

# Warehouses: The boxes worth €300 billion

Today's competition makes warehouses too important to ignore. Hands-on experience can unlock major improvements in logistics performance and productivity.

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Impatient customers demanding next-day or same-day delivery? Service engineers pleading for critical spare parts—now? Retail partners searching desperately for cost efficiencies? These are today's competitive battlegrounds, moving warehouses and distribution centers—once considered backwaters—into the forefront of corporate strategy and investment.

We estimate that globally, companies spend around €300 billion a year on warehousing, managed either in-house or through third-party logistics providers. More than 85 percent of that expenditure is for operating costs: the labor, space, and equipment required to receive, sort, store, pick, pack, and finally dispatch products.

Our research from more than 700 warehousing studies compares the highest performing warehouses with global averages. It indicates that most organizations have significant opportunities to achieve savings here. [Lean working practices](#) could trim at least €35 billion from the world's warehouse bill, for example. And making better use of the latest automation technologies could shave off a further €18 billion or more.

## No easy fixes

With so much potential sitting on their shelves and racks, why aren't companies doing more to optimize warehouse performance? A lot of the answer comes down to knowhow and capabilities. As in manufacturing, there are no short cuts or quick fixes for warehouse productivity or structural cost problems. Big investments in automation or large-scale outsourcing of services can have little impact if companies don't understand how the details of their warehouse operations translate into cost and service performance for them. Or if they don't know how those operations deliver value for their customers and support their current and future business models. Warehouse excellence can be designed from the top down, but it must be built from the bottom up—location by location.

## The challenge of learning on the job

[High-performing lean-manufacturing organizations](#) have achieved remarkable improvements in productivity through the accumulation of marginal gains. They equip their frontline people with the skills, tools, and incentives to continually fine-tune and improve operational performance.

Most companies, however, don't have a stock of skilled [change agents](#) and lean practitioners in their warehouse operations. Worse, they don't have an efficient way to gain those capabilities. In manufacturing organizations, the shop floor has always been the classroom. Lean manufacturing specialists can hone their skills in focused mini-

transformations that address a single machine or production cell. But warehouse operations—which tend to involve few processes conducted at a large scale and exposed to significant external volatility—don't provide the same opportunities to learn on the job. It simply isn't feasible to reconfigure a whole warehouse to test the end-to-end impact of a possible productivity improvement.

## **A brand-new model**

That's why more companies are adopting a new approach to warehouse capability building: model warehouses, dedicated training facilities that can implement all the major processes of their grown-up brothers, but in a much more transparent, accessible fashion. Building a warehouse environment with a few dozen representative SKUs (instead of many thousands) allows risk-free experimentation, for a greatly accelerated learning experience. This type of experiential learning significantly boosts knowledge retention than conventional classroom training.

Today's model warehouse facilities, such as the ones McKinsey operates in Karlsruhe, Venice, Tokyo, and Atlanta, give trainees hands-on experience in applying lean principles and digital operations techniques to warehouse operations. Over a period of several days, participants practice new picking, packing, and replenishment procedures, while identifying improvement opportunities and testing proposed configuration changes for both the processes and the facility. They can even test the shop-floor productivity impact of new, state-of-the-art technologies, such as smart glasses for vision-guided multi-order picking.

This type of first-hand, practical experience has proved to be the most effective and enduring way to acquire lean warehousing skills. After three months, participants in training programs that take place in a realistic environment retain twice as much as information as those who practiced with simpler simulations and games—and six times more than those who only had access to books or classroom presentations.

Companies are using model warehouses in a number of different ways. Short courses for senior executives (“awareness trainings”) explain the challenges involved in warehouse performance improvement, the key performance indicators for warehouse operations, and the potential of lean management. More intensive courses give managers and team leaders the skills they need to drive the performance improvements in their own facilities straight away. And strategic procurement personnel can use the insights they gain to assist the planning of outsourcing projects and build the skills for the evaluation of current and potential service providers.

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