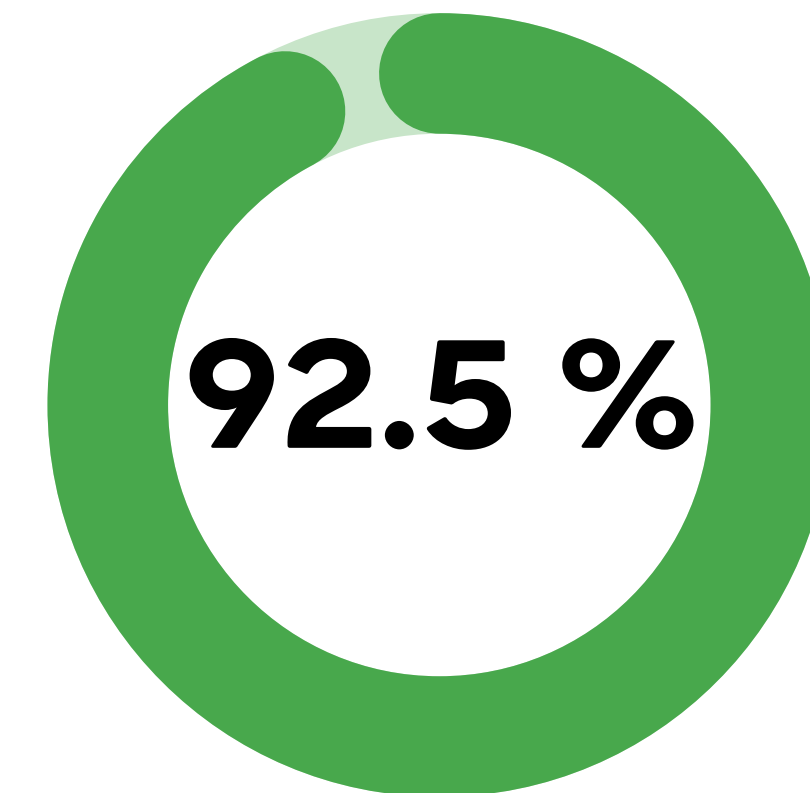
The efficiency of warehousing operations increased by



Balance errors decreased by



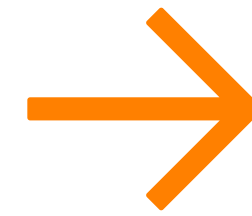
The amount of incorrect deliveries decreased by



Measure performance and develop daily management

It is important to collect correct and sufficient information about the flow of goods in in-house logistics and to use it in daily work management. The supervisory work of immediate supervisors also needs numbers to support decision-making. However, not all ERP and warehouse management systems used by companies are able to identify problems in in-house logistics or provide the necessary data.

One of the most important indicators in in-house logistics is lead time. This is generally measured by daily averages that do not reveal the variation of individual performance, good or poor performance and the root causes of individual deviations. If the information is very narrow, collected separately from several sources and not real-time or easy to use, it does not support supervisors well in daily management – for example, in shift start meetings, monitoring of work phase efficiency and real-time allocation of resources.



Solutions

- Invest in a WMS system that produces real-time in-house logistics data to support daily management.
- Use digital tools instead of a whiteboard at shift start meetings. For example, a Digital Daily Management (DDM) tool collects key operational information from automatically updated reports from different data sources. When the data is in order, daily work can be managed efficiently.
- A reliable lead time measurement system measures the different work phases and helps to assess the quality of operations in relation to the service promises. For example, analyzing data using the Lean Six Sigma method reveals both poor and excellent performance. Investigating their root causes can eliminate sources of error and increase excellent performance.

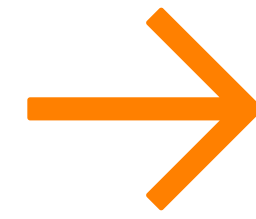
Check the suitability of the operating environment

The operating environment plays a major role in in-house logistics, the smoothness of which can depend on very small and easy-to-fix things in warehouses and production facilities and their layouts, furniture, machines and equipment.

It is also possible that warehouse automation has been invested in, but there are issues in in-house logistics due to deficiencies in work guidance. The production facilities may not have been

designed from the perspective of the smoothest possible in-house logistics. Instead, they may have taken shape over time. A lack of work guidance also creates bottlenecks where the flow slows down. For example, when a production phase has to wait for a missing component due to a late collection impulse, it also affects the subsequent work phases. As peaks in demand increase, current warehouse automation is not enough to make operations sufficiently efficient.





Solutions

Identify the bottlenecks in the production environment and their significance yourself or with the help of a competent partner. What would be the optimal production environment in terms of flow and what kind of investments would it require? Would it make sense to outsource some or all of the warehouse capacity? An assessment by an external party is often useful because it is easy to become blind to the current situation and it can be difficult to see opportunities for improvement yourself. With the help of modern technology, the renewal of the operating environment can be examined in the planning phase by, for example, using virtual glasses.

CASE

Virtual technology allows the customer to familiarize themselves with their new space in advance

Virtual technology can be used to support the planning of the warehouse and production space's layout. Based on the volume and measurement data, a value stream and process description is created, followed by rougher 2D and detailed 3D design. Finally, using VR technology in the 3D model, it is possible to walk around the new warehouse in virtual reality. In this way, the customer can check that, for example, the workstations and their locations are as they should be and that safety issues have been taken into account correctly.

” As one satisfied customer said: it was great to see the warehouse in advance before even signing the lease agreement.

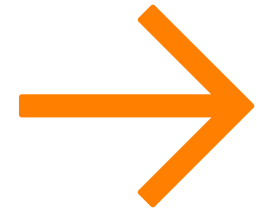
– Development Manager, Posti



Develop the competence of personnel and the operating

As the availability of skilled workforce declines, competence requirements increase and the amount of work requiring special skills varies, competence development and standardized operating models play a major role. Training and orientation of personnel in the use of systems, standardized work processes and safe work, for example, promotes smooth in-house logistics.

Standardized operating models are the cornerstone of flexible resourcing. Without well-documented and standardized processes, orientation is time-consuming and developing multiple skills is difficult.



Solutions

- Standardize and document operating models and processes to improve the efficiency of orientation and occupational safety.
- Train the personnel to be multi-skilled. Increasing the multiple skills of the personnel can solve the challenges posed by volume fluctuations, as employees can work wherever work is needed at any given time.
- Make use of regional cooperation with the neighboring unit.
- Hire temporary flexible or part-time personnel from a logistics partner to get the right kind of expertise and competence at the right time.



CASE

Competent logistics personnel for individual needs and comprehensive outsourcing

Utilizing a partner's competent logistics personnel enables the scalability of operations and competence from peak times to quieter times, evens out the everyday workload of in-house personnel and provides flexibility and space to focus on the company's core business. When the use of external personnel is planned correctly, it saves costs and provides the necessary flexibility in resourcing.

” It makes more sense to let you arrange the warehouse employees we need in any given situation, even on a tight schedule – it allows us to focus on our core competencies.

- The customer company's Logistics Manager

Improve safety at work

An occupational accident is primarily an accident involving an employee. It also causes a disruption to the company's operations, which may have long-term effects if a competent employee will be on sick leave.

Occupational safety risks can arise for several reasons:

→ The risks of the work are not identified, and measures are not taken to minimize them.	→ Deviations and disruptions in production and in-house logistics processes.	→ Insufficient work guidance and orientation.
→ Safety is not improved proactively, but through near misses and accidents.	→ Poor work ergonomics, untidiness or sudden changes in the working environment.	→ A shared workplace where different parties are responsible for the working environment and occupational safety.
→ The supervisor does not intervene in incorrect working methods.	→ Employee turnover and inadequate competence and occupational safety skills.	→ Poor flow of information in the matters mentioned above.

CASE

Occupational safety is developed in cooperation with customers

Occupational safety is an essential part of working life for our employees. Guaranteeing a safe working day for everyone, regardless of the job description, is essential to us. Our goal is to incorporate occupational safety into each everyday decision. The customers with whom we develop occupational safety together are important partners in this work .

“ We are professionals in logistics, but also in the safety of logistics. We want to build a safety partnership with our customers because together we can achieve the best results.

– Head of Safety, Posti

We provide all logistics services

The company can focus on its core business while the strategic logistics partner helps it optimize and improve the efficiency of logistics and identify growth opportunities. Whether your company is large or small, we offer the entire logistics value chain as an easy service under one roof – solutions and systems for warehousing, transport and processing the flow of goods to suit your company's needs.

We make sustainable logistics a competitive advantage for companies, enabling them to grow. We serve our consumers in the Nordic and Baltic countries.

As an in-house logistics partner, we operate in various manufacturing sectors, such as heavy industry, package manufacturing, factories and production facilities, ports and industrial loading and cleaning tasks.



The benefits of a logistics partnership

→ Finance

Outsourcing in-house logistics frees up capital when fixed costs become variable costs and the company only pays for the work performed.

→ Savings

Depending on the starting level, outsourcing in-house logistics generates cost savings of 10–30 per cent to the company.

→ Efficiency

When the number of employees can be adjusted according to the volume, there is always the right number of employees.

→ Competence

The logistics partner's experts and warehousing professionals are always available to the company.

→ Job satisfaction

Job satisfaction and motivation also improve when there are enough interesting tasks available.

→ Delivery accuracy

Better accuracy and quality are also reflected in improved customer satisfaction.

→ Development

The logistics partner's development work improves the efficiency of processes and speeds up operations.

→ Focus

The company can focus on its core business without having to worry about recruitment and functionality.

How can you develop your company's operations with a competent logistics partner?

→ [Read more about our in-house logistics services and contact us](#)

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