



Five Ways to Modernize Postal and Courier Operations



A Dynamic Market

The postal and courier market is arguably one of the fastest moving and most competitive in global commerce.

A milestone will be reached in 2025 when parcels will equal mail in volume.¹ This change requires postal and parcel firms to re-engineer networks at a time when inflation has been climbing. The resulting margin squeeze is exacerbated by other challenges and trends: notably, consumer expectations for faster, accurate, and lower-cost services, attracting and retaining staff, increased competition, and changing legislation.

When it comes to consumers' expectations, **56%** expect to be offered same-day delivery options and **68%** say cost is the most important factor when selecting a courier service.² Such rising expectations come at a time when the sector is struggling to recruit.

In relation to drivers, data indicates that **14%** of driver positions are open in Europe³ while 60% of warehouses report labor shortages.⁴ With the number of people of working age in Europe set to fall by **20%** by **2050**,⁵ labor scarcity is a long-term issue.

Competition is increasing, too, especially as new entrants target the last mile. This, the trickiest part of the delivery chain, accounts for **53%** of shipping costs⁶ and is susceptible to nimble players using new and inexpensive technology to undercut established networks with higher cost bases.

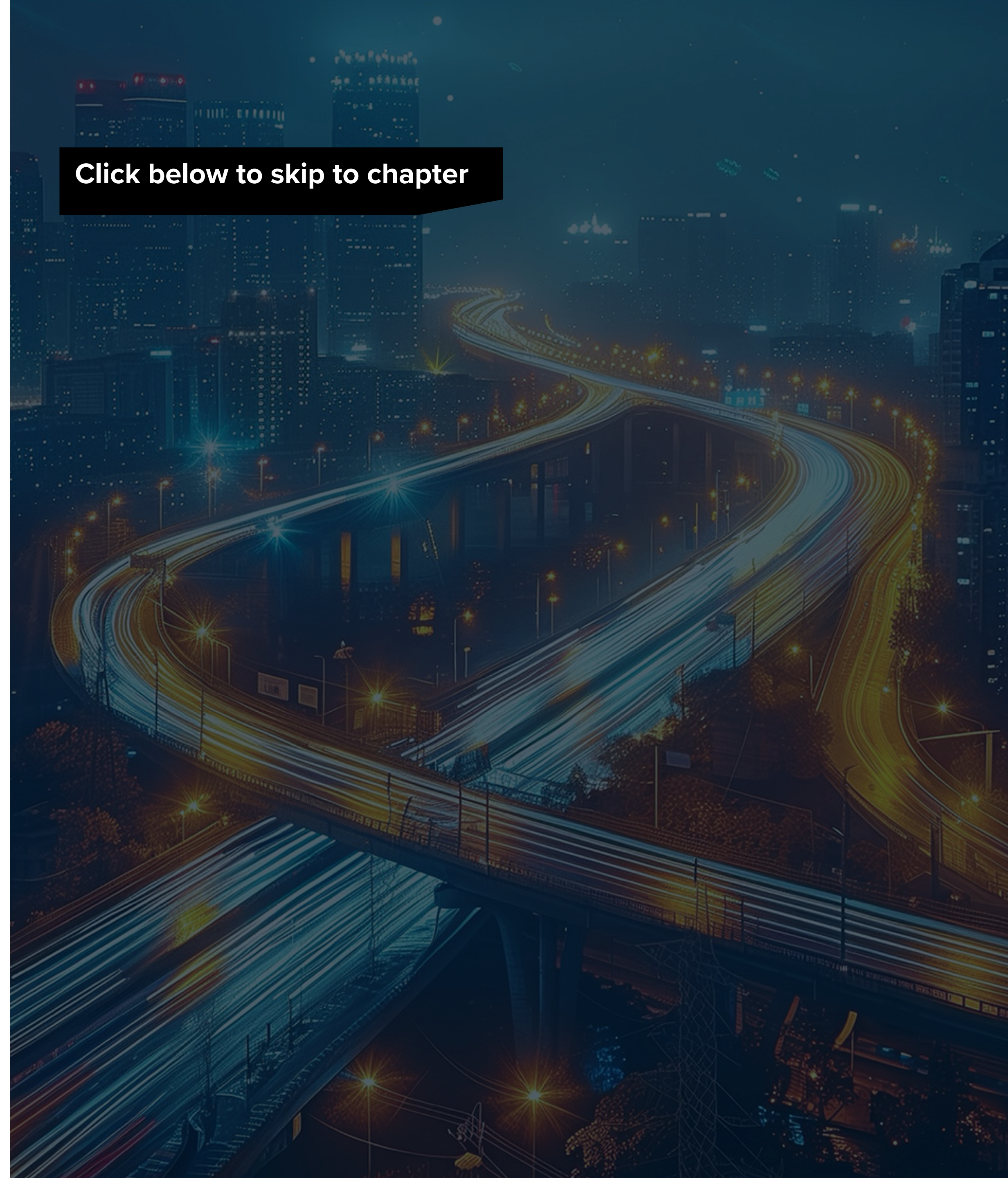
On the compliance front, both government legislation and local edicts (e.g., restricting access to city centers) increasingly require investment and changes to scheduling. It's of note, too, that consumers are increasingly engaged in the environment, social, and governance (ESG) debate – **68%** expect postal and courier companies to take a lead on sustainability.⁷

With all this in mind, technology and innovation must play a transformational role in helping postal and courier companies digitalize and restructure operations to win on the big challenges presented by capital expenditure pressures, labor, automation, and competition.

In this guide, we look at five areas where technology has a clear impact on these critical requirements. The solutions create an agile and cost-effective platform to help postal and courier organizations excel now and long into the future.

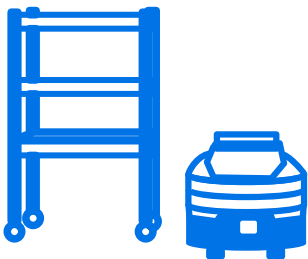
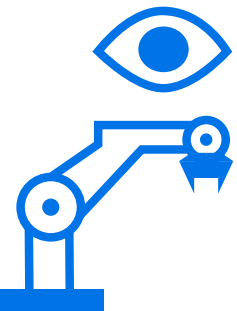
[Click below to skip to chapter](#)

¹ McKinsey
² meteorspace.com
³ Sapio Research
⁴ Zebra Warehouse Vision Study, 2019-2024
⁵ Allianz
⁶ The Sustainable Last Mile, Accenture
⁷ The Sustainable Last Mile, Accenture

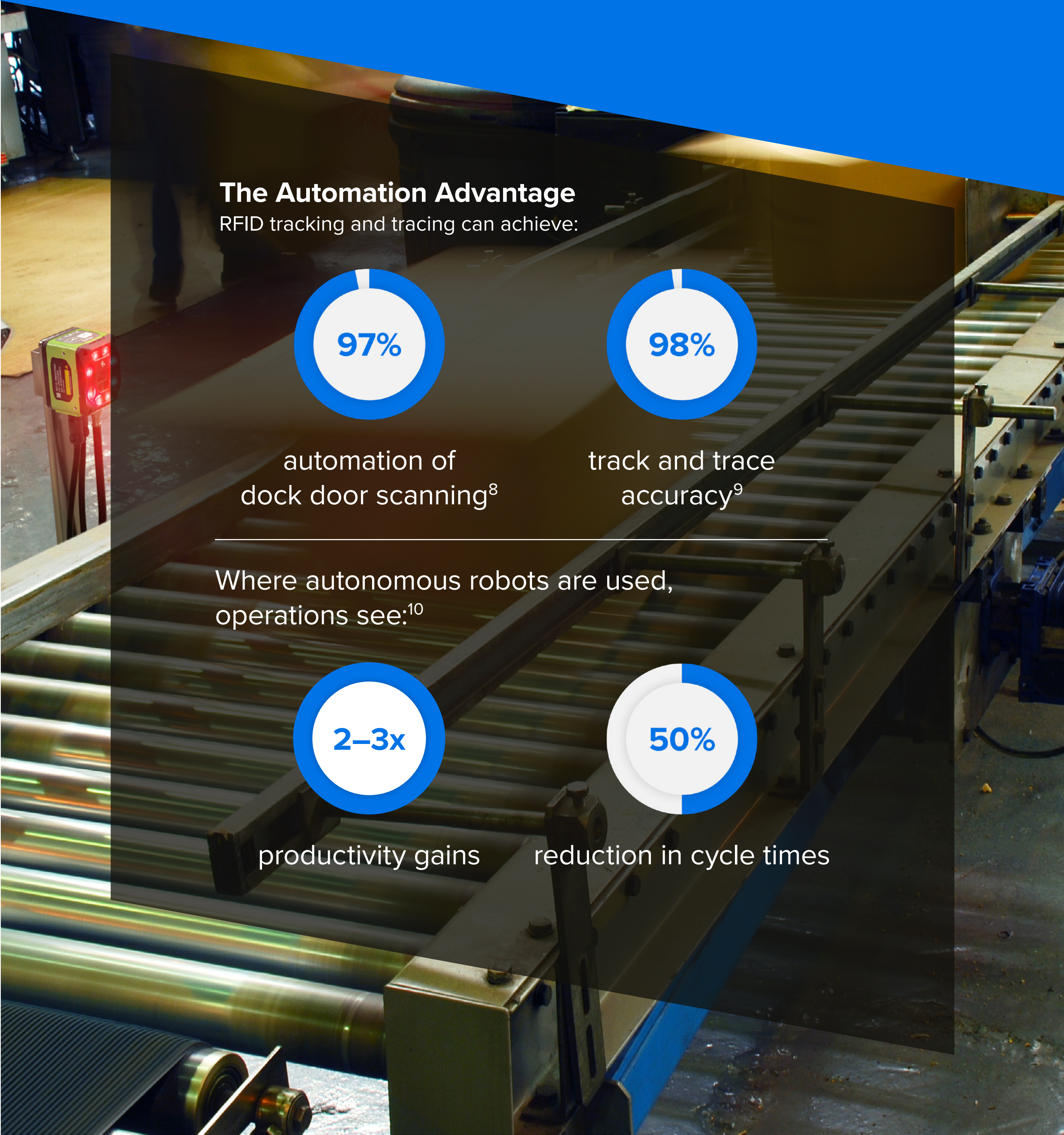


One: Push Automation Deeper Into Sortation

From accurate, high-speed data capture to autonomous mobile robots (AMRs), automation frees up precious team resources, while improving the speed and accuracy of repetitive processes. Options to explore include:

Technology and Application	How it Works
Dock door and pallet auto-ID with RFID 	Adding RFID labels and scanners into workflows enables easy inventory and asset tracking throughout sortation, warehousing, and distribution. On the forklift or at the dock door, batch scanning of pallets becomes quick and effective, with simple auto-registering of any shipments (both incoming and outgoing). This can offer huge time savings compared to manual data capture. Accuracy is exceptional too.
Transportation with AMRs 	AMRs can take totes to teams sorting or picking items and manage transportation across centers, such as taking boxes to conveyors, moving pallets, and removing the recycling. Across large sites where AMRs are in play, employees save a huge amount of time lost to repetitive walking journeys.
Fixed Industrial Scanning and Machine Vision 	Fixed industrial scanning (FIS) solutions enable items to be scanned quickly and accurately – e.g., in scan tunnels – to capture label data during sortation. With Zebra, a software upgrade opens up machine vision (MV) applications too. These promote best practice by automatically inspecting work, such as the placement and content of labels on pallets, and the packing of fragile goods. MV cameras can also be used to alert you to outsized parcels which may impair conveyors. The cameras work far faster and with greater acuity than the human eye.

8 Zebra website
9 Zebra Modern Store Framework
10 The Time is Now report, Zebra 2022



Two: Augment Your Team's Human Capabilities

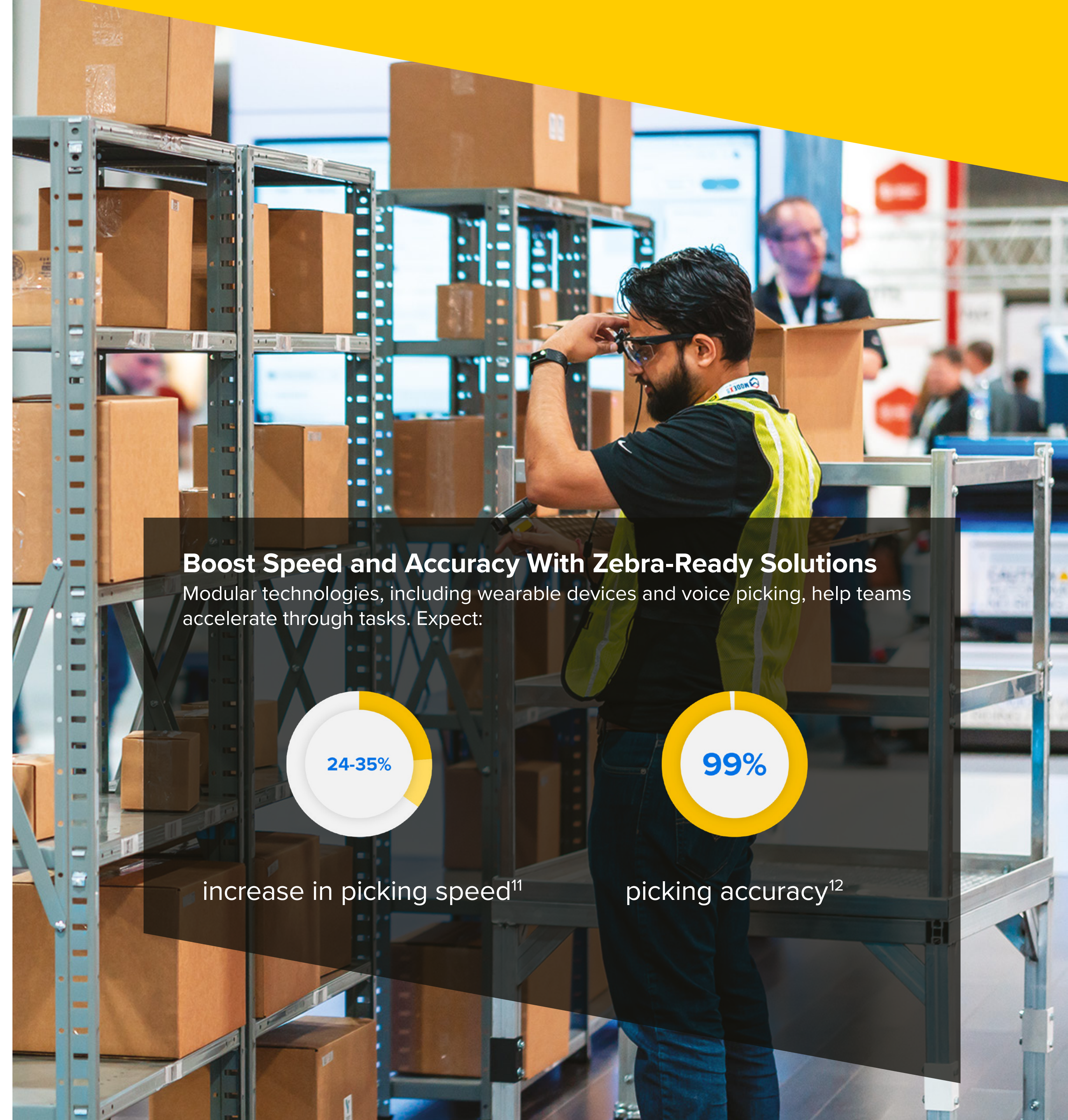
When teams' human capabilities are augmented with intuitive technology, they more easily capture data and view and manage tasks with greater efficiency. A range of solutions are available, which can be used individually to improve productivity or in combination to achieve eye-catching performance gains.

Options include:

- **Wearable devices:** Wearables including wrist-mounted computers and ring scanners allow people to keep their hands free. With the freedom to work instinctively, they accelerate through tasks, from picking to putaway.
- **Voice-directed and multimodal picking:** Using headphones and mobile computers, teams can be directed through tasks using voice commands. The solutions can also interleave tasks to optimize workflow efficiency. In addition, you can "map" your sites using Bluetooth™ beacons, which efficiently guide users to particular racks and locations.
- **Heads-up displays (HUDs):** HUDs project the information workers need into their real-time field of view, including tasks (such as the next pick) and alerts that highlight rack or item locations to help users easily identify what they are after. By freeing hands and eyes to remain on what's next, the headsets minimize errors and help people accelerate through their action lists.

¹¹ <https://investors.zebra.com/news-and-events/news/news-details/2019/New-Zebra-Warehouse-Solution-Increases-Worker-Productivity-Up-to-24-Percent/default.aspx>

¹² <https://www.zebra.com/gb/en/solutions/industry/transportation-logistics/warehouse/picking.html>



Boost Speed and Accuracy With Zebra-Ready Solutions

Modular technologies, including wearable devices and voice picking, help teams accelerate through tasks. Expect:

24-35%

increase in picking speed¹¹

99%

picking accuracy¹²

Achieving 100% Inventory Accuracy

Logistics specialist RevLogical has achieved **100% inventory accuracy** and is able to **see over 300,000 items** in real time across its warehouses with Zebra's RFID, print, and mobile device solutions. The company has also been able to reallocate **20%** of its workforce from admin-intensive tasks to more value-added work. [Read the full story.](#)



Three: Optimize Post Shop Experiences

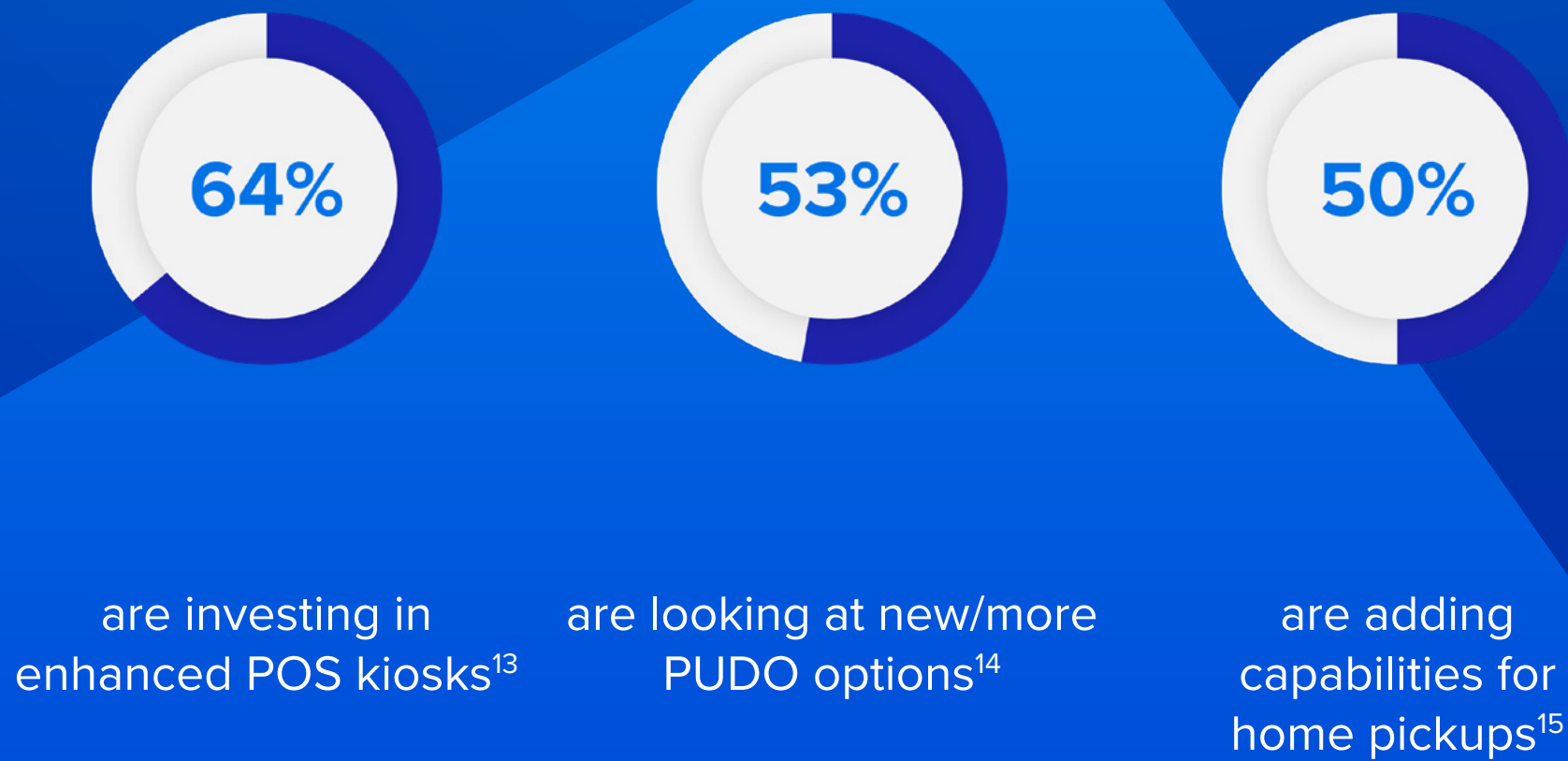
Although post offices and stores remain popular, they are not immune from staffing issues, while the services offered take time to process. To help reduce queues (and costs), kiosks provide an increasingly competent, intuitive, and lower-cost way to process customers. Kiosks can be used to scan and weigh packages, print labels, place items in lockers for dispatch, pay for services, and print receipts for the transactions. It's just as simple for collections too.

Similar services can also be provided by using tablet PCs or mobile devices, on countertop installations, combined with mobile or desktop printers, to enable customers to self-serve pick-up and drop-off requirements within your stores or partners' retail premises.



Reviewing Post Office Retail Strategies

Most postal and courier companies are actively considering their post shop network strategies:



¹³ The Future of Posts report, Escher Group
¹⁴ The Future of Posts report, Escher Group
¹⁵ The Future of Posts report, Escher Group

Smart Ideas and Predictable Costs

The Zebra Custom Solutions team helped a **major European courier company** replace a complicated retail kiosk solution. The kiosk comprised technology from four different vendors making it difficult and costly to run. The specialist team **built a custom solution, aligned to the customer's brand, with better technology and fewer components** in an attractive, easy-to-manage installation. The Zebra Managed Services team now oversees everything – at a fixed cost – across a multi-year contract that covers rollout, operations, and maintenance.



Four: Enhance Services for Drivers and Customer Satisfaction

Advanced technology allows drivers to do more at the door for customer-centric service. Furthermore, sharing real-time delivery insights with customers, and allowing them to make in-flight changes to deliveries, helps significantly raise the percentage of first-time drops.

Parcel and courier companies are at different stages of maturity when it comes to integrating such technology into driver apps. But wherever you are on your journey, among a host of innovations coming on stream, three are especially exciting.

- **Calculate dimensions and take payments:** Our dimensioning app enables drivers to “size” a parcel at a customer’s door, instantly calculate shipping charges, and alert the business to what is coming into the network and where it’s going. You can also take payment, and issue a receipt, providing a convenient service that our postal and courier organizations say encourages repeat business.
- **Enhance driver competence:** Zebra’s mobile devices include chips designed to cope with the heavy processing demands of AI. Our partnerships with Qualcomm on chips, Google on large language models, and Android® on operating systems mean that our devices can run postal and courier-specific generative AI tools that learn from user interactions. These copilots can answer pretty much any question posed by a courier, reducing their time to competence by so much that your newest recruits can be as effective as your long-term employees. This is particularly important when you consider that staff turnover can be as high as 32% a year in the sector.¹⁶
- **Augment the view:** On-device augmented reality (AR) technology is becoming an everyday reality. This sees overlays of actual street-level graphics displayed on drivers’ mobile devices to help them pinpoint pick-up or drop-off addresses. The technology can also be used to flag items to drivers in often packed full vans, helping them shave more time off every delivery.

Ready to Roll

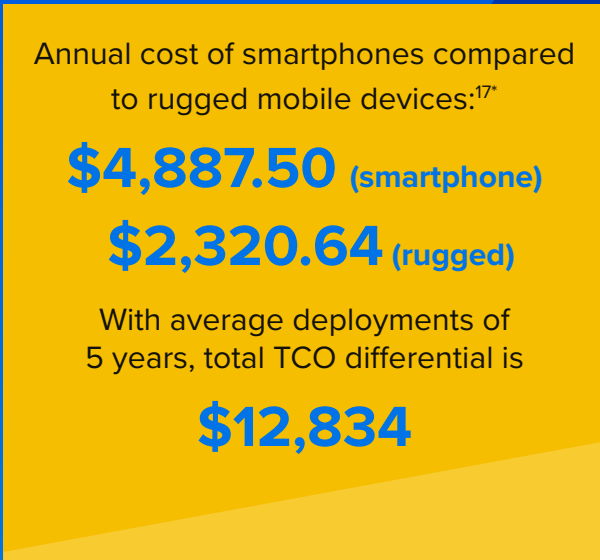
From the dock door to packing bench, to life on the road, the mobile devices used by your team experience demanding operating environments. We design our devices to work all day, every day, for years, to cope with knocks, drops, and water submersion, and with the processors and modular options to power both today’s applications and those coming down the road. From best-in-class data capture to full-shift batteries, which are hot swappable, to fast and reliable connectivity, and a suite of robust security features, they set the standard for enterprise mobile computing.



Zebra TC7X
Enterprise mobility, re-imagined
Zebra’s fastest and toughest device, made to thrive in the most demanding places.



Zebra TC5X
A rugged and powerful productivity partner
Built for field service. Built to excel.



Superior TCO
Rugged devices, designed for the rigors of the enterprise, have closed the “intuitive gap” to consumer smartphones, and are more economic to own. Smartphones fail at three times the rate of rugged devices and cost twice as much to run each year.

¹⁶ Enterprise Mobility Total Cost of Ownership, VDC, 2022
¹⁷All stats sourced from VDC, 2022. Annual TCO of smartphone versus rugged device



Processing 10% More Packages a Day

InPost, Poland, has equipped its couriers with TC5X devices, which they use to access a range of services, from scheduling to POD and route guidance. With the same number of couriers, InPost is processing 10% more packages daily.

Five: Delivering With Data

As smart sensors and automation technologies become more embedded into networks, the amount of data collated is increasing exponentially. A combination of AI, faster processors, cloud computing, and enhanced wireless networks allow this data to be efficiently analyzed and shared, enabling a new era of innovation.

A great example is dynamic routing. Algorithms can interrogate infinite historical data and current demand requests to propose routing that seamlessly blends pickups with drop-offs for the same driver. The result is far more effective and efficient planning which reduces fuel consumption and CO2 emissions while making better use of everyone's time. What's more, enhanced real-time scheduling – with in-flight redirections and driver tracking for customers – can dramatically increase first-time drop rates.

^{18,19} Stats sourced from Gartner Group, and which we typically see across our customer base.

De-risk Your Investments With Zebra Managed Services

Our Managed Services team comprises a dedicated group of professionals with unsurpassed knowledge of our solutions. They take over the running of every aspect of your mobile deployment, from the service desk to maintenance and beyond, including taking responsibility for technology outside of Zebra's ecosystem.

Key performance indicators are agreed with you, which we work to for a set cost over the agreed contract period. The assurance of predictable expenditure is complemented by notable efficiencies. Post and courier companies working with our team typically report a:

- **25–45%** IT cost reduction¹⁸
- **45–65%** increase in operational efficiency¹⁹



Hassle-Free Device Deployments

Deutsche Post DHL rolled out a total of 118,000 Zebra TC7X Series Mobile Computers across 4,500 depots in just seven months, with the help of Zebra DNA intelligent software and Zebra Managed Services – several months ahead of schedule.

Read the full story [here](#).



Why Zebra?

For over 50 years we've intelligently connected people, assets, and data to help businesses make smarter and more informed decisions. Our experience ensures we truly understand the needs of the enterprise, creating partnerships that reduce risk and help you win on the big decisions around technology, capital expenditure, security, team resourcing, and more.

We have used this understanding to create our enterprise-class mobile platform. It's designed to help you:

- **Deploy solutions** – easily stage and roll out devices and develop apps and solutions for them.
- **Secure devices** – roll out robust security and extend operating system (OS) patches and updates over multiple years, way longer than the usual period provided by Android.
- **Optimize performance** – your devices can evolve and be supplemented (e.g., with battery replacement) to provide high levels of performance across often extended lifecycles. We also provide real-time device analysis tools which provide proactive recommendations to help you drive more value from each device and extend their lifecycle.
- **De-risk investments** – we have teams based across the globe including custom solutions, professional, and managed service experts. They help you create innovative solutions and manage them, in their entirety, to KPIs, for a set fee, over an agreed period.
- **Retire responsibly** – our circular economy initiatives have, so far, seen one million devices reused, refurbished, or recycled and, when it comes to the end of life of your technology, we offer a range of services that will contribute to your own ESG objectives. Rest assured, too, as a responsible corporate citizen, we are targeting substantial improvements across a range of environmental goals both in our business and across our supply chain.

By optimizing uptime, easing maintenance and management, and accelerating tasks, from app development to staging devices, our enterprise mobile platform demonstrably lowers the total cost of ownership of your solutions.

**For more information, contact your Zebra representative
or visit www.zebra.com to find a partner.**



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