

**BLUE WATER
INNOVATION LAB**

RADAR #5

WAREHOUSING

FROM E-COMMERCE TO A-COMMERCE





WHAT HAPPENS AS AUTOMATIONS INCREASE, EVEN IN THE WAREHOUSE

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**WAREHOUSING
FROM E-COMMERCE
TO A-COMMERCE**

Warehousing is becoming less of a storage concept and more of a traffic hub that leverage data and goods to a cloud of fast and flexible transactions to heed and exceed customer expectations. The trick of the trade is a swarm of AI-based support mechanisms - from robots and humanoids to autonomous delivery pods and predictive engines.

All in all, we are fast approaching an era of less mere digital support of physical commercial processes but entirely autonomous and digitally native handlings of physical goods through commercially superior customer experiences.

Traditional electronic commerce is replaced by autonomous, augmented and action-packed commerce, and warehouse hubs are where the main action unfolds.

**E-COMMERCE IS BECOMING
A-COMMERCE!**

WHY WAREHOUSING?

FROM SUPPLY BASED STORAGE UNIT TO DEMAND DRIVEN CONNECTION POINT

Once upon a time, warehouses were storage units for excess and stockpile goods meant for later distribution. Increasingly, warehousing is becoming a verb to describe the art of controlling the intelligent flow of goods, like a smart heart to pump physical goods round the landscape in a perpetual flow of reception and forwarding, connecting demand with supply. Regardless whether it is new shoes you bought on a website, an electrical car straight from the factory, or

giant parts needed for a wind farm in the North Sea - intelligent handling will ensure we get what we need when we need it, maybe even just a little bit before. In the process, the handler - Blue Water Shipping - is becoming a seismographic needle of fluctuations in demand, of need intelligence. A great new role if we can master it!

It used to be supply that was stocked up in warehouses, awaiting demand. Now, it is increasingly demand that is unlocking supply in today's digital and realtime based economy and warehousing becomes a traffic centre to ensure as close to instant provisioning as possible and plausible. E-commerce is becoming A-commerce, autonomous commerce, so purchasing becomes a systemically automated exercise of backfilling everything and anything from energy plants and military operations to household fridges and supermarket shelves.

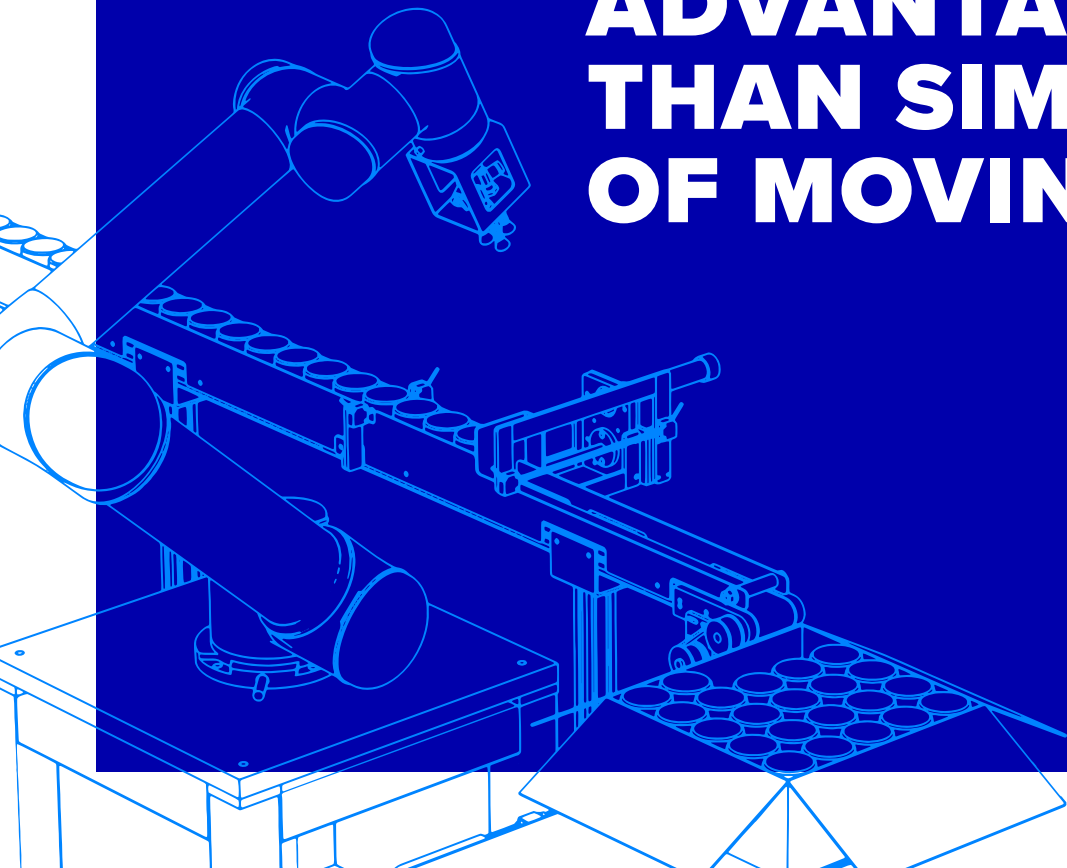
It can look similar - it is still goods being moved around - but the algorithmic takeover changes everything. It is the digital intelligence in future warehousing that supports all decisions and makes the impossible possible, speeds up delivery times, reroutes intelligently and predicts demand by placing orders pre-demand to ensure uninterrupted supply. It is algorithms that drive and connect the new swarm of last mile delivery pods, from drones to self driving units, and make sure the humanoids that fill in between autonomous robotic systems are capable of self learning and improvisation as they handle dangerous goods or heavy and odd sized objects.

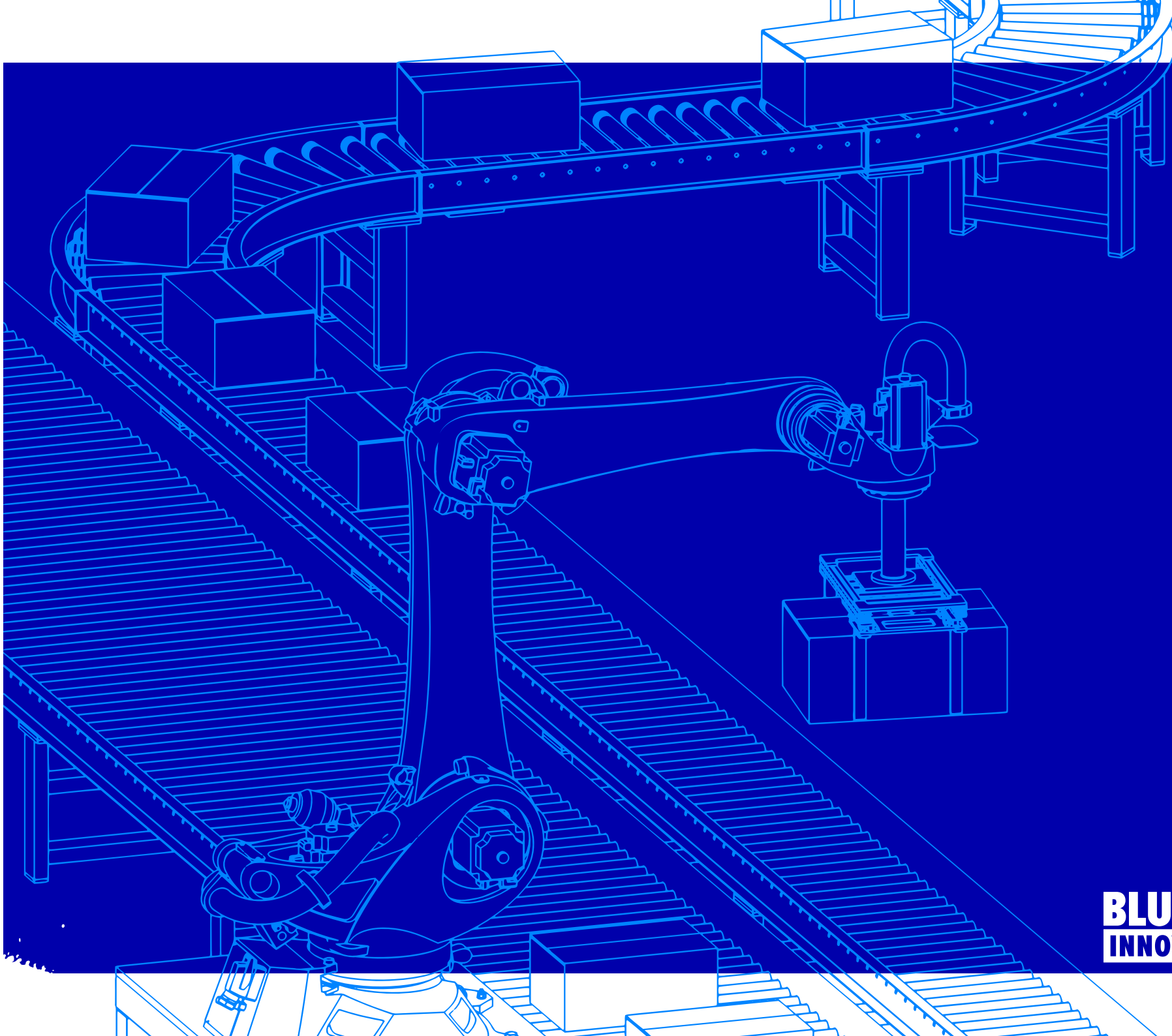
In the shift that is happening, warehousing supports the larger tectonic plates as it shifts from a one way supply centric economy to a two-way demand centric economy, giving consumers and buyers the power to demand what they want, how they want it and when they want it, changing the previously passive role of the warehouse into something much more active - into an integral component of the inflection point where consumption meets production and logistics becomes a competitive advantage more than simply a science of moving boxes.

Enjoy the read, enjoy the ride!

STEFFAN

**LOGISTICS BECOMES
A COMPETITIVE
ADVANTAGE MORE
THAN SIMPLY A SCIENCE
OF MOVING BOXES**







A large, vibrant blue paint splatter graphic is positioned on the left side of the page, partially overlapping the main title text. The splatter has several distinct, radiating strokes, creating a sense of dynamic energy and movement.

WELCOME TO THE FUTURE OF WAREHOUSING

**WE HAVE PICKED 3 TRENDS IN
WAREHOUSING THAT STAND OUT
AND CONSTITUTE DIRECTIONS IN
THEIR OWN RIGHT.**



“THE GLOBAL AI IN WAREHOUSING MARKET SIZE WAS VALUED AT USD 10.27 BILLION IN 2024. THE MARKET IS PROJECTED TO GROW FROM USD 12.69 BILLION IN 2025 TO USD 61.36 BILLION BY 2032, EXHIBITING A CAGR OF 25.2% DURING THE FORECAST PERIOD.”

SOURCE: FORTUNE BUSINESS INSIGHTS OCT 2025





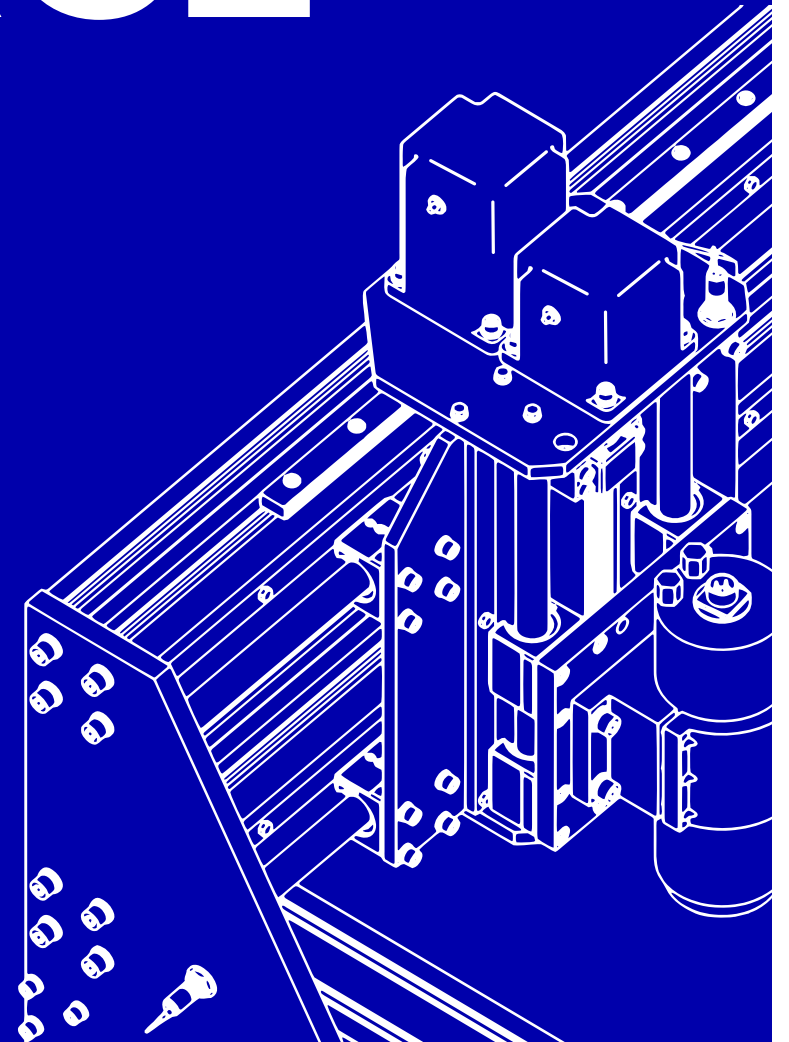
Yes, it is AI everywhere you look when the subject is “future warehousing”.

But AI isn't just AI. It covers broadly and is the key ingredient in software that predicts and automates as well as the driving engine behind robotics and interfaces for a new humanoid workforce.

In the following 4 key applications for AI in warehousing, focus is on the perceived advantages offered and with AI embedded in the context of other technologies, software as hardware, coming of age.

A-COMMERCE

WELCOME TO AUTONOMOUS
COMMERCE WHICH TAKES
COMMERCE A GIANT LEAP
FURTHER THAN THE
E-COMMERCE.





A FOR AUTOMATION.

From automatic reordering, restocking and back stocking to automating systems integrations, automating user interface upgrades and offering full setup for automated purchasing of everything and anywhere from fresh milk to defence supplies. If you can think it, AI can automate it. The upsides come from automating the simplest forms of decision making, routine task of replenishing and refilling at set intervals or thresholds.



A FOR ACTION.

The earliest forms of broadly compelling AI came in the form of LLMs, like ChatGPT. Now comes the LAM, Large Action Models, that sets off actions at certain predefined events. LAMs can represent success parameters and translate these into suggestions that can be set up for activation - so that anything from rerouting of goods to reassessing existing supply levels can become subject to AI-amplified actions that support optimization.

BEWARE!

Do not automate powers of judgment. Only automate lower purchasing decisions where large degrees of repetition is the norm. AI can only access historical data and repeat existing patterns. Imagination, empathy and critical decisions need a Human in the Loop.

BEWARE!

Keep the Human in the Loop in all larger actions transactions. AI can make mistakes and misinterpret and will only act on available data - which can be misleading.





A FOR AUGMENTATION.

Most actions previously undertaken by humans can be overtaken by robots - or humans with robotic assistance to draw the best from both worlds. Offloading of repetitive task and tireless physical support at speed to robots and cobots combined with human nag for optimization, invention and complete versatility when called for.

BEWARE!

Most robotic setups are costly and difficult to install and need special expertise - but mainly in the beginning, so be patient. However, this is changing with a number of solutions to allow for even smaller firms to have complete robotic pick n pack setups or cobots assisting humans with all repetitive tasks.



A FOR AUTHENTICATION.

Increasingly, security and sustainability relies on AI-powered solutions to authenticate the necessary humans in the loop, to detect and oust foul play - and to offer full traceability and accountability in the supply chain which is increasingly important as consumers and governance, including legislation, is concerned with high standards in materials and processes.

BEWARE!

AI is also used by criminals to disguise foul play, to cover up for fraud and as a favorite tool by which criminals seek to enrich themselves. So keep Humans in the Loop to offer powers of judgment and ways to expose misuse.

CASES OF A-COMMERCE

A FOR AUTOMATION

AI DRIVES PICKING AUTOMATION FOR ANY ITEM AND ANY SIZE DISTRIBUTION CENTER

Spanish retailer Eroski experienced a whopping 5x (400%) in picking efficiency when integrating an AI native automation solution from AutoStore, reducing storage space by 25% and enjoying a systems uptime of 99.7%. Automation is now the norm in warehousing and increasingly, AI is the key to unlock the real advantages when automating based on a number of technologies from computer vision of stock pile assessments to automated restocking in a 24/7 environment as provided by AI automation company Uptake. When Danish wholesaler Elektroimportøren implemented an AI automation system in their warehouse, the ROI was less than 2 years in stead of the projected 3-4 years. Despite a costly capex, AI automations seem like more of a “must have” than a “nice to have” business decision.





AI FUELS AUTOMATION AT THE HEART OF NEXT GEN WMS (WAREHOUSE MANAGEMENT SYSTEMS)

AI native WMS has the added advantage of naturally adding AI functionality for clients, like high growth support, predictive functions and alerts as well as deeper business enhancing analysis and recommendations based on realtime data. AI native WMS are typically cloud based and converge easily with robotics and AGVs/AMRs providing compelling efficiency gains, treating AI as integral and not as add-on component. Examples include:

- **HOPSTACK WMS** that uses predictive AI to reduce pickup delays by 25% and improve outbound visibility by +62% for a large HVAC producer and increased warehouse throughput +30% by replacing manual processes with AI-assisted workflows and real-time orchestration
- **MANHATTAN WMS** that uses AI based machine learning to improve overall distribution center efficiency by +9% in an WMS implementation that went 30x faster with warehouse modules than legacy system rollout.
- **DEPOSCO WMS** who positions itself as the AI Native WMS - a platform that analyses billions of operational events to identify root causes and provide prescriptive recommendations (e.g., labour deployment, inventory placement, packaging choices). In an industrial distribution, this led to 99,7% order accuracy and a 4x efficiency increase in inventory activities.

A FOR ACTION

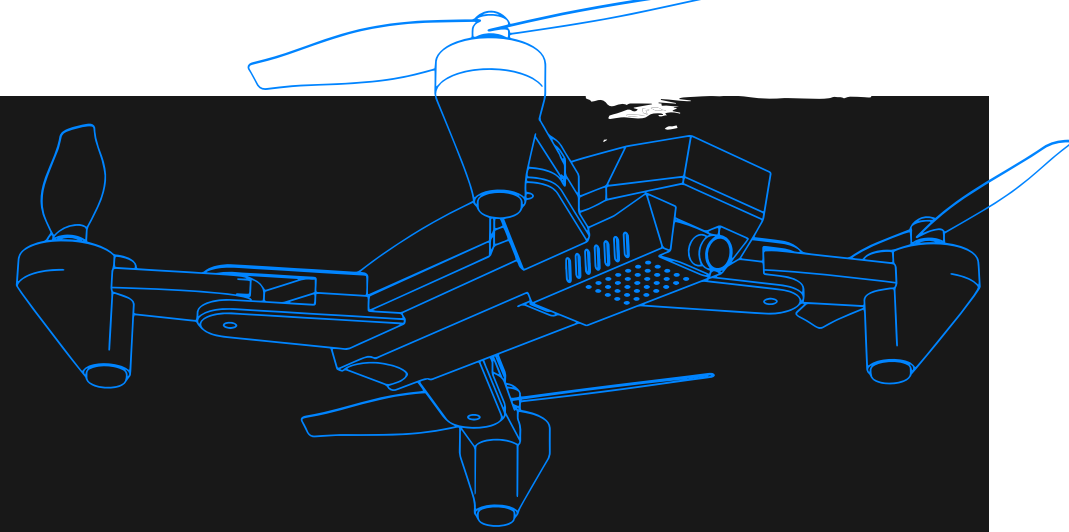
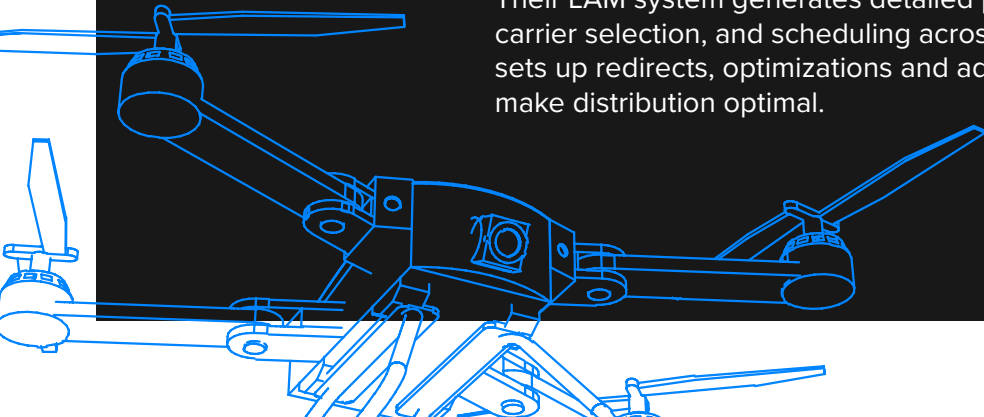
AI INSTALLING ACTIONS ON WASTE AND EMISSION IN THE SUPPLY CHAIN.

In a joint project between food giant Nestlé, foodwaste specialists Zest and AI platform Google Cloud, 700 tonnes of edible food - or 1.5 mio meals - designated as waste was repurposed for meals cutting edible food waste by 87% in just 2 weeks, thanks to an AI LAM platform that spotted edible foods and redirected these to charities automatically.

AI INCUMBENT MICROSOFT TAKES ITS OWN LARGE ACTION MODEL AI-MEDICINE - TO GREAT EFFECTS

Hardware logistics arm of AI giant Microsoft used a LAM platform to automatically identify and act out optimized fulfilment decisions, cutting planning time from 4 days to 30 minutes while improving accuracy by 24%. Their LAM system generates detailed plans covering inventory allocation, carrier selection, and scheduling across 40+ distribution centers and then sets up redirects, optimizations and ad hoc courses of actions to take to make distribution optimal.

While **LLM** focuses on analyzing text and generating results, **LAM** is a model that determines 'how to act' based on the information provided.



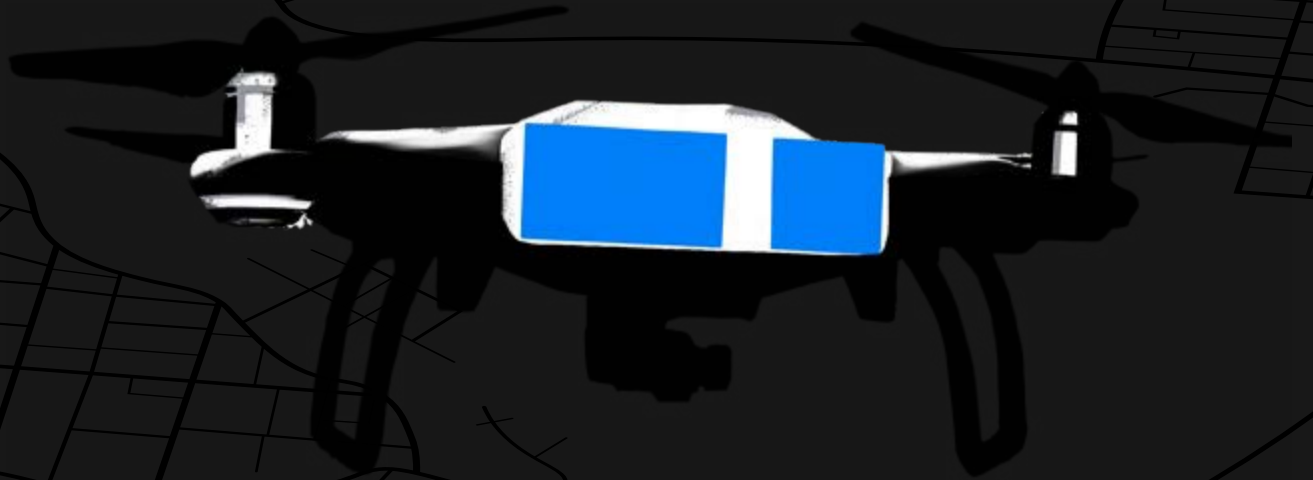
A FOR AUGMENTATION

EXIA - A GERMAN AI COBOT YOU CAN PUT ON LIKE A VEST.

Transport and Logistics have the highest serious injury rate of any industry (US Bureau of Labor & Logistics), costing US businesses 12,5B USD annually. But a number of exoskeleton solutions aim to remedy this - some, including the EXIA from German Bionic, including AI from robotics to provide sensors to adjust power and instant fit to any wearer, taking the strain of any physically demanding tasks.

AGVS - AUTOMATED GUIDED VEHICLES - ARE THE SELF DRIVING CARS OF WAREHOUSING.

AGVs are powered by AI to move around humans autonomously, picking optimal routes, handling awkward loads, and optimizing logistics based on data access that supersedes any human intelligence. Toyota teamed up with Dutch retail giant Albert Heijn to provide automated fork lifts and stackers, significantly improving efficiency, safety and general logistics performance of the distribution center.



A FOR AUTHENTICITY

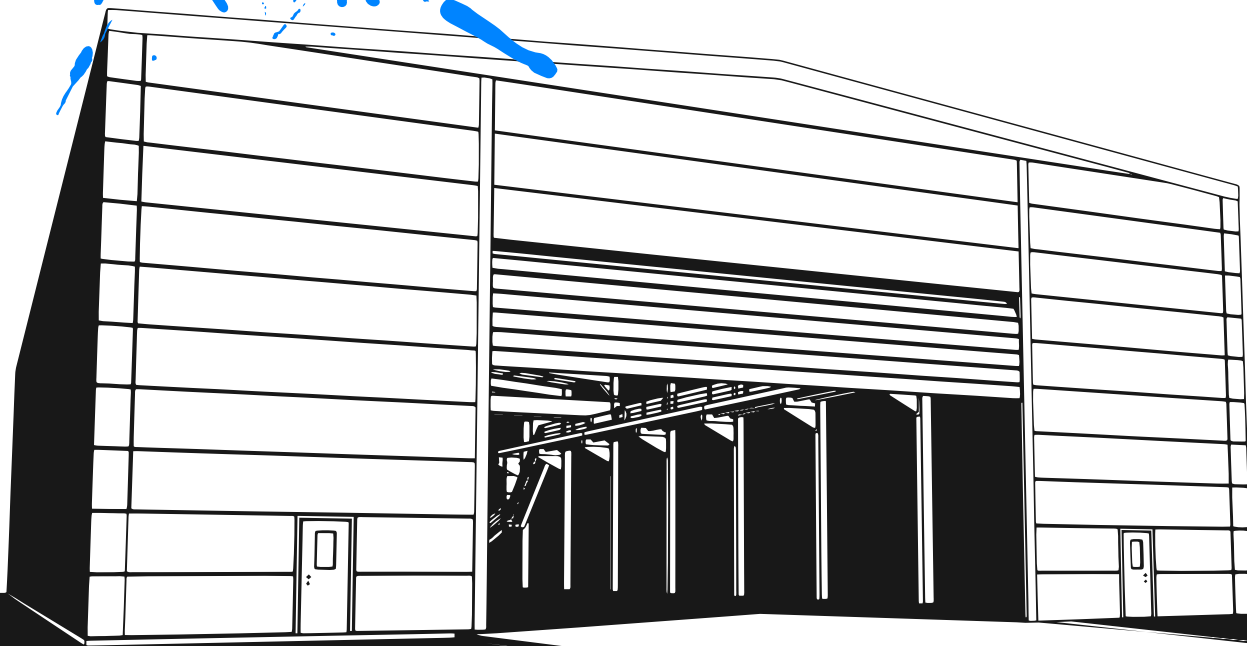
THEFT AND FRAUD DETECTION IN SUPPLY CHAINS:

More than 100B USD is lost annually to cargo theft, invoice fraud, GPS spoofing, insider collusion, and fraudulent broker pickups. In a 2025 study by Debiles, ways of deploying AI proved helped companies to detect fraud in 95% of cases and reduce theft related losses by 82% in average.

AI DRIVING 1ST MILE SUSTAINABILITY AND GOVERNANCE

UK-based Treefera offers an AI platform combined with data from drones and satellites to increase the visibility of sourcing - 60% of volatility and risk is down to the first mile of logistics - to govern and ensure sustainable footprints of anything from raw materials like coffee beans or rubber to carbon-based energy resources. From Starbucks and Mendelez to Bridgestone and Michelin, Treefera is used to lower risks and secure governance in sourcing.

WAAS - THE PHYSICAL CLOUD IS COMING.



WHAT IS WAAS - WAREHOUSING-AS-A-SERVICE? AND WHAT ARE THE BENEFITS AND IMPLICATIONS FOR CUSTOMERS, END CUSTOMERS AND S&L PROVIDERS LIKE BLUE WATER?

When Amazon coined the flexible web storage approach “cloud” in 2007, bewilderment was widespread. But the problem that ‘the cloud’ addressed was real - no flexibility, no easy scaling, huge capital investment were today unimaginable brakes on growth, new products and entrepreneurship. AWS and its cloud services offered full flexibility, instant scalability and a “pay per usage” model with centralized server updates and security expertise that unfolded a new era in digitalisation.

WaaS is cloud for logistics. A pay per usage approach to storage and transport, real-time inventory visibility, automated order routing, and AI-based demand forecasting that allow businesses to treat storage as a service layer in their supply chain, rather than a static node, a huge and unpredictable cost entry outside most companies’ core competences.

Like cloud, WaaS is starting as an obvious and tempting solution for smaller companies and high growth industries - but soon it will be large industry, offshore and production lines that want to buy into relieving themselves from acting as experts in logistics and storage models, WMS systems and AI prediction software that is needed to avoid being held down by outdated approaches to logistics.

“Leave your warehousing to the experts!”, could very well soon be shouted from the roof tops... Just like digital storage and computing power is more often than not left to the experts of the cloud, so companies can focus on their core business. As logistics becomes more data-driven and decentralised, WaaS promises a future where warehousing is no longer a fixed cost — but a fluid, intelligent service powering global commerce.



3 CASES FOR WAAS

WAAS STARS ARE DRAWING INSPIRATION FOR THEIR OPERATING MODELS FROM THE SUPERSTARS OF CLOUD, LIKE AWS AND AIRBNB.

#1 **FLEXE (FLEXE.COM)**

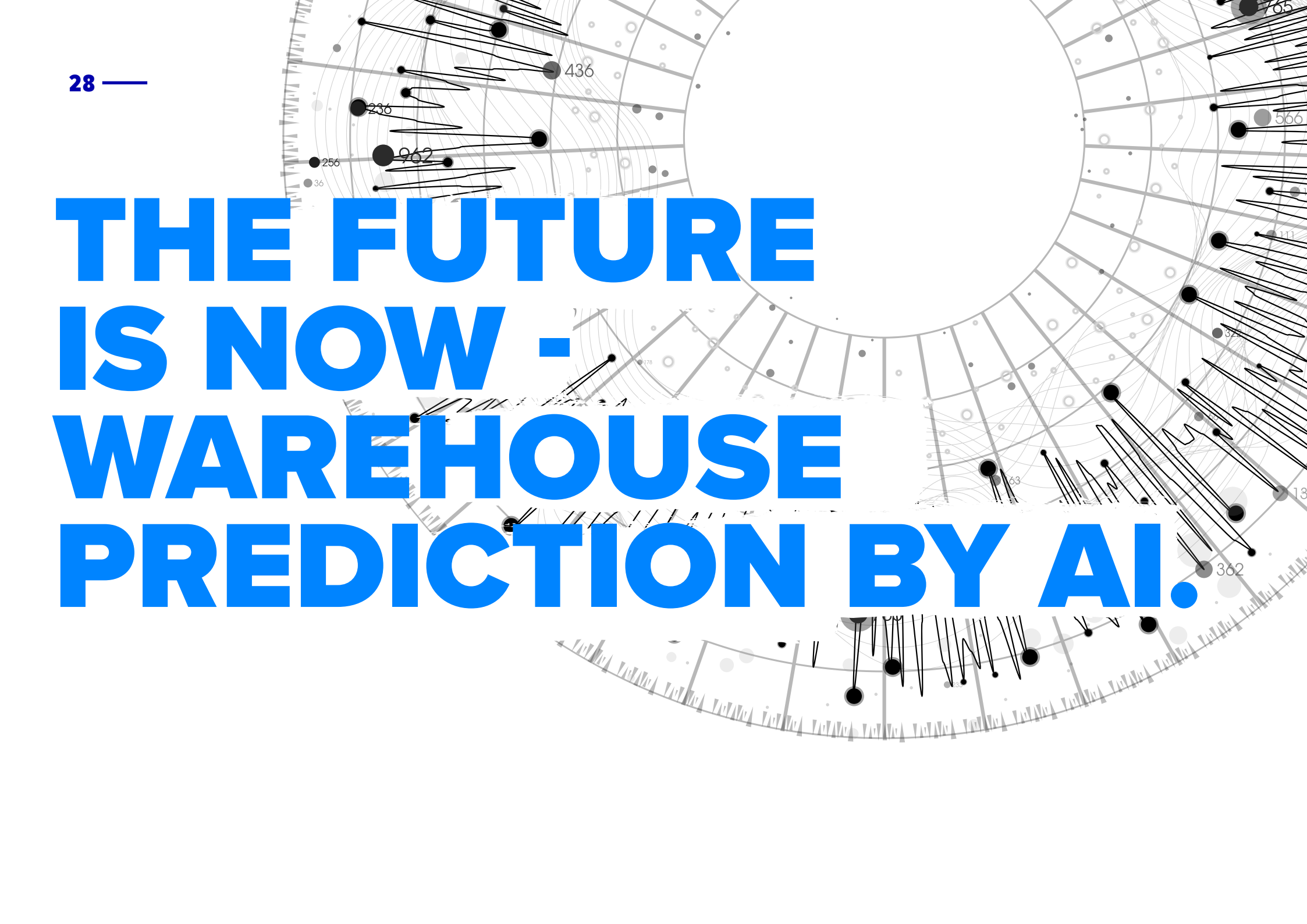
Operates a vast on-demand warehouse marketplace, enabling clients to instantly add capacity as well as storing excess stock, catering for any and all unexpected events at zero capex investment. Clients ranging from Target and Mars to Tractor Supply Co and Nike use Flex to add exceptional flexibility - and thus competitive advantage - in its logistics operations.

#2 **FLOX (FLOW.IS)**

Is the “Airbnb of warehousing” connecting under-utilised space with short-term demand, reducing waste, excess space and increasing efficiency across the logistics sector. Organized as a dual sided digital platform, Flox organises an AI platform to match existing warehousing supply and demand in realtime.

#3 **SHIPBOB (SHIPBOB.COM)**

Operates 60+ fulfillment centers globally to provide seamless warehousing for provides fulfillment-as-a-service for e-commerce brands, combining an AI native digital platform with a mix of own warehouses and a network of partner warehouses to deliver fast, scalable logistics - sometimes cutting shipping times by 50% or more and saving USD mios for clients compared to in house warehousing. A warehousing counterpart to AWS cloud offerings.



THE FUTURE IS NOW - WAREHOUSE PREDICTION BY AI.



PREDICTIVE ANALYTICS IN UNPREDICTABLE TIMES THROUGH DIGITAL TWINS, URBANISATION, MICRO FULFILLMENT AND LAST MILE DELIVERY INNOVATION. AI IS REINVENTING THE FUTURE OF WAREHOUSING - RIGHT NOW.

Predictive AI is shifting operations from reactive to proactive. Instead of waiting for demand, stock-outs or bottlenecks to arise and then reacting, predictive systems use AI to analyse historic sales patterns, combined with external data like real-time sensor/IoT data, market triggers, weather events and logistics flows to anticipate future needs. Prediction by AI is becoming an expected norm, not a wow-ing extra.

Prediction involves forecasting each SKU, whether it is a crucial spare part for an active oil rig or a pair of sneakers in demand that time of year or geographical zone. This demand prediction then dynamically slots inventory and assigns resources ahead of time, predicting maintenance or throughput issues in transport/handling, and orchestrating fulfilment routing and inventory flows to meet the forecasted demand. The impact is significant: warehouses become adaptive “smart nodes” rather than passive storage.

Benefits include reduced stock-outs and overstocks, lower carrying costs, faster fulfilment, improved workforce utilisation and better responsiveness to disruption. For example, combining IoT data (pallet motion, temperature, location) with external signals helps trigger pre-positioning of inventory ahead of a demand surge.

Challenges remain: quality and integration of data across legacy systems, showing transparent model decisions, aligning human workforce and process change, and ensuring AI systems operate ethically and reliably. Overall, predictive AI in warehousing is redefining how storage, movement and fulfilment work — turning warehouses into insight-driven, anticipatory fulfilment centres rather than passive spaces.



CASES

PREDICTION BY DIGITAL TWIN - DEXORY.COM.

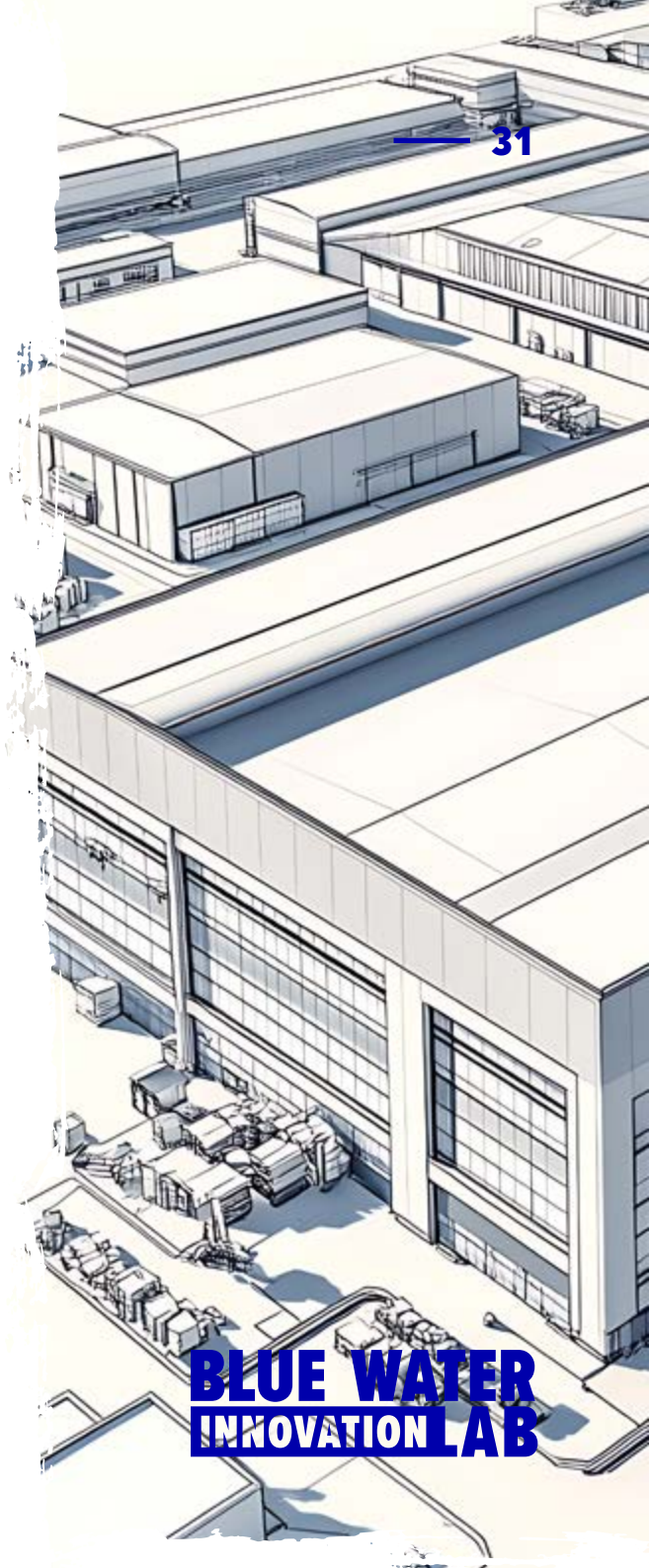
Dexory builds autonomous robots coupled with a digital twin platform called DexoryView to scan pallet locations and create a real-time digital twin of warehouse operations. Their robots can scan up to ~10,000 pallet locations per hour, feed the data into AI analytics, and flag misplaced stock, damaged goods, or inefficient layout. This is a combination of hardware, robotics and AI in one stack — bridging the “warehouse blind spots” gap.

PREDICTION AS THE KILLER APPLICATION - STORD.COM.

Stord is a cloud and AI supply-chain company that integrates warehousing, fulfilment and transportation through a software stack (WMS, OMS, TMS) built for omnichannel brands. They enable businesses to scale logistics by plugging into Stord’s network of warehouses and software tools rather than building from scratch. By offering the software + network, Stord reduces friction for brands to adopt more dynamic warehousing, and their model supports predictive routing and inventory decisions across nodes.

Warehouses themselves are transitioning from a role as storage units to transport and service hubs that are hidden from plain sight and supported increasingly by a number of robotic automation and autonomous delivery options ranging from superfast drones for lighter loads to self driving pods for temperature regulated or heavier goods. Humans stay in the loop for added service layers that need extra empathy and powers of judgment, for human to human interfaces where preferred and to ensure operational governance. But we are not the norm, autonomous technologies are.

**SOUNDS LIKE SCI FI?
IT IS ALREADY HERE
AND THE TREND GOING
FORWARD IS PRETTY
CLEAR.**



**BLUE WATER
INNOVATION LAB**

DRONE DELIVERIES, HUMANOID HELPERS, AND SELF DRIVING DELIVERIES STRAIGHT FROM SUBTERRANEAN MICRO FULFILLMENT CENTER WILL BE THE NORM BY 2030 AS URBANIZATION CONTINUES ACROSS THE GLOBE.

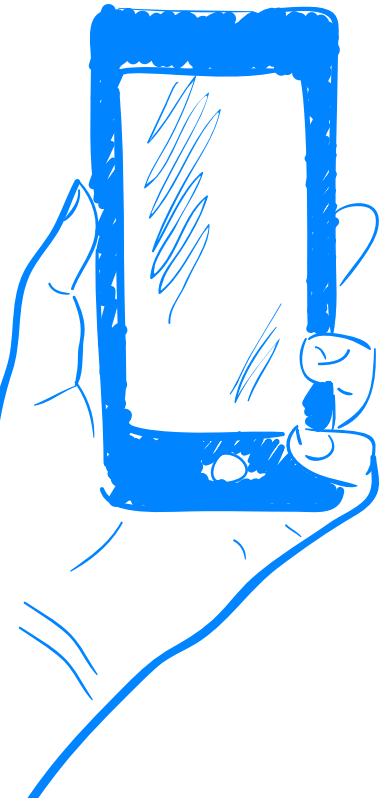
More than **500,000 trips using autonomous vehicles are made every week in the US alone**, proving the tech roadworthy. Autonomous last-mile delivery market is booming at \$5.93B by 2030 (24.8% CAGR).

Delivery drones market is taking off big time at a staggering 42% annual growth rate and will hit a staggering \$10.48B by 2030.



“AVERAGE WAIT TIME FOR A DRONE BASED PIZZA OR PHONE DELIVERY IS 2MIN 30 SEC.”

BOBBY HEALY, MANNA AERO CEO JUNE 2025.



- Global micro-fulfillment market is booming to secure fast deliveries in cities and will hit \$37.74B by 2030 at an 34.8% annual growth rate.
- Humanoids are the fastest moving robotics category and will grow to \$6.5B by 2030. The global robotics market size is nearly \$50 billion in 2025. Growing at a Compound Annual Growth Rate of 14%, the total robotics market size will reach US\$111 billion by 2030.
- The world is becoming city based with 70+% of the world living in cities by 2050, up from just over half the population in 2018.



BLUE WATER INNOVATION LAB

WE LOVE YOUR PROBLEMS!

BEYOND WAREHOUSING, BLUE WATER INNOVATION LAB IS YOUR GO-TO INNOVATION FACILITY THAT CAN HELP DEFINE, STRUCTURE AND FULFILL INNOVATION PROCESSES TO BRING REAL VALUE FROM DOING NEW THINGS.

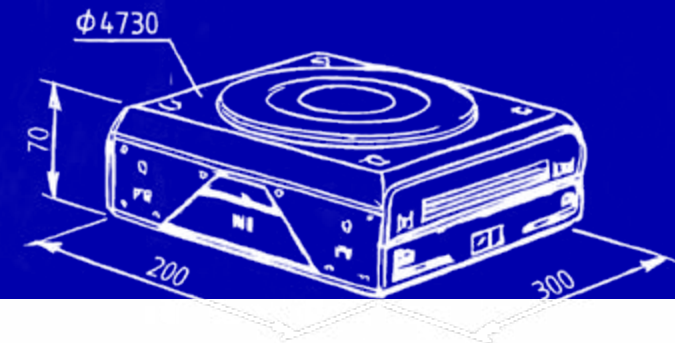
- **Want to move on the future of warehousing?** We are happy to unfold our feel for that is coming to meet the reality of today and together map options and actions that can help you get on the road to the next reality.
- **Want to experiment?** Blue Water Innovation Lab is your in-house friend with best practise access to all manners of support in taking even your wildest ideas into reality. We can help setup from contextualizing to realising, from daunting challenges to working solutions. Just give us a ping.
- **Want to cash in on the vast potential of AI?** We operate with external and internal specialists to identify, structure and realize opportunities with AI as a tool and not a goal in itself. Let us know if you want help to automate tasks, create shortcuts, breakthroughs in processes or simply unfold how AI can become more relevant to you.

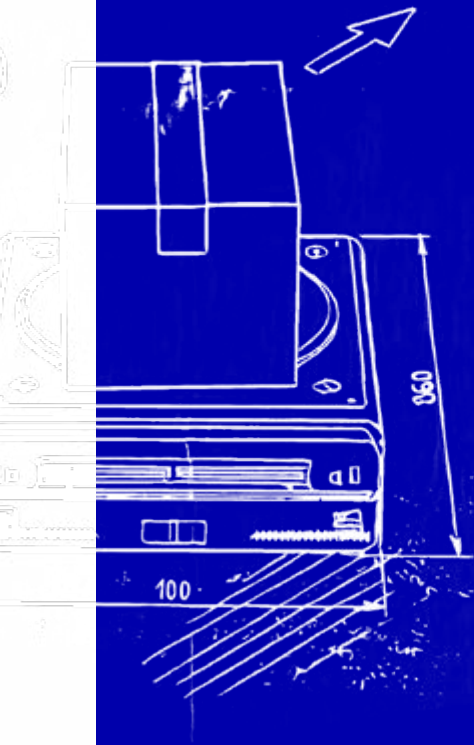
For a fast clarification, send an email with your thoughts or wishes to
Blue Water Innovation Lab lead, Steffan Lindegaard Nielsen on stla@bws.dk

SHAPING THE FUTURE OF WAREHOUSING THROUGH TECHNOLOGY

- A HANDS-ON PERSPECTIVE FROM A
GLOBAL WAREHOUSING FRONT RUNNER.

GXO logistics has shot into the fortune 500 list with its focus on automated fulfilment centers and future proof warehousing solutions. Client range from Apple to Zalando – but also includes BtB giants like Boeing. We caught up with European SVP of Technology, Pedro Luis de las Heras Garcia, for a chat on what is happening right now in warehousing and where that is taking us.



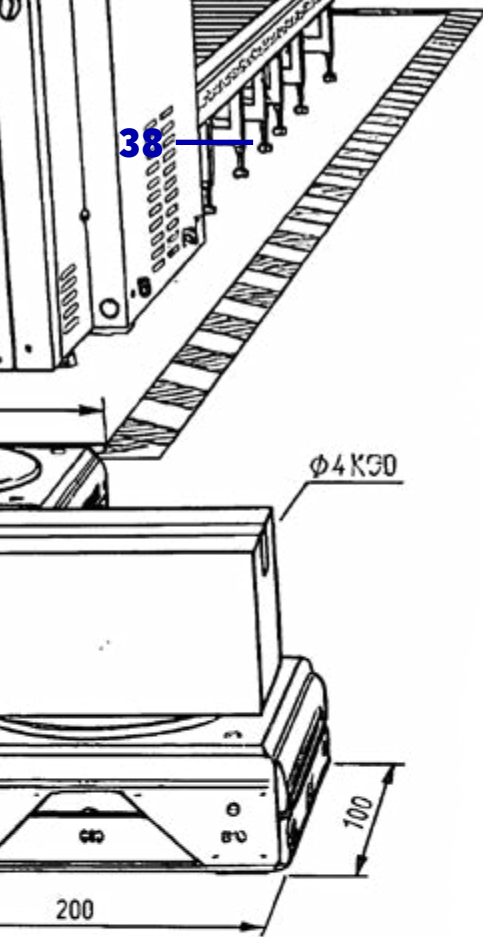


Pedro, what are your thoughts on the warehousing transformation as it happens right now?

Warehousing has evolved far beyond the traditional image of vast, static storage facilities. Today, at GXO we see—and actively drive—the transformation of warehouses into dynamic hubs powered by advanced technologies. These hubs leverage automation, data analytics, and predictive tools to respond to demand in real time, much like cloud computing revolutionized IT with its flexible, demand-based flow. Our experience in Continental Europe, with over 70 major go-lives in 2025 alone, demonstrates how technology enables us to anticipate customer needs, optimize inventory, and deliver seamless, rapid service.

And this new “hub” role of warehousing, in perpetual tech driven movement, how does this change the traditional role of IT keeper, of the CIO?

As warehousing becomes increasingly technology-driven, the role of the CIO is shifting from operational oversight to strategic leadership. Today’s CIO must be a catalyst for innovation, integrating emerging technologies, fostering cross-functional collaboration, and ensuring that IT aligns with business goals. At GXO, our CIOs are deeply involved in digital transformation, cybersecurity, and the deployment of platforms like GXO IQ, which empower data-driven decision-making across our sites.



It seems that contract logistics and indeed warehousing seems to be an inflection point for a lot of emerging tech, from AI and robotics to digital twins and Edge computing. How do you see this play out in the coming years?

Over the next 3–5 years, technologies such as AI, robotics, digital twins, and edge computing will fundamentally reshape warehouse operations:



AI

drives predictive analytics, demand forecasting, and intelligent automation.



ROBOTICS

Enhance efficiency, safety, and scalability, working alongside human teams.



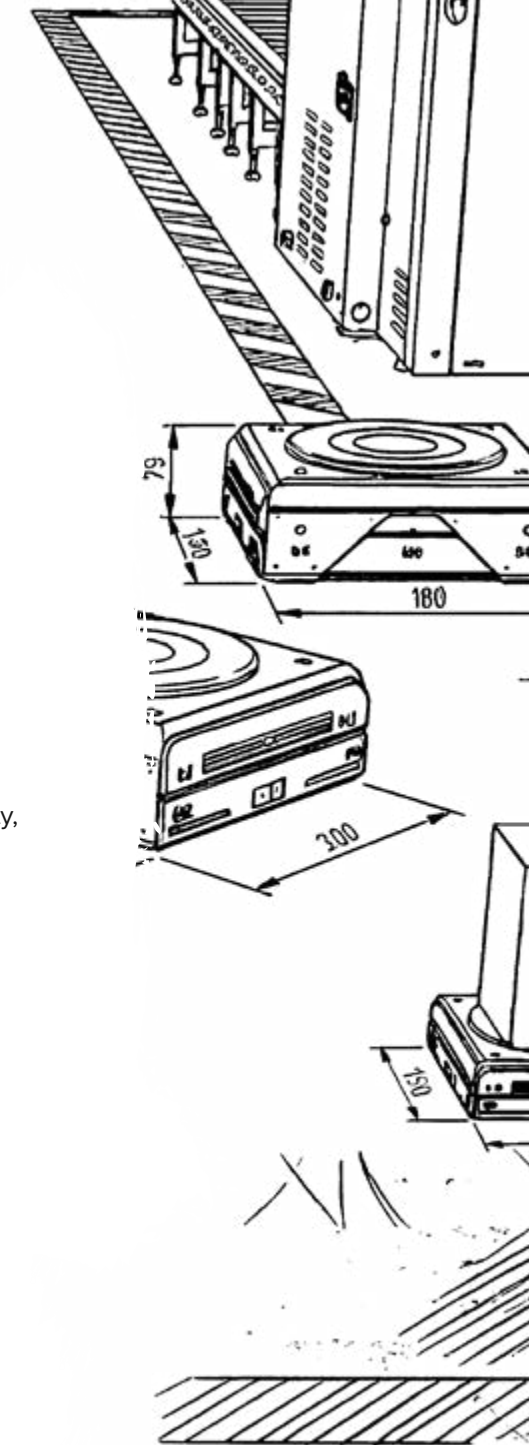
DIGITAL TWINS

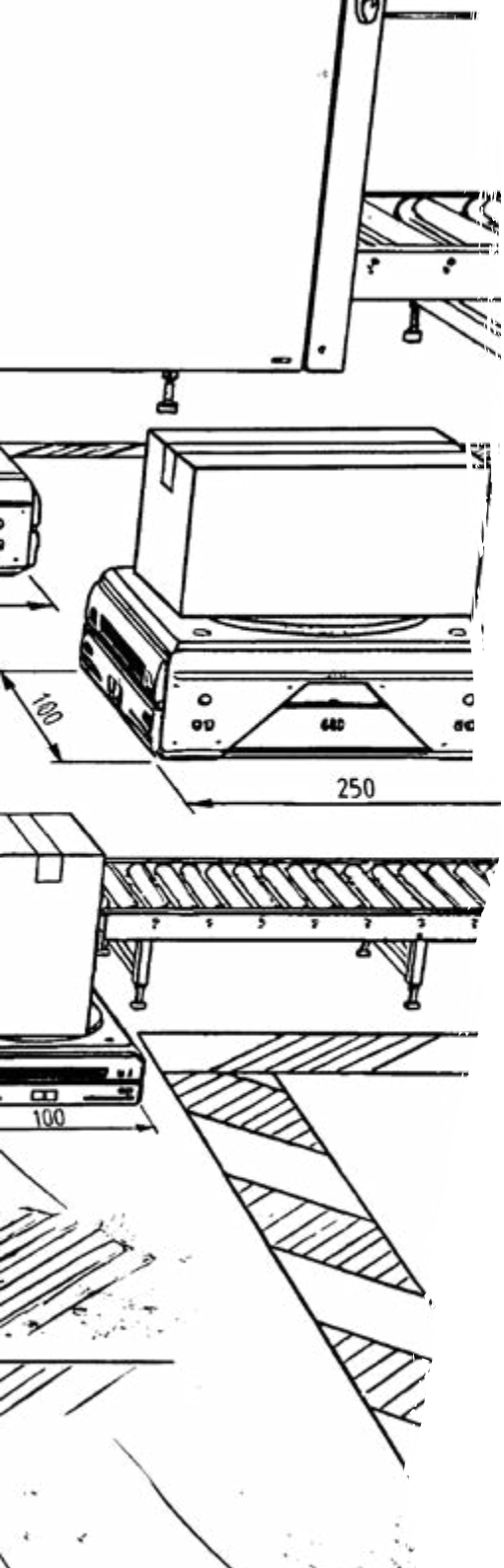
already allow us to simulate, optimize, and monitor warehouse processes in real time, reducing walking distances and operational costs.



EDGE COMPUTING

will enable faster, localized decision-making, supporting real-time responsiveness.





Ok, so the robots are really coming now! In hardware and software. Where does this leave us – the “humans in the loop”?

GXO is recognized for its large-scale automation deployments. One key lesson is that successful integration of robotics and human labor requires clear communication, transparent project management, and a culture of collaboration. Our teams work closely with technology providers and operational staff to design processes that maximize flexibility and engagement. We’ve found that combining robotics for repetitive tasks with human expertise for complex decision-making leads to higher productivity and job satisfaction.

Ok, so we are relevant when Powers of judgement are called for. But how do you see our roles as decision makers being reinforced by new technologies?

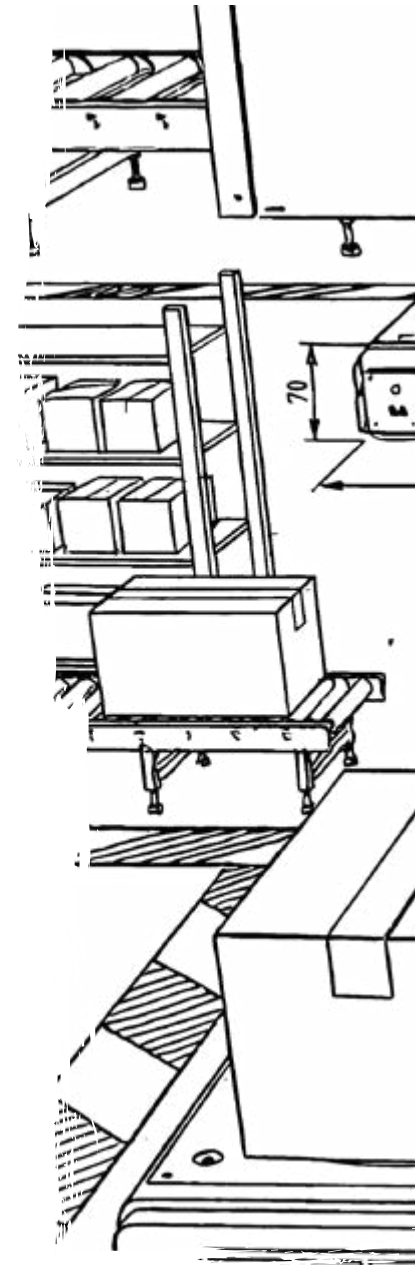
Data and analytics are at the heart of our operational excellence. The GXO IQ platform aggregates data from across our network, providing actionable insights for inventory management, process optimization, and customer service. Real-time dashboards enable site managers to monitor KPIs, identify bottlenecks, and make informed decisions instantly. This data-driven approach has helped us achieve 98% on-time delivery of priority customer requests and 100% issue-free implementations in 2025

And the inevitable party-pooping question – how about cybersecurity and vulnerability when all movement of goods is driven by online tech?

As logistics becomes more connected, cybersecurity is a top priority. We invest in robust security protocols, continuous monitoring, and regular training to safeguard our systems and data. We collaborate with global partners to stay ahead of emerging threats and ensure compliance with industry standards. Our approach includes proactive risk assessments, incident response planning, and the integration of cybersecurity into every technology deployment.

If you were to describe The Warehouse of the Future, how would you describe it?

The warehouse of the future is a smart, adaptive environment where automation, AI, and digital twins work together to optimize every aspect of operations. It's a place where data flows seamlessly, enabling predictive maintenance, dynamic inventory management, and personalized customer experiences. Operationally, it's agile, resilient, and capable of scaling rapidly to meet changing market demands.



A technical line drawing of a conveyor system. A blue rectangular text box is overlaid on the center of the image. The drawing shows a conveyor belt with several boxes being transported. Dimensions are indicated with arrows and numbers: 180, 90, 200, 150, and 180. A circular hole is labeled with the diameter symbol $\phi 4$.

And how do we get there?

Rapid innovation is essential, but so is operational stability. GXO achieves this balance by standardizing core processes, piloting new technologies in controlled environments, and scaling successful solutions across our global sites. Continuous feedback loops and rigorous testing ensure that innovation enhances, rather than disrupts, our service quality.

Partnerships are central to our innovation roadmap. We collaborate with leading technology providers, startups, and universities to co-develop solutions, access cutting-edge research, and accelerate adoption. For example, our work with Blue Yonder is delivering measurable benefits in efficiency and cost savings. These partnerships foster a culture of learning and keep us at the forefront of industry trends.

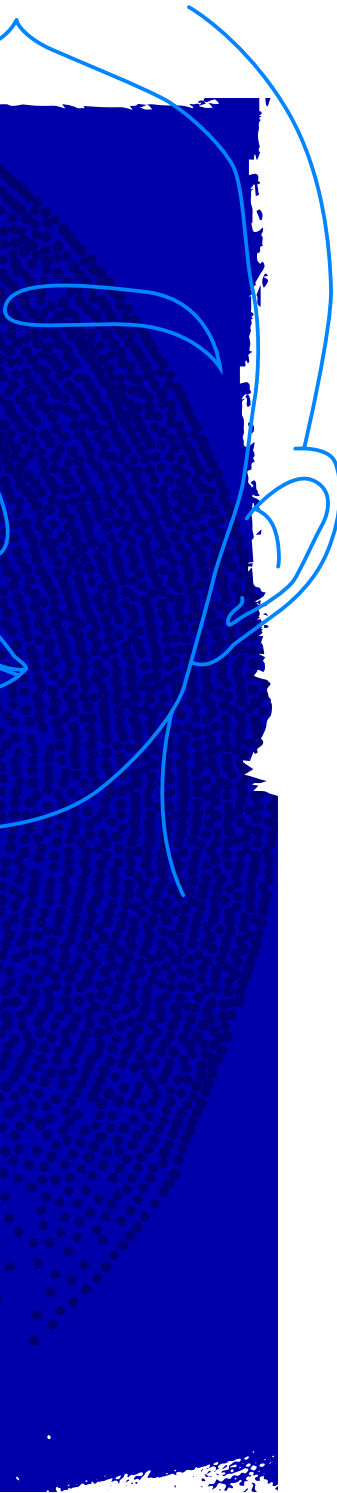
OUTRO



**THE CLOUD IS GETTING REAL.
SO IS THE NEW ROLE FOR
HUMANS IN THE LOOP.**

We now have a generation entering the workforce with no memory of life before the internet - life before the cloud. They can hardly remember what it was like before streaming services, when you had to choose and wait. Seek and deploy. No-one knows what zapping is anymore, relevant content, news and services are brought to you before you develop a conscious need. Just in time.





This is the digital reality where everything is a service waiting to be unlocked by a predicted demand. With new technologies moving into warehousing - this will be the reality of moving goods too. Things will be there when you need them, as you need them - and, if you want, even before you need them. Never mind if it is spare parts for a tanker or a fresh pair of collectable sneakers.

But as with all things techie, the new opportunities are tools to advance a purpose, a steadily increased demand for meaningful flow, for never having to wait for what you need, for making the best possible use of time and resources. And for supply to always be able to identify and reach your demand, your market, your customers.

Tools need operators. Tools need direction, application. They require a human-in-the-loop. So as opportunities grow and warehousing processes will be increasingly automated, so will volumes of traffic, complexity and new opportunities to be implemented. We have yet to see a lasting decrease in the need of humans due to technology - so the best bid is that humans will still very much be needed to steer, invent, analyse, understand, relate and the mio other things we do best.

The main difference being that now we have the powerful tools to help us revert our roles from under par mechanical task rabbits, from bad robots, to great humans. The future of warehousing will not only mean an explosion of options for flow and optimization becoming real, but also a new role for us, for humans, as the swarm of goods is orchestrated in automated streams around us and we finally get the time to pick our role, carefully.

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