

8 myths about warehouse automation



OPTIMIZING WAREHOUSE PERFORMANCE



Myth #2 "It's too expensive"



Myth **"You need to build** #3 **a new warehouse"**



Myth	"Robots are for the future
#4	– and for big players"







Myth "It does not fit our #6 business or our industry"	
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Robotic technology is quickly becoming an established and well-used tool to grow businesses across industries. Now, an increasing number of companies are looking to automate their warehouse to maintain and gain competitiveness in their respective markets.

As a company that has worked with automation for more than 30 years, we have experienced a shift in the market from one where the idea of robots in the warehouse was unheard of to an increased willingness to invest in warehouse automation across industries.

But even though the market is maturing, and industry experts have talked about robotisation for decades as the future of the industry, automation is still often met with scepticism in the board rooms.



Being a big investment – maybe the biggest a company has ever done – it is only natural to be sceptical and afraid of potential risks. But the scepticism is often based on myths that do not hold water.

This whitepaper is here to debunk some of the most common myths of warehouse automation and to provide you with insight so that you can make your decision based on actual facts.

Dag-Adler Blakseth Chief Executive Officer



Myth **"It's complex and** #1 **difficult to use**"



Håvard Hallås CSO, Element Logic

At first glance, automation can seem overwhelming and complex. But once you get acquainted with the technology you will realise that it is pretty intuitive and easy to use. With training, employees can easily learn their new workflow within hours.

"Digital investment, robots and upscaling: The many aspects of automation may make the process sound both complicated and risky. However, it is not supposed to be complicated for the users. As a provider of automation systems, Element Logic make the installation, onboarding, and operation as easy as possible", says Chief Sales Officer in Element Logic, Håvard Hallås.

There are different levels of automation, from basic picking machines to fully data driven warehouse units. No matter what your warehouse looks like today, automation should always be tailored to meet your needs and supporting your overall business performance.

Regardless of your business model, with an automated warehouse solution, operations are easier – not harder – to do. Once you have the right automated system in place, you will have a flexible and scalable solution that lets you make adjustments to your warehouse when necessary.





Vegard Tvervåg Logistics Manager, GetInspired

Anxious at first but not for long

The e-commerce player, GetInspired, selling sportswear and shoes to active women, admitted to being slightly anxious about moving from a traditional to an automated warehouse. After several months of discussions, the decision to become automated was finally reached.

"We were not sceptical to automation per se, but more to letting robots take over a big part of the job that we had done for many years ourselves. Up until the point we decided to automate, our way of working was based on our own solutions, developments, and creativity. To place this responsibility into the hands of others was of course slightly nerve-wrecking", Vegard Tvervåg, Warehouse and Logistics Manager at GetInspired says.

Because of continuous growth and multiple expansions of the warehouse, GetInspired realised that automation was the best solution going forward. The final tipping point was when they were no longer able to meet customer demands for fast deliveries.

"To deliver quickly on customer orders has always been our number one priority. When we no longer could deliver as fast as we wanted or the customers demanded, we knew we had to make a change. With the AutoStore system from Element Logic we got a warehouse solution that can handle growth, thus not requiring us to move, tear down walls or buy new storage inventory every season. We can scale-up when necessary without risking downtime", Tvervåg explains.



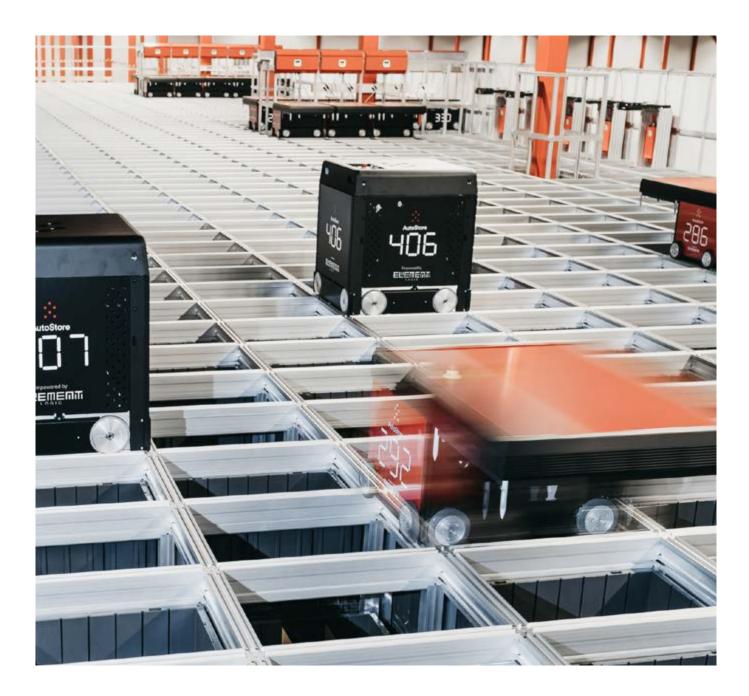


Anna Wiśniewska MD, Element Logic Poland

Fast installations without affecting current operations

When starting an automation process, organisations are often concerned it will steal valuable time – or even risking a complete temporary shutdown.

"The implementation of AutoStore takes less time than you might think, and your new warehouse solution will be implemented without it interfering with current operations or causing down-time for your business", says Anna Wiśniewska, Managing Director Element Logic Poland. With AutoStore, the system can run in parallel to your existing warehouse, and depending on the complexity of the solution, the installation can be delivered within four months and ready to use in just a few weeks.







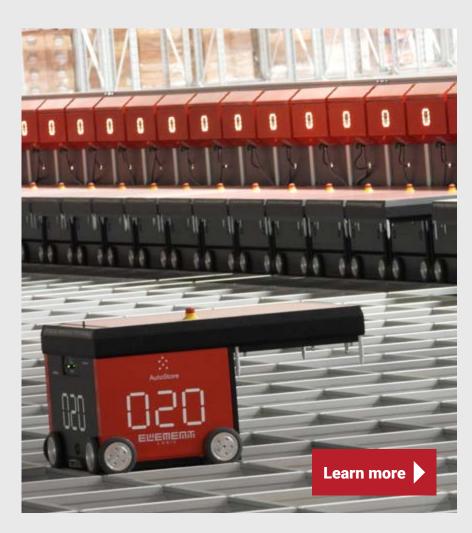
Ole Sauar MD and majority owner, Jollyroom

Ready to use in no-time

Jollyroom, one of the fastest growing e-commerce players in the Nordics, sells children and baby products online and is a good example of how fast you can get an automated warehouse up and running.

Signing an agreement with Element Logic during spring, the automated warehouse was delivered and ready to use already in July – with no down time of current operations.

Managing Director and majority owner in Jollyroom, Ole Sauar debunks the myth of automated solutions being complicated and difficult to use. He knows what he is talking about – he has implemented an AutoStore solution twice. "The first time I was involved in implementing an AutoStore solution with Element Logic was in 2007 with our former company Komplett.no the first e-retailer in the Nordic region to automate its storage system. My experience with the system has been great as it is easy to use, has a competitive price and can be installed quickly. With Jollyroom, the installation was incredibly efficient and the integration between SAP and EWCS was quick and well implemented", he explains.







QUICK TIP

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AutoStore

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Are you already using some sort of Warehouse Management System (WMS)?

eManager integrates well with your WMS or we can integrate our own software/WCS to your solution.



Myth **"It's too expensive"**



Terje Skjølberg Sales Director, Element Logic

You don't have to go all in at once if you choose to automate your warehouse. One option is to gradually transform into an automated warehouse. Regardless of how you go about it, you can rest assured that the investment will be worth it.

"Before signing an agreement, we make ROI calculations together with the customer to ensure they benefit financially from an automated warehouse solution. This results in all our customers experiencing success with automated warehouses, and reporting a faster growth than expected", says Sales Director in Element Logic, Terje Skjølberg.

For some organisations, it is important to be able to scale up

during peak seasons throughout the year. For others, it is all about having a competitive advantage in their market. With robots installed, your operations are more flexible.

"There is no arguing that warehouse automation is a big investment for a company. But it is an investment that will make your business even more profitable", says Jeremy Clouston-Jones, Managing Director Element Logic UK.







Geir Nielsen Nordic warehouse manager, XXL

Investing for the eighth time

One player that has exceeded their expectations towards their investment, is the Nordic sports equipment retailer XXL.

As the largest and fastest growing sports chain in the Nordic Region, continuous growth put increasing pressure on warehousing and handling capacity – leading to the need for manual warehouse adjustments.

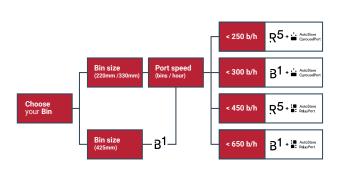
Only one year after the installation of AutoStore, XXL experienced a radical boost in efficiency, fewer picking errors, reduced lead-times to XXL stores and crucial space utilisation improvement.

XXL is expanding its automated warehouse for the eighth time, making its robotic system able

to handle 150 000 bins and consolidate shipping through one central hub. In addition, the sports retailer has installed the new AutoStore RelayPort workstation, and compared with a carousel port, the efficiency has increased with approximately 50 %.

"Robot picking is 3-5 times more efficient than manual solutions. We have expanded eight times since we first installed the robots, but not one time did we have to shut down operations. Our warehouse is in operation close to 100 percent of the time," says Nordic warehouse manager at XXL, Geir Nielsen.

The new RelayPort consists of an ergonomic workstation with 2-6 buffer modules that feeds the operator continuously with bins. With all buffer modules and Black Line Robots, it can handle up to 650 bins per hour. Both AutoStore robots, Red Line and Black Line, are compatible with the workstation, making it an available option for all AutoStore installations





Reduce errors – boost efficiency

Faults and accidents due to human errors are one of the main reasons for delays, accidents, or extra costs for businesses. With automation, you reduce this risk to a minimum, ensuring that every product is handled exactly the same.

In e-commerce, but also in other businesses, reducing picking errors equals to huge cost savings. With even better tracking and accuracy on the inventory, businesses also get more precise insight into what is currently in stock. Another aspect that will give you value for your money is the fact that machines never sleep. Automation means you can extend opening hours and speed up the process to run 24/7. By extending the operating hours, you can improve your ROI faster.

QUICK TIP

Does your company depend on funding from investors?

An automated warehouse will give you a better chance of providing clear numbers in real-time, making it easier for investors to gain complete insight into the overall business and ROI.

Myth #3

"You need to build a new warehouse"



Product Manager, Element Logic

Element Logic has helped many customers design new warehouses, tailored to extract maximum efficiency and customised for increased growth. However, these types of greenfield projects are not the norm. Actually, 70-80 percent of our AutoStore installations are made within the current warehouse of the customer.

"One of the great advantages of AutoStore is that it is a highly adaptable solution. You can compare it to LEGO - the entire system is based on modules, which means that the design we make is tailored to the space you have available, the processes you run, the workstations you need, and the list goes on. Really, there are no boundaries to our design possibilities. If a customer would like to do something extraordinary, like having their system in the shape of the letter A, we could do that", Product Manager at Element Logic, Lasse Vik explains.

There are multiple ways of utilising existing warehouse space. You can dedicate a part of your warehouse to automation, take advantage of the height by building a mezzanine for the robots to work on or transform a room into an automated storage.

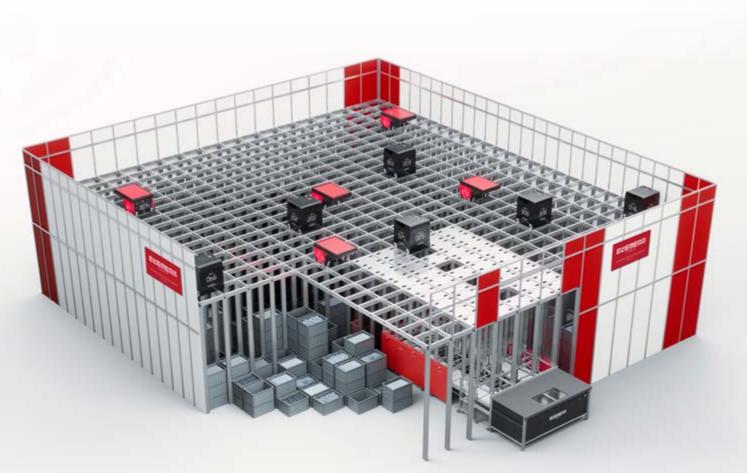
With an AutoStore solution from Element Logic you get up to four times the storage capacity compared to a traditional warehouse, meaning that the need to build a new warehouse only applies to the few.

"We tailor solutions for warehouses of every shape. One example is the AutoStore solution implemented at OSL, the main airport in Norway. The lack of storage space at OSL was solved by implementing AutoStore in a basement room, utilising the entire space and building tunnels to gain access to the system. eXXpozed in Germany also took advantage of its basement storage space, installing an AutoStore system serving both its online shop and retail shop. In both cases, the grid designs were customised to fit the unique space", Vik says.

Another example is the grid customised for Solar, a wholesaler in electrical equipment. Taking advantage of an existing mezzanine, the robots operate high above floor level, receiving and delivering packages to the goods reception on the ground floor through lift ports.

"No matter what your warehouse looks like today, we can find a solution that fits your facility perfectly and one that better utilises the space available to you", Vik says.





How AutoStore works

AutoStore is a unique automated warehousing and picking system suitable for all types of businesses.

The AutoStore system is scalable and modular and includes battery-powered robots, storage bins, operator ports and an aluminium skeleton – a grid. The bins are placed in the grid and each order is processed quickly. The robots work on top of the grid and bring bins to and from operators at their own gates.

AutoStore consists of the Red Line system and the Black Line system, which have different robot speed and height of the bins. Depending on your specific needs, Red Line and Black Line can be operated independently or in a combination.







Myth **"Robots are for the future** #4 – and for big players"



Isabelle Bion MD, Element Logic France

It is time to settle this once and for all: robots are not a futuristic dream. The fourth industrial revolution is happening now and has been for a while. In a globalised, competitive world, automation means labour efficiency, system accuracy and overall productivity, making it a competitive necessity for both smaller and bigger companies.

"Warehouses all over the world are automating to keep up with new customer demands. In this, size does not really matter as no automation solutions are the same. The solution is fitted to your business model, no matter how small or big", says Managing Director in Element Logic France, Isabelle Bion. Being small may actually be an asset as it allows you to adapt to change fast. With a scalable solution, it gives you a competitive advantage, avoiding the cost of commitment that follows with temporary human labour. A scalable solution also allows smaller businesses to test out going big in a more risk-free environment.



QUICK TIP

Do you run a small business and are unsure if automation is right for you?

This is what you should be asking yourself: How is our business doing today and how will it look 2 to 5 years from now?

OPTIMIZING WAR



MD, Element Logic Germany

Leslii: One of the smallest and most cost-efficient AutoStore systems in Germany

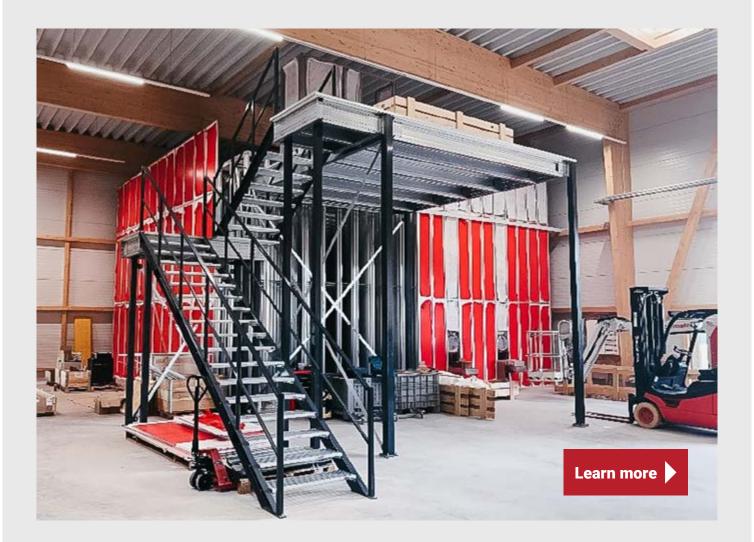
The family-owned German company Leslii sells hand-made fashion jewellery and has 30 employees. In the course of constructing its new headquarter, Leslii automated its warehouse with an AutoStore system designed and delivered by Element Logic.

"We were looking for a futureproof solution that would allow us to use our space more efficiently and to optimise our logistics. AutoStore is exactly the right system for our growth and product range, and with Element Logic we have found the ideal partner to put this into practice," says CEO and founder at Leslii, Thomas Kalle.

With only a 100 m² grid and four robots, Leslii is one of the smallest

and thus most cost-efficient AutoStore systems in Germany. The system now handles 1.500 picks per day, shipping 2 million articles each year to dealers across Europe.

"The current setup is easily upscaled if Leslii suddenly requires more AutoStore capacity", adds Manfred Schleicher, Managing Director Element Logic Germany.







Myth #5

"Robots will steal our jobs"

Automation is changing the very nature of numerous jobs. Many are worried that robots will make them excessive. It is however a fact that by inviting the robots in we need human skills to ensure smooth operations. As more warehouses automate, companies are still relying on their employees and need to emphasize and cultivate them as their most important asset.

To most employees, it is a relief that invites for more interesting tasks and a better workday, going from repetitive low skill labour, to ergonomically pleasant jobs, as well as creating new ones that did not exist before. It is not an issue of humans OR robots – it is humans AND robots.

Improved working environment

Prepare your workers for a new type of work and a time of learning new tasks. Automation results in different workflows, thus a need for reskilling workers. This is one of the reasons Element Logic has developed an easy-to-use interface, so that warehouse staff quickly can learn how to operate robots and picking stations.

Robots are also easy to scale up when necessary. Especially in peak season. This means less stress for your employees, less overtime, and less unfavourable working hours. The workplace also depends less on temporary labour, resulting in more resources to invest in the staff you already have.





CEO, Proshop

Robots created 15 new jobs for Proshop

Proshop, one of the leading e-commerce businesses in Denmark, automated their warehouse in 2018, with the help of Element Logic.

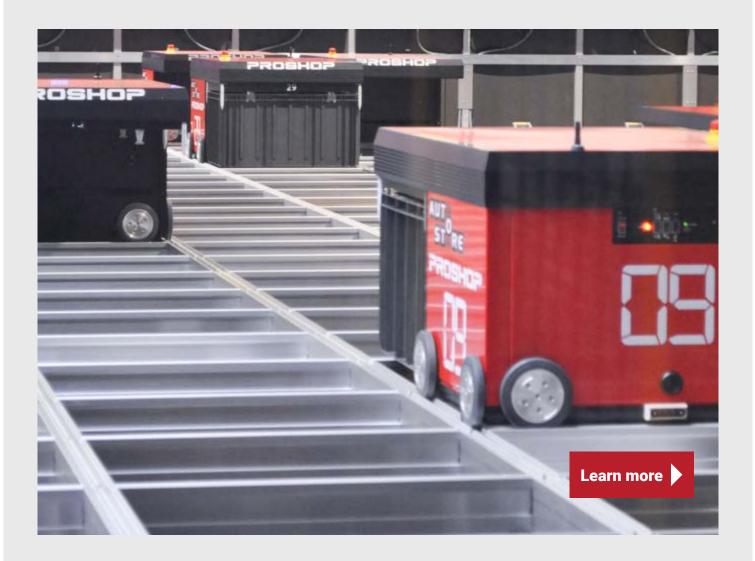
A year after the AutoStore robots were introduced into the warehouse, Proshop had employed 15 new workers. In other words, the robots did not steal jobs, they created them.

"If we had not automated, we might have gone from 140 employees to zero", says Ivan Jæger, CEO in Proshop.

"We always need someone to handle the robot system, pick items or do service. Thus, it is more about moving the employees", says Warehouse and Logistics Manager in Proshop, Ronnie Stormfeldt.

A frantic Christmas in 2017 led Proshop to automate. They started with 40 robots in 2018 and added 10 more robots in 2019 and in November 2020 to be even better equipped for busy periods like Christmas and Black Friday.

"The robots make us ready for seasonal peaks, without making us run faster or work longer", Stormfeldt says.





How automation can help your business grow

Key benefits from automating your warehouse with Element Logic.



A customized but also flexible solution tailor-made to fit your needs



Easy to expand, adapt to market changes and change in customers



Implementation

Easy to implement both hardware and software



ROI A beneficial investment

High level of operational safety



Handle goods flow through seasonal peaks



Low risk

Does not interrupt

daily operations

High utilization of floor area and warehouse volume



Labor efficiency

High operational efficiency for all warehouse processes



Precision & quality High level of precision and quality to ensure high customer service level



Energy saving and sustainable robots





Myth **"It does not fit our** #6 **business or our industry"**



Anders Bohlin Sales Director, Element Logic SE

From car parts and aviation to luxury fashion, groceries and electronic components, more and more industries are turning to automation to meet new customer demands and streamline their value chains.

"We see a strong automation trend across a variety of business segments, and we are currently working with businesses ranging from health care and consumer electronics to sports and apparel and within the 3PL segment. As long as you have a warehouse and products that fits into bins, AutoStore is a solution that can benefit your business, independent of your company size", says Sales Director in Element Logic Sweden, Anders Bohlin.

There are several ways to use automation. Many businesses use robots to handle parts of their product line-up but continue to handle other products manually, like large items or hazardous substances. And it is not mandatory in retail to have a web shop to get the most out of the robots – many also install AutoStore in-store to reduce the waiting time for customers and making the in-store handling more efficient.

"Element Logic has wide experience from different industries and knows how to make the AutoStore solution suit your business model. We are already seeing several new industries making a shift towards automation, and I would recommend all types of businesses to at least consider if automation can make their dayto-day handling of products more efficient, giving them a competitive advantage in their respective market", says Bohlin.







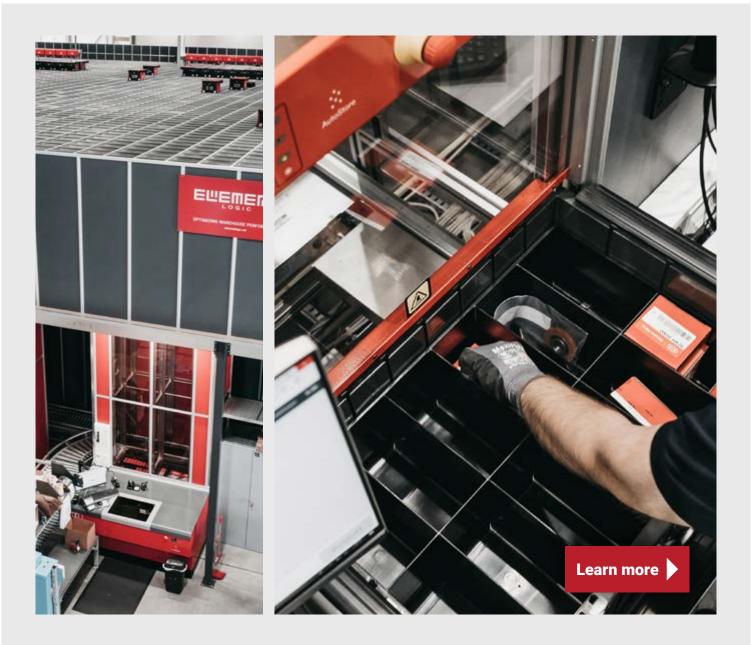
Dieter Egloff DMD, Peterhans Handwerkercenter

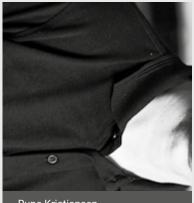
In-store AutoStore – for faster deliveries

Peterhans Handwerkercenter, an assembly and mounting hardware specialist in Switzerland, decided to use the AutoStore solution differently than many of its competitors. Instead of only installing AutoStore in their storage, the automated system was also integrated inside the shop.

"By integrating the AutoStore system directly into our store, it was possible to simplify processes and eliminate long walking distances, and also give our customers a more engaging shopping experience", Dieter Egloff, Deputy Managing Director at Peterhans Handwerkercenter AG says. The in-store solution is characterised by three picking ports located behind the sales counters where the customers can watch how fast the robots process their orders. An unplanned express order from the lowest bin level takes a maximum of 4 minutes. On average, it takes less than 2 minutes from the customer makes a request until the product arrives at the sales counter.







Rune Kristiansen Head of Logistics, Bertel O. Steen

Flexibility in a changing market

For a company offering the largest range of car brands, streamlining logistics is crucial. While cars do not fit in the AutoStore bins, spare parts do. In addition to importing brands like Mercedes-Benz, Opel, Smart®, Peugeot, Citroen, Kia, Fuso, Setra and DS, Bertel O. Steen also carries spare parts for cars, buses, and trucks.

Being in an industry where change happens fast, Bertel O. Steen has chosen technology that enables it to adapt quickly if needed:

"If the market for car spare parts declines, our new warehouse can easily be adapted to distribute other products instead. The benefits we get from working with Element Logic and the technology in its unique Element Warehouse Control Software (WCS), are immense," says Head of Logistics at Bertel O. Steen, Rune Kristiansen.



Myth **#7**

"You should not invest in automation if your future is unpredictable"



Nikolaj Bjørn Eriksen MD, Element Logic Denmark

On the contrary, unpredictability is our expertise! With seasonal peaks, global commodity prices and trends, products will experience highs and lows causing sudden needs for changes. Scalability and flexibility by automation means being prepared for future growth – when you need it.

One very recent example of this is the outbreak of Covid-19, forcing businesses across the globe to scale up or down their operations according to the new customer demands. The sports retailer XXL was able to handle the new situation immediately.

"Sales dropped in the shops, but the online sales growth partly made up for the in-store decline. For us, having a flexible and modern warehouse has been vital. We were less dependent on people when quarantine and social distancing rules were applied", Geir Nielsen, Nordic Warehouse Manager at XXL explains.

A more foreseeable future for everyone

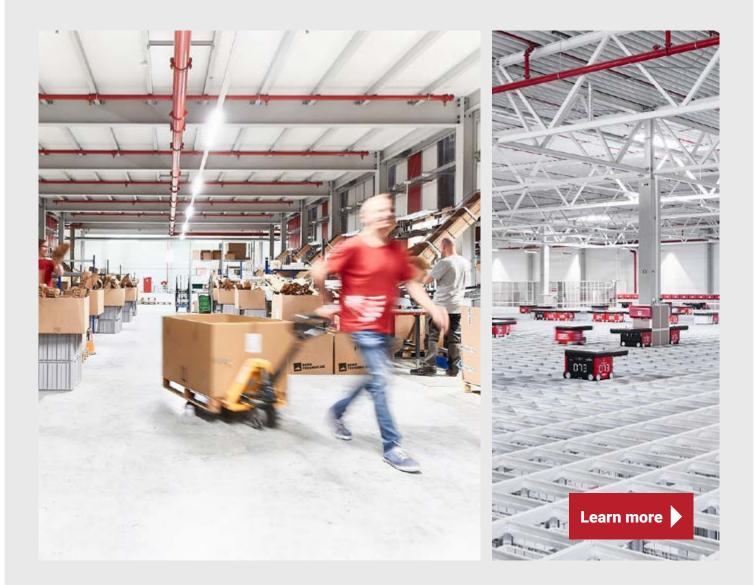
Finding skilled and dependable workers for short time employment during peak season can be a challenge – and even more so in the future. Throughout Europe, warehouses are struggling to find enough manual labour. Keeping them motivated and loyal for an extended period of time can be equally challenging. In addition, there is the extra cost of onboarding new employees, especially for short term employment.

"With automation, you can scale up when necessary, providing a more foreseeable work situation for both you and your employees", Nikolaj Bjørn Eriksen, Managing Director at Element Logic Denmark explains.

Just ask the third-party logistics company Prime Cargo:

"Capacity and flexibility were the two major keywords for our installation. We have previously experienced bottlenecks during peak seasons at our manual warehouse, which lowered our efficiency. With our AutoStore system, we can increase efficiency and capacity while simultaneously making a better use of our space", says Morten Høilund, CEO of Prime Cargo.







Ronny Höhn MD, Bergfreunde

An unpredictable market calls for predictable solutions

One e-commerce company who felt the need to be prepared, was German Bergfreunde, a business selling outdoor equipment from more than 750 brands. With a sales increase of roughly 30% per year, the ability to scale operations is crucial.

"With our tremendous growth we are dependent on a flexible and efficient warehouse system. Scalability, space efficiency and high performance were the deciding factors for us", says Ronny Höhn, Managing Director at Bergfreunde. After installing AutoStore, Bergfreunde increased their picking efficiency by about 400 percent. On average Bergfreunde's employees are now completing more than 175 picks per hour. Before switching from shelf storage to Element Logic's AutoStore-based intralogistics system, they only did 45 picks per hour.





Myth #8

"Robots are not sustainable"

Copenhagen institute for Futures Studies took in 2018 on the subject of green robots, debunking an article from The Guardian claiming robots to be "fantastically energy-hungry" and bad for a sustainable future. The AutoStore robots could easily have been added to the list from CIFS with sustainable robots to debunk this myth.

Ten AutoStore robots use the same amount of energy as one vacuum cleaner. In other words, not very much. They run on rechargeable batteries and generate much of their own energy, making the power circular and sustainable. The robots regenerate the energy by slowing down and lowering bins, instead of spending unnecessary energy through traditional breaking functions. Because of this, the robots waste much less energy to friction and resistance.

The latest robots from AutoStore, Black Line, can be in operations 99% of the time, changing batteries themselves when needed. Another aspect making robots sustainable is that, unlike humans, robots can work in the dark and do not depend on environmental settings. Reduction in heating and lighting as well as maximising the use of space, reduces the required electricity – thus reducing a large part of your emissions.

Also, AutoStore is the very definition of space efficiency as it delivers the highest storage density of any ASRS. With AutoStore you get four times the storage capacity in the same footprint as manual storage. With any shape possible, utilisation of the building is at its best.





Robots powered by the sun

Sustainability was at the forefront when electronics wholesaler Berggård Amundsen (BA) built its new warehouse with Element Logic.

Because BA wanted its new 14,000 m2 building to act as a visual representation of the products they sell, 1,050 solar panels were installed on the roof and 50 m2 of the façade.

Even in Norway, with little sunlight and snow during the winter season, the facility generates 230.000 kilowatt hours of pure solar energy every year. The solar panels make BA selfsufficient from April to September and also provide power to 40 electrical car chargers that are available to the local neighbourhood. As a result, BA received an "eco-lighthouse" certification for an environmentally friendly warehouse facility, where the robots run on solar energy.





QUICK TIP

BHAN

STFOL

NIT

PLAST

Is sustainability an important focus for your business?

Element Logic also focuses on designing warehouse processes that reduce waste and increase recycling in the warehouse.



Knowledge to make an informed decision

There you have it – 8 myths on warehouse automation debunked. Automation is happening now; it is no longer a futuristic dream. A variety of companies, big and small, across industries are turning to automation to get ahead in their markets. If there ever is a time to consider your technological options, it is now.

Warehouse automation is complex, but not for you. It is our job to make the implementation, the process and operations as easy as possible for our customers. Automating your warehouse is an investment to make your business even more profitable - as it has for our customers mentioned in this whitepaper.

The investment does not necessarily include a brand-new warehouse. The system can be tailored to your current one, being cost-efficient and environmentally friendly.

What is also cost-efficient is the ability automation gives you to be more agile when facing changes in consumer behaviour and to scale up when necessary. There is no denying that the decision to automate your warehouse will involve long discussions, thorough calculations, and big investments. However, to make a decision like this, it is vital that you have the correct information. Hopefully, this whitepaper has given you valuable insight into the benefits of warehouse automation.

The market of warehouse automation is on the rise across all of Europe. Choosing automation can bring increased efficiency and profitability to your business, but at this point in time, it can also give you a competitive advantage over other suppliers in your market.

The time has come to make an informed decision about the future of your warehouse – whether it involves automation or not.



Dag-Adler Blakseth CEO, Element Logic



Want to learn more about how Element Logic can optimize your warehouse performance?



For over 30 years Element Logic have been optimizing warehouse performance

We create smart solutions to help warehouses deal with the increasing demand for fast deliveries. Our robotic solutions, software and consulting helps businesses improve their value chains and to be more profitable. We optimise warehouses of all sizes in a wide range of industries including electronic components, parts distribution, consumer electronics, 3PL, pharmaceuticals, apparel, sports equipment, and more.

As the original AutoStore® partner, we have immense experience in designing, delivering and installing tailor-made solutions to improve the customer workflow.

Element Logic has over 150 employees and had a turnover of €80 million in 2019. Our headquarter is in Norway with subsidiaries all over Europe.



elementlogic.net