

OWR x *HIKROBOT*

How ready is the UK  
warehousing industry  
for the robot revolution?

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# EXECUTIVE SUMMARY

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**Automation, specifically robotics, is transforming modern warehousing in ways we could never have imagined before. Capable of undertaking arduous and repetitive tasks more efficiently than us, robots represent a step-change in logistics, allowing warehousing firms to better serve their customers, protect margins and future-proof their operations.**

Amazon, Ocado and other giants are setting the pace, demonstrating what is possible through large-scale automation. As they ramp up investment further, it's clear that 3PLs and retailers with their own warehouses (particularly those with e-commerce) will need to leverage the technology too.

Robotics is now coming of age against a backdrop of Covid-19 and Brexit. As well as supporting current social distancing measures, the technology helps to meet surges in demand and address the industry's ongoing labour shortages, which could get worse under a points-based immigration system.

Automation is not only about fending off challenges but staying relevant and thriving in a world increasingly dominated by e-commerce. Processing goods at the volume, speed and accuracy retailers and consumers expect would be impossible without some level of automation – but as with any technology, there will always be innovators, early adopters and those who lag behind.

With this in mind, we wanted to provide a review of how robotics is currently being used in warehousing today, with a focus on four key verticals:

- Retail and e-commerce
- Third-party logistics (3PL)
- Grocers
- Pharmaceuticals

Our market-leading dataset draws on more than 50 independent sources including proprietary data and insights. Based on our qualitative research, we'll provide a 'robotics-ready' verdict for each segment to highlight where the opportunities lie.



**David Hallam**  
Chief Executive Officer of OWR  
[www.owrobotics.co.uk](http://www.owrobotics.co.uk)

# STATE OF THE MARKET

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Manufacturing might have led the way on robotics but in recent years, those same commercial gains have been seen in warehousing too.

Amazon's £600m acquisition of Kiva Systems in 2012 was a major game-changer for the industry, since it paved the way for a myriad of new start-ups to accelerate the pace of change.<sup>1</sup> The result is a warehousing robotics market that is tremendously competitive and vibrant – delivering fast-paced futureproof change for all industry verticals.

Competition in the market means robotics manufacturers are innovating quickly, continually improving the functionality and technical capabilities of the software and also driving down the cost. Unlike Amazon, other businesses might not have the resources to develop their own robotics technology, so rely on strategic partnerships with tech firms instead.

Amazon may be one of the dominant players in automation, but you only have to look at the soaring share prices for Ocado, now the UK's most valuable grocer, to see how warehousing robotics contribute to success. Now other supermarkets are moving quickly, building robotics into their logistics operations in order to compete.

The UK may have mature e-commerce, pharmaceuticals, grocery and retail markets but our research suggests it lags behind other European countries when it comes to robotics adoption in general.

**221,500** Units  
Germany

**74,400** Units  
Italy

**42,000** Units  
France

**21,700** Units  
UK

There was an operational stock of 580,000 units (robots) across the EU last year, with Germany accounting for around 221,500 units. Meanwhile, Italy had 74,400 units; France had 42,000 units yet the UK had a comparatively low 21,700. Although robot sales fell in Germany by 23% after a record-breaking year in 2018, they rose by 15%, 13% and 8% in France, Italy and the Netherlands respectively. With robot use already lower than other nations, new installations in the UK dropped by 16%.<sup>2</sup>

Failure to invest in robotics could put some UK firms at a disadvantage after Brexit, especially those who traditionally relied heavily on EU labour. Their costs are likely to be higher and, for businesses trading in the EU, it might make more sense to move their operations to the mainland.

## Automation adoption rates



4% SMEs



28%

Large businesses

Among SMEs automation adoption rates stand at just 4%, compared to 28% in large businesses.<sup>3</sup>

The warehouse automation market is forecast to see a Compound Annual Growth Rate (CAGR) of 12.6% to reach \$46 billion in 2023. Analysts also predict a CAGR of 61.5% for AMR (autonomous mobile robotics) goods-to-person systems.<sup>4</sup>

## RACE FOR SPACE

The colossal distribution centres that have emerged in recent years, driven by the e-commerce boom and high demand in the grocery sector, belie one of the major issues facing the warehousing industry – chronic space shortages. Stockpiling due to Brexit and Covid-19 only put further pressure on space.

By the summer of 2020, it was reported that ‘take-up of industrial & logistics space (units of 100,000 sq ft +) has hit record levels in H1 2020, reaching 22.4 million sq ft (2.081 million sq m), 66% above the long-term average’. Some 43% of take-up can be attributed to online retailers, with Amazon alone accounting for up to 84% of this figure. 3PLs accounted for 15%, with many fulfilling contracts for the NHS. Another 11% were short-term lease agreements with high street retailers with excess stock to store as a result of Covid-19.<sup>5</sup>

AS/RS could save up to **85%** of wasted warehouse space

With land and labour in short supply, and demand only expected to grow, automation is only going to become more valuable to warehousing firms. It has been suggested that an automated storage and retrieval system (AS/RS) could save up to 85% of otherwise wasted warehouse space and reduce 60% of labour costs – all the while increasing through-put and accuracy.<sup>6</sup>

# LABOUR SHORTAGES

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A long-standing problem in warehousing, labour shortages are only adding to the pressure operators face to achieve more at no extra cost. Negative perceptions around warehousing work can hamper recruitment efforts and, without a steady supply of EU labour to fall back on, logistics – and the industries that depend on it – could be storing up trouble.

Technology is going a long way to addressing labour shortages; for example, a WMS can automatically allocate picks with rules to ensure operatives take the most efficient route around the warehouse.

Even if labour wasn't in such short supply, it's becoming clear that there is a limit to what human endeavour alone can achieve. No matter what benefits are offered, operatives could still walk for miles across enormous distribution centres, working anti-social hours and striving to meet higher targets.

Robots however can undertake work that people find repetitive and physically-demanding. They can meet targets that would be impossible for us and do not need to stop for a break. Currently, the outlay for an autonomous mobile robot (AMR) is around the same as one full-time picker, although these costs usually drop when operating a 24-hour shift model.<sup>7</sup> In other words, there is no over-time, anti-social hours pay, management, training and absence to factor in, no expensive agency workers to source and operators can make the most of the space by moving goods through the warehouse faster.



# HOW WILL COVID-19 AND BREXIT SHAPE THE WAREHOUSING INDUSTRY?

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Problems like labour shortages, land availability and low productivity have been bubbling away for many years – but the combination of Brexit and Covid-19 is likely to force operators to take action. Before looking at each of the verticals we've identified, it is worth looking at the ongoing impact of these events.

## COVID-19

As many commentators have suggested, lockdown accelerated the shift towards e-commerce quicker than anyone could have predicted. It brought new sales opportunities for retailers and the logistics companies that serve them – but those whose supply chains lacked resilience and flexibility invariably paid the price.

The pandemic prompted many shoppers to change how they buy groceries, with 10% trying delivery, 6% using in-store click-and-collect and 10% collecting via a drive-through.<sup>8</sup> Supermarkets increased delivery slots in response and many new converts look set to continue shopping online after the pandemic has passed. New sales opportunities are always welcome – the problem is supermarkets are still struggling to make e-commerce profitable.<sup>9</sup>

Lessons have been learned outside the grocery sector too. While the most agile retailers and logistics companies moved quickly to temporarily plug the gap left by bricks-and-mortar stores during lockdown, others could have performed better. As the authors of one report put it:

“The situation has given businesses a stronger sense of what they need in order to deliver for customers, to be more productive, and to have the flexibility to operate in downtimes or when demand surges beyond usual capacity.”<sup>10</sup>



# BREXIT

As an industry traditionally dependent on European labour, operators have been bracing themselves for what 2021 might bring, and for good reason. Around one-in-five forklift truck drivers and warehouse operatives are reported to be EU nationals whose vocational status in the UK is described as 'uncertain'.<sup>11</sup>

While it is too early to tell what impact the end of free movement will have on labour availability, the UK's new points-based immigration system could rule out those who fall short of the requirements. The UK Warehousing Association (UKWA) has warned that recruitment will be even more difficult in this climate.<sup>12</sup>

EU net migration dropped following the 2016 referendum, although it stabilised in 2018/19.<sup>13</sup> The ONS reports that in 2020 the number of EU citizens coming to the UK for work-related reasons has decreased to the lowest level since 2004, driving an overall fall in immigration for work since 2016.<sup>14</sup> However, it is not yet clear whether the current trend will continue. We also don't know how many EU nationals, who have lived in the UK for more than five years, will apply for settled status before the June 2021 deadline.

Brexit uncertainty will doubtless prove a headache for operators in the short-term at least – but, as with Covid-19, it is likely to prompt positive changes in a bid to improve operational resilience. Automation will play an important role in helping them to achieve this, as long as they see strong returns in the short and long-term. Any solution should involve minimal disruption during implementation and ease-of-use from the start, followed by ROI in as little as 12 months.

The availability and affordability of new technology is one of the reasons why more businesses are starting to think more seriously about automation. One expert points out that his clients see it as a way to resolve 'labour cost inflation and manual handling regulations' as well as improve accuracy and efficiency. He added:

"Automation does not need to be multi-million-pound automated storage and retrieval systems. Automation these days can start with simple automated guided vehicles to replace manual FLT activity and these systems can often pay back in less than 12 months."<sup>15</sup>

## OWR ROBOTICS READINESS INDEX

### SHORT TERM GAIN POTENTIAL:

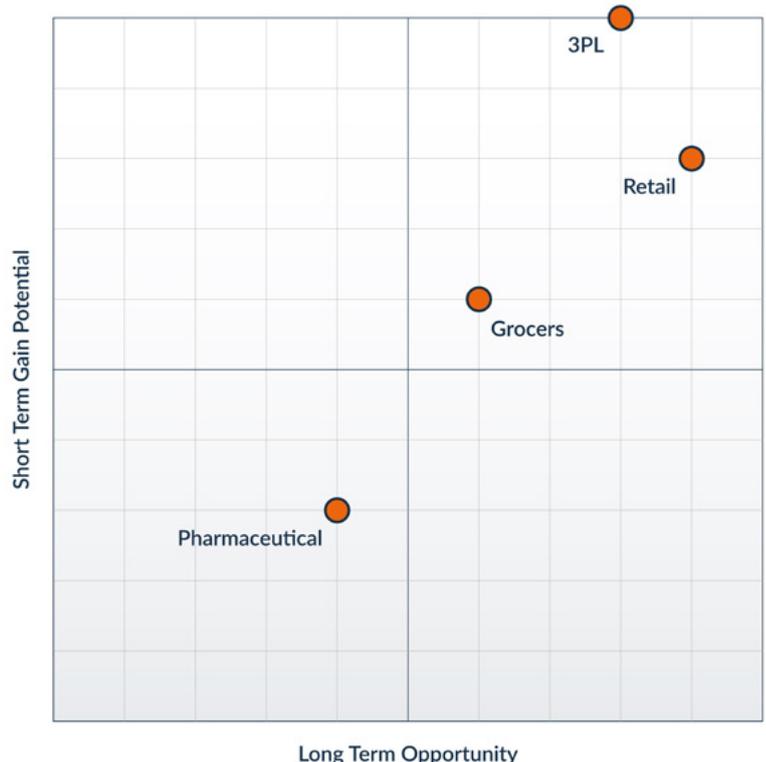
Following our analysis, based on the secondary research present in this report, OWR experts have given a 0-10 rating for each sector and its potential to implement warehousing robotics now for immediate gains. The higher the score, the bigger immediate impact we believe warehouse automation can have on operations.

Pharma - 3                      3PL - 10  
Grocers - 6                     Retail - 8

### LONG TERM OPPORTUNITY:

This measure looks at adoption levels, barriers to implementation and the long term potential warehouse robotics is likely to have on a sector.

Pharma - 4                      3PL - 8  
Grocers - 6                     Retail - 9



# ONLINE RETAIL: A GROWING MARKET

Covid-19 restrictions have arguably deepened the divide between bricks-and-mortar retail and e-commerce. Stores, already struggling in the face of online competition, lost months of trade and even when they reopened, low footfall continued due to the lack of tourists and office workers.<sup>16</sup>

Online sales, on the other hand, boomed during the lockdown period – rising by as much as 50% by the summer of 2020 compared to February that year.<sup>17</sup> Now as many as 44% of shoppers say their habits have changed permanently as a result of the pandemic, while 47% believe they'll make more online purchases.<sup>18</sup>

Automation is going to be key if retailers are to adapt to this swing towards e-commerce. It remains to be seen whether investment in IT infrastructure and fulfilment will come at the expense of bricks-and-mortar stores, but a major shift to online could disrupt traditional distribution channels.

Global brands such as Uniqlo have also introduced robots into their warehouses, while Boots introduced 135 'cobots' at one of its warehouses in anticipation of delivering three million items for Black Friday 2019.<sup>19</sup>

Tight margins and high customer expectations have already paved the way for automation in retail but there is still more work to be done. According to the authors of one report, around 53% of retail activities could be automated, predominantly in logistics. They go on to say that packing, stock management, data collection and other manual tasks can all be automated, leaving tasks that demand emotional intelligence, such as advising customers, to people.<sup>20</sup>

**53%** of retail activities could be automated

Robots are well-suited to the fast-paced nature of e-commerce, since they can operate 24/7, without risk of illness or injury, and pick single items with speed and accuracy. Powered by artificial intelligence, they continually find the optimal route to reduce pick times and costs and have a proven track record of picking items without error.

Where Amazon and other e-commerce giants lead, others tend to follow albeit on a smaller scale. Amazon now operates more than 250,000 warehouse robots internationally – eight times the number it had in 2016<sup>21</sup> – and support pick rates up to 800 per hour.<sup>22</sup> Close behind are Ocado's robots, which can pick as many as 700 orders per hour.

Pick rates depend on the level of automation in a warehouse, ranging anywhere between 250 to 300 with some systems, to 600 with a high-speed one. To put this in context, a person could normally be expected to pick 50 to 100 items per hour.<sup>23</sup>



## CUTTING OUT THE MIDDLEMAN

The pandemic has also pushed big brands into a new direct to consumer approach. Heinz<sup>24</sup> for example has launched Heinz to Home, enabling consumers to purchase bundles of products online and have them delivered straight to the front door.

Pepsi is another example of a food and beverage heavyweight developing new direct routes to market to supplement traditional channels which have struggled due to a drop in footfall. It launched snacks.com and pantryshop.com back in May 2020.

Of course this means a warehouse rethink. Pick rates and order fulfillment takes over from pallets and bulk distribution. Inevitably, robotics and automation will have a greater role to play if and when this DTC model becomes more established as many commentators believe it will.

## HOW READY IS E-COMMERCE FOR ROBOTICS?

### + STRENGTHS

By its nature, e-commerce is tech-driven and it's therefore no surprise to see major retailers, such as Amazon and Ocado storming ahead in robotics development. Other retailers have also begun investing in automation and despite robots not yet being classed as common, the signs are promising for the sector as we look ahead.

With consumer buying habits forced to drastically change from the outset of the pandemic, online retailers are also well versed in the benefits of automated solutions and the efficiency savings they can provide.

### — WEAKNESSES

The pace of change is so quick that all online retailers will have to innovate through strategic partnerships with tech companies if they are to survive. This may leave those who have been slower to act facing real trouble, unable to provide the high levels of customer experience and service consumers have grown to expect.

### ✓ OPPORTUNITIES

Robotics could play a role in transforming the fortunes of high street brands that have seen in-store sales drop off, enabling them to future-proof their business model for the omni-channel world. Strategic partnerships with robotics companies can give them access to the latest systems that deliver value, without the R&D costs as well as driving far more efficient ways of working.

## OUR VERDICT

Automation will be vital for online retailers to survive and thrive.

## 3PL: ON THE ROAD TO AUTOMATION

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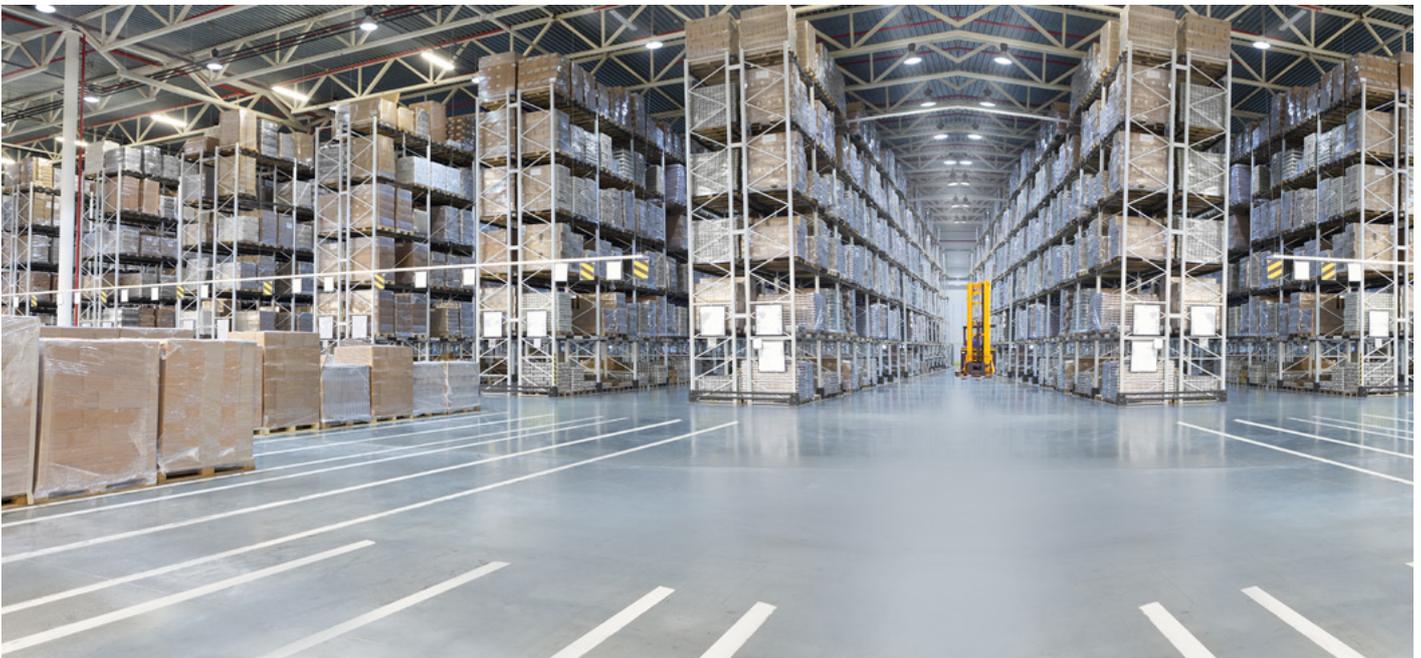
**Automation is becoming more common in the 3PL market, particularly among the tech-led start-ups serving the e-commerce market. Like any warehouse operator, businesses benefit from increased efficiency and productivity and better customer service – so why aren't they more prevalent?**

Our research suggests that while many firms use a WMS (warehouse management system) and other automation technologies, as much as 90% of picking is still manual. But labour-intensive processes surely have no place in a world where labour is in short supply. As we saw in the previous section, automation dramatically increases pick rates, which could lead to a six-fold rise in productivity on manual pick-to-pallet warehouses.<sup>25</sup>

One barrier for multi-tenanted 3PLs is they need to ensure robotics would deliver a strong return on investment beyond the lifetime of existing customer contracts. They may need to reconfigure their warehouse to accommodate different product types and sizes, so will also look for flexibility.<sup>26</sup>

New generations of robots have been developed to learn and optimise new routes and layouts far quicker than human operatives, helping to drive up standards and enable 3PLs to deliver on more contracts without increasing headcount.

There is no shortage of forward-thinking 3PLs in the UK but failure to innovate and introduce new ideas (like robotics) more widely means retailers and their customers are losing out. When surveyed, almost 60% of businesses said their 3PL is 'poor' at introducing new initiatives, and none rated it as extremely good. Worryingly, 3PLs do not seem to recognise the scale of the problem – the same poll found that 84% of 3PLs believe they are good at introducing new ideas and initiatives.<sup>27</sup>



The boom in e-commerce, accelerated by lockdown, has come at a critical time for 3PLs. Amazon has set the gold standard for rapid fulfilment, giving small-scale retailers and major brands access to its sophisticated warehousing infrastructure via its 3PL arm, Fulfilled by Amazon (FBA). Other 3PLs therefore have little choice but to match its capabilities if they want to win contracts from retailers.

It's worth mentioning too that some big brands have left Amazon, creating new opportunities for 3PLs.<sup>28</sup> And while FBA is an attractive option for many sellers, its pricing plan does not suit everyone, particularly those who cannot sell their stock quickly enough. It seems there is a gap in the market for 3PLs to serve customers who do not get what they want from Amazon but expect the same standards.<sup>29</sup>

## HOW READY ARE 3PLS FOR ROBOTICS?

### + STRENGTHS

The right partnerships with tech companies can deliver the innovation customers are looking for, and impressive returns for the 3PL market itself. With very fine profit margins in transport, automation is becoming more common for 3PLs but there is still a comparatively low adoption. This means the industry has a lot to gain by boosting efficiency through improved pick rates.

### — WEAKNESSES

While start-ups have automation built into their operations, some established firms are holding back, perhaps concerned about ROI due to the typical length of contracts they have with customers.

The apparent gap between how 3PLs and customers view innovation in the sector is concerning – however, there is every chance that could change as the e-commerce market grows further.

### ✓ OPPORTUNITIES

There are lots of opportunities for 3PLs who wish to embrace automation. Especially if they want to win forward thinking customers who are looking to outsource their warehouse operation to a 3PL who's infrastructure matches and complements their own. If they are working with the latest tech for their operations, for their customer service and for their R&D, then they are likely going to want to work with a 3PL using tech in the same way.

Businesses don't just want their 3PL to pick, pack and ship, they want them to integrate seamlessly as if they are part of the business. Investing in automation and warehouse robotics is one way for 3PLs to show they are serious about offering the best service possible.

## OUR VERDICT

A few SLA adjustments could make robots the next big opportunity for 3PLs.

# GROCCERS: AN APPETITE FOR INNOVATION

As a pioneer of smart warehouses and custom robotics, Ocado leads the way in the grocery e-commerce segment. While it might have the smallest market share of all the grocery retailers (just 1.8% according to Kantar<sup>30</sup>), its rising share price and profits suggest a strong growth trajectory. At the start of the pandemic, website visits were 100 times the normal rate, prompting concerns that cyber-criminals had targeted the system.<sup>31</sup>

Commenting on this year's profits, which grew by 87%, chief executive and co-founder Tim Steiner attributed its success, in part, to the company's centralised warehouse model. He also said that, compared to the store pick model other supermarkets typically use, Ocado is not as exposed to 'structurally weaker profit margins.'<sup>32</sup>

Our research shows recent technical improvements, spurred by demand during Covid-19, led to Ocado increasing the number of picks per hour from 600 to 700 – far higher than human pickers could achieve in even the most efficient warehouses. One UK Amazon worker, in one of the few remaining non-Kiva distribution centres, said that colleagues could achieve a maximum of 250 manual picks per hour.

Ocado's success, and the fact that Amazon is also making inroads into the grocery market, means that the sector gives omni-channel retailers an incentive to adapt.

Robotics can take existing warehousing automation to the next level, reducing costs and helping supermarkets make delivery more profitable at last. This is going to be essential if Covid-19 brings about a permanent change in grocery buying habits.

Ocado **increased**  
from **600** to  
**700** picks per hour



The big grocers certainly seem to think so, with Tesco, Asda and Sainsburys all increasing online capacity. And while Aldi is expanding its home delivery service via Deliveroo, Lidl appears to have scrapped its e-commerce plans. As both expand their store estate, they are building state-of-the-art distribution centres although it is not yet clear what the level of automation will be.

Other supermarkets have taken great strides towards automation recently too. Asda's distribution centre in Warrington is 97% automated and staff are supported by robots<sup>33</sup> and Tesco is working with Ocado's tech partner to bring robotics to its logistics centres.<sup>34</sup>

When supermarkets realised it would be unviable for staff to pick items for delivery alongside shoppers, they moved towards dark stores. Not only are staff able to pick items quickly without getting in the way of customers, dark stores have also paved the way for automation and robotics, as seen at the Tesco CFC (customer fulfilment centre) in Erith, London.

Like other retailers, supermarkets do not have to create their own automated warehouses from scratch. Strategic partnerships with robotics suppliers and 3PLs that use the technology in their warehouses can help retailers keep pace with shifts in the market. Indeed, as its contract with Ocado ended, Waitrose joined forces with 3PL Wincanton to develop a CFC in West London.<sup>35</sup>

Automation is not limited to the supermarkets alone, of course. Elsewhere in the food and drink sector, manufacturer Nestle is investing in robotics and autonomous vehicles for its large-scale distribution centre in the East Midlands<sup>36</sup> – however, there is potential for the technology to be adopted further down the supply chain too. One area where it could be a game-changer is cold storage warehouses because, unlike humans, robots can work in inhospitable environments with no break or risk to health.

## HOW READY ARE GROCERS FOR ROBOTICS?

### + STRENGTHS

There is certainly an appetite for automation among the big four supermarkets, already used extensively by the major players, and we can expect further partnerships with tech firms as each one tries to grow their share, online and offline by taking automation to the next level.

### — WEAKNESSES

Similar to the retail sector, it's not yet clear if consumer buying habits will be permanently changed by the pandemic and grocers must remain adaptable to avoid panic or worse, losing the trust of their loyal customers.

### ✓ OPPORTUNITIES

Robotics solutions present a huge opportunity as there is potential for the technology to be adopted further down the supply chain. Take cold storage warehouses as an example, unlike humans robots can work in inhospitable environments with no break or risk to health, ensuring that no matter the task your operations need not be disrupted.

## OUR VERDICT

Robots are a risk worth taking to increase resilience and continue to compete.

# PHARMACEUTICALS: A HEALTHY MARKET

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**A highly-regulated environment like pharmaceuticals demands precision, so it is no surprise that it is one of the more mature markets for automation.**

Manufacturers such as Grifols, which produces blood-plasma based products, know that automation can reduce the risks associated with human intervention – ensuring traceability, auditability, product security and safety. Automation also supports the operational demands of humidity and temperature-controlled facilities; at Grifols, storage spaces can be kept at the required -35° because, unlike a manual warehouse, people are not constantly opening and closing doors.

We have worked with businesses such as Oxford Pharmacy Store to help the team work efficiently and deliver end-to-end traceability for the 1,000 products it has in stock, sourced from around 50 suppliers. The stock control function, included in the software we provided, gives the team visibility and control, helping to ensure that regulatory requirements are met. The same is true for another of our customers, Pilatus Pharma, which stressed that the technology enables it to process orders quickly and effectively, while complying with MHRA (Medicines and Healthcare products Regulatory Agency) rules.

Robots are becoming a common sight in pharmaceuticals manufacturing, including packaging, and they are making their way into warehousing too.

Yusen Logistics, which works in the healthcare and pharmaceuticals industries, is developing a semi-automated smart warehouse in Antwerp which will operate 24/7 and feature 'induction-driven, unmanned trucks that locate the correct pallet through sensor-controlled positioning.'<sup>37</sup>

Meanwhile, in the UK, family-owned wholesaler Sigma Pharmaceuticals Plc is on track to achieve its growth ambitions following investment in a new distribution centre – which includes an autopicker and intelligent conveyor, capable of processing 900 totes per hour.<sup>38</sup> As far back as 2014, the country's largest pharmaceutical wholesaler, Ruislip-based AAH, was using robots to pick 70% of its orders.<sup>39</sup>

Covid-19 will almost certainly drive up robotics adoption longer term – and the technology will find a natural home in pharmaceuticals where distributors are under immense pressure to get the vaccine and treatments (including generic drugs) to market faster.

By minimising human intervention, and carefully controlling variables such as temperature, even a novel vaccine could be made available sooner but safely. Manufacturers are promising billions of doses of the Covid-19 vaccine – which is on top of the additional flu vaccines that are being rolled out this winter, as part of the UK's largest vaccination programme<sup>40</sup>



## HOW READY IS PHARMACEUTICALS FOR ROBOTS?

### + STRENGTHS

The application of robotics in pharmaceuticals may not be universal but manufacturers and distributors increasingly see automation as necessary for control and visibility and therefore, safety and compliance. Great strides have already been made in the sector. Robotics and other technologies are setting new standards that manufacturers expect from their supply chain partners – providing the biggest incentive for distributors to move away from manual processes.

### — WEAKNESSES

We don't foresee many challenges specific to pharmaceutical businesses that are a barrier to robotics automation being a success. Pharma manufacturers and wholesalers have already made great strides in the sector. The nature of automation lends itself to the repetitive nature of picking, packing and distributing boxes of uniform size. But like with any business operating a warehouse operation, the needs of each distribution centre and each supply chain is different. So one solution that works for one business might not work for another.

This means pharma businesses need to ensure that the automated robotics solution they go for is tailored and designed for the needs of their own business - with a big focus on compliance this feels even more crucial. Therefore having a key understanding of what you need before implementing the right robotics solution, like for any business, is vital to long-term success and ROI of such an investment.

### ✓ OPPORTUNITIES

Safety and compliance is the most important priority for pharmaceutical businesses and anything that can help increase control over the storing and movement of medicines is going to be welcome. Robotics provides that opportunity to pharmaceutical businesses adding another layer of accuracy around picking to ensure compliance is met and safety is upheld.

As major rollouts of the Covid-19 vaccine are seen across the UK, Europe and the world, and with the testing that's been taking place for most of 2021, we are seeing an insight into the future of how we react to, plan for and ultimately aim to reduce and eliminate the spread of viruses. This means for pharmaceutical businesses warehouse space and delivery are going to be extremely important - and automation is going to be key to saving space, boosting pick rates and throughput.

### OUR VERDICT

Robots are already well-established - but the next generation could be critical to ensure safety and compliance while speeding up processes.

# CONCLUSION

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**Although we have chosen to focus on four verticals, we should stress that no retailer or warehouse operator works in isolation. Some industries appear to be ahead of the curve compared to others but we're seeing strong signs of innovation across each of the segments.**

Modern supply chains are complex, and businesses depend on strategic partnerships to get the most from innovations in technology. Even if they don't always realise it, the smallest online retailers are already benefiting from robotics if they use FBA or major couriers such as Hermes and DPD.

There are many reasons why some warehouse operators are reluctant to adopt robotics, though they often include cost (and concerns about ROI), upheaval, concerns about in-house technical skills and lack of buy-in from the team. Lack of awareness about the technology, and how accessible it has become in recent years, is usually another factor in their decision to retain manual processes.

Whatever their reservations, one thing is clear: robotics is only going to gather pace over the coming years. Those who adapt quickly have an opportunity to significantly grow their market share, those who don't may find their business model becomes obsolete. Manual processes are ill-suited to the high order volumes of e-commerce and grocery retail, and the precision demanded by pharmaceuticals – and it is only a matter of time before they are phased out completely.

Operational resilience is the priority for many warehouse operators today and we are expecting to see more investment in automation as a result. As solutions become more flexible and cost-effective, operators will use robotics to future-proof their business and achieve what manpower alone cannot.

## Discover how automation can benefit your business at Europe's first Robotics Demonstration Centre

Using 30 years' industry experience in warehousing in the UK and globally, and partnered with Hikrobot's cutting-edge robotic technology, OW Robotics allows businesses all of sizes to change the future of their operations using automation. Experience the power that robotics can bring to your warehouse by seeing our solutions in person at Europe's first Robotics Demonstration Centre.

[Book a tour](#)



# SOURCES

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