A digital future for consumer goods

How to kickstart your digital transformation journey

Introduction

It's no secret that many consumer goods companies have been looking at digital transformation for some time. But the pandemic and evolving market conditions changed the urgency around adoption and have accelerated industry-wide investment in new, game-changing digital technologies.

Companies have been grappling with faster product development cycles, supply chain disruptions, widespread skills shortages as well as increasingly complex consumer demands. Plus, there's now growing and unavoidable pressure to deliver on sustainability and environmental interests.

Despite all of these pressures changing the pace of transformation, it's clear that many companies still have some way to go before realising the true extent of their digital vision. At present, 88% of consumer goods companies are capturing data about their assets and operations. ⬭

But only 18% currently believe they're properly equipped to fully deliver on the Internet of Things (IoT) and connect this data effectively to business systems that improve their operations. ⬭

A thorough and well-planned digital roadmap will be essential for achieving longer term transformation goals. This needs to start with a fully connected and optimised smart factory with the ability to automate operations. Complete integration of all the data captured across operations, business systems, suppliers and consumers will then be critical for gaining that much-needed 360-degree view of their supply chain and a deeper understanding of what customers want.

To help you on this journey, we've created this whitepaper to support your thinking about digital consumer goods. I hope it helps shape your plans for the future. Do get in touch if you'd like to discuss anything further. ⬭

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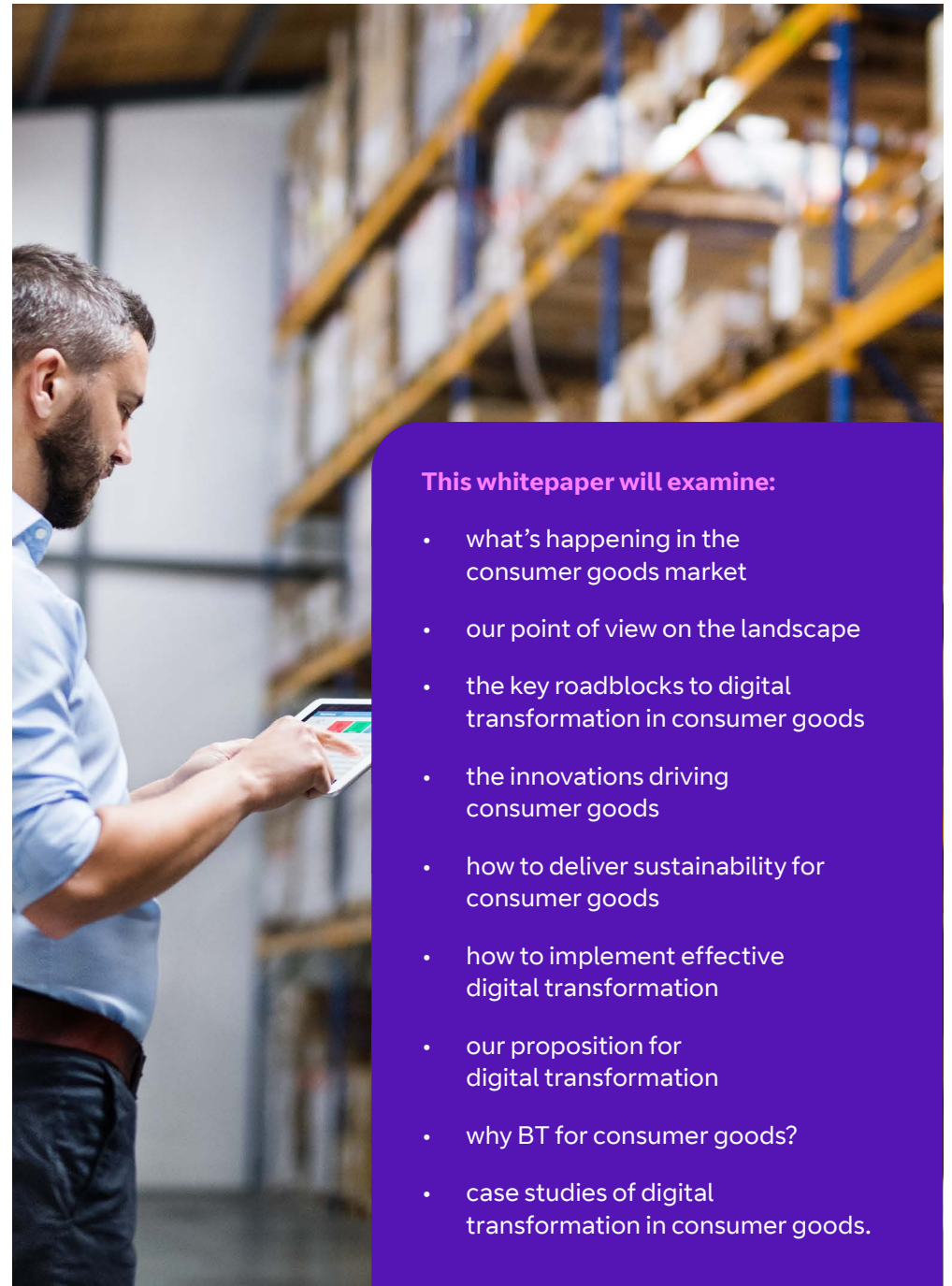
This whitepaper will examine:

- what's happening in the consumer goods market

- our point of view on the landscape

- the key roadblocks to digital transformation in consumer goods

- the innovations driving consumer goods

- how to deliver sustainability for consumer goods

- how to implement effective digital transformation

- our proposition for digital transformation

- why BT for consumer goods?

- case studies of digital transformation in consumer goods.

What's happening in your market

Digital transformation has been on the consumer goods agenda for some time, but a unique set of market conditions is forcing organisations to change gear. The pandemic accelerated five-year adoption strategies down to as little as six months, as three key developments started reshaping the industry as we know it.

Transformation driver #1 – growing uncertainty around supply chains

Concerns around supply chains escalated during the pandemic when, exacerbated by the surge in online ordering, many consumer goods companies were affected by the logistical bottlenecks caused by travel restrictions. This meant many companies found themselves unable to meet the demand for everyday, staple items.

Since then, pressure on supply chain management and logistics has continued, as consumers continue to expect shorter delivery windows regardless of the ongoing shortage of delivery drivers, growing shipping costs, increasing border checks, and fluctuating exchange rates. On top of all this, there's also now a growing awareness of the environmental impact of logistics, highlighting the need for companies to develop more

sustainable supply chain practices and meet new emissions targets.

Digital transformation will be seen as a critical enabler for real-time end-to-end visibility, accurate forecasting of disruptions and smarter, more resilient supply chains.
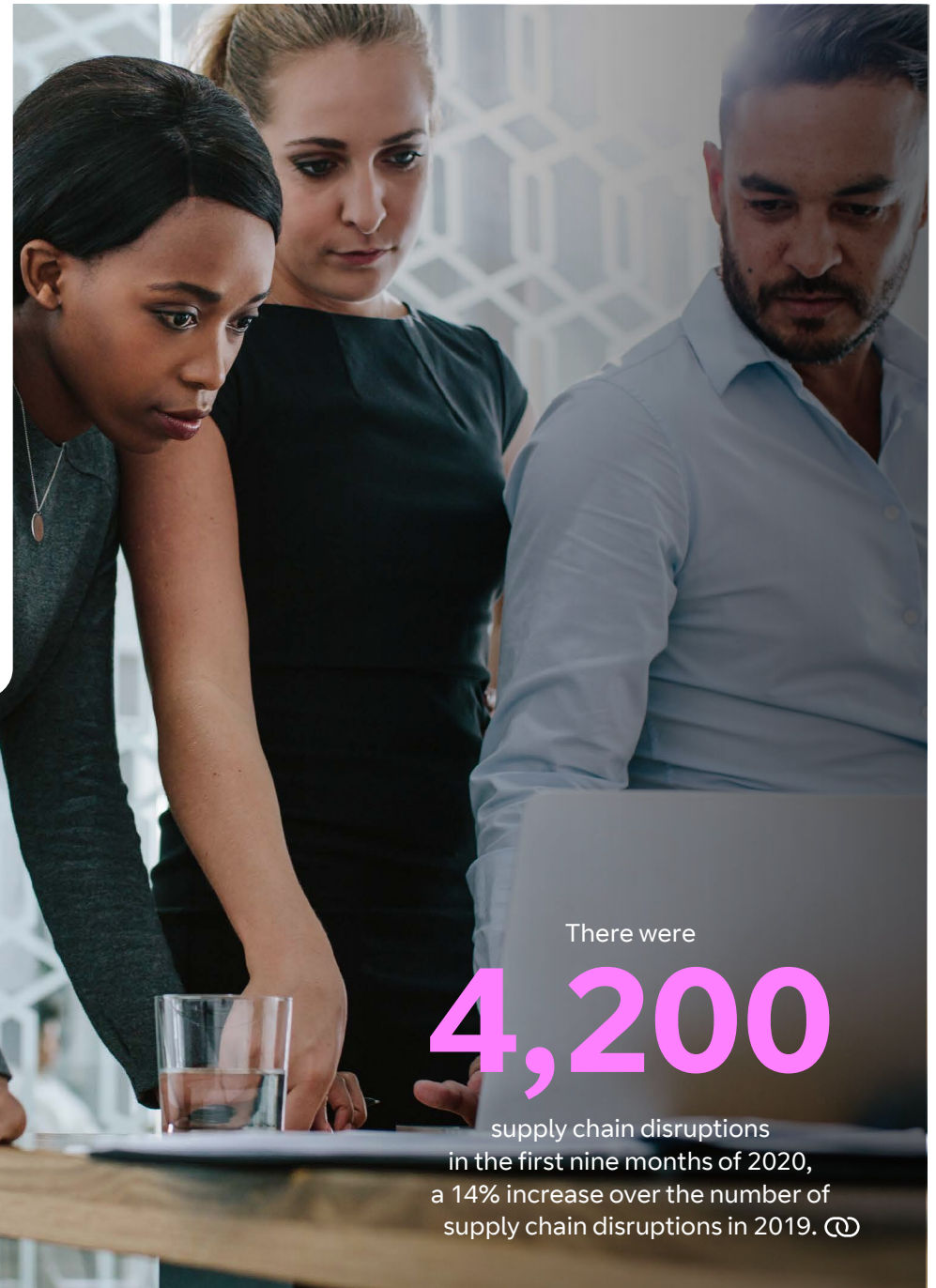
There were

4,200

supply chain disruptions in the first nine months of 2020, a 14% increase over the number of supply chain disruptions in 2019.

What's happening in your market

Transformation driver #2 – evolving consumer demands due to generational shifts

Gen Z is coming of age and becoming a major force in the consumer market. On the whole, post-millennials place far more value on sustainability, authenticity, health, and wellness and, as digital natives, they have far higher expectations around convenience and instant gratification. To keep up, consumer goods companies need to be investing in innovations across multiple areas including accelerating fulfilment and development cycles, and optimising production to conserve energy and reduce waste.

1 in 3

consumers claim to have stopped purchasing certain brands or products because of ethical and sustainability related concerns. ⊙

Transformation driver #3 – direct-to-consumer (DTC) models

Many brands are now additionally using DTC models, as well as traditional retail channels, in order to collect customer data and build closer relationships than ever before, while reducing overheads and increasing profit margins. We're now seeing industry-wide experimentation with new DTC models such as product subscriptions, direct messaging platforms, flagship stores and the servitisation of products.

Today, many different items from groceries to shampoo are available via subscription services, while servitisation adds more value to products by creating a service wrap around them. For example, rather than just selling groceries, brands are now creating meal kits with all the necessary ingredients measured out for specific meals.

As these value-added services rise in popularity, machine learning and Artificial Intelligence (AI) will support brands in upgrading more of their traditional products into app-based and data-driven services.

Plus, incorporating IoT technology into products, such as connected fridges or smart wearables, will capture data on how they're used to optimise experiences and refine marketing strategies even further.

25%

of US consumers are making nearly one fifth of their purchases from DTC brands. ⊙

Our point of view

Even before the pandemic hit, consumer goods companies were dealing with more suppliers, faster product development cycles and more demanding consumers than ever before.

Now, after the disruptions of the pandemic, consumers crave certainty. Competing in the future will require consumer goods companies to have a 360-degree, data-driven view of their operations and supply chains, as well as a deep understanding of end-consumers and what they want. The most forward-thinking organisations will want to prove their credibility by offering reliable product availability, taking sustainable measures to tackle the climate crisis, and adopting new innovations and technologies to improve their products and services.

To keep up with globalisation and evolving technologies and trends, many leading brands are moving towards DTC sales models. But although exploring new channels to market has its benefits, most traditional wholesale operations weren't built to be end-consumer facing. And moving from a product focus to a consumer focus requires a significant levelling up of strategy and digital investments.

End-to-end digital transformation and greater operational resilience starts with the supply chain. Undoubtedly, supply chain challenges will continue to dominate the

agenda as critical raw materials grow scarcer, labour shortages increase, and energy prices rise. In these challenging market conditions, consumer goods companies will need full transparency across their supply chain to ensure they can accurately forecast disruptions and handle sudden surges in demand. To achieve the right level of reactive decision making and agility just isn't possible if you're trying to make sense of siloed platforms, multiple data sources and point solutions from different providers. This is why, to properly implement intelligent manufacturing and a digital supply chain, greater convergence of Information Technology (IT) and Operational Technology (OT) is essential for breaking down silos and unlocking a comprehensive data-driven view. Once implemented, this end-to-end visibility will optimise processes, logistics, cut energy costs, reduce downtime and ultimately, increase revenue.

5G is also a critical enabler for the connected factory. It will support the ability to handle higher densities of smart devices and process increasing volumes of data. Today, we're helping more and more customers weave 5G

into their manufacturing plans to gain that much-needed agility and achieve greater levels of automation.

But successful adoption of greater automation will require a significant transformation of the workforce into digital-ready teams who want to adopt smarter ways of working. This new generation of 'connected workers' equipped with technologies, like Augmented Reality (AR) glasses that connect to remote experts, can improve safety while reducing mistakes and encourage a culture of collaboration across the entire value chain.

We're also seeing a growing sustainability imperative in the consumer goods industry that needs to be factored into digital transformation strategies. The key to a successful evolution will be marrying innovation and sustainability, so adoption of any new practices reduces energy consumption, emissions and conserves raw materials while improving demand forecasting. Organisations who fail to recognise this will find themselves losing out to their competitors as the demands of the conscious consumer continue to grow.
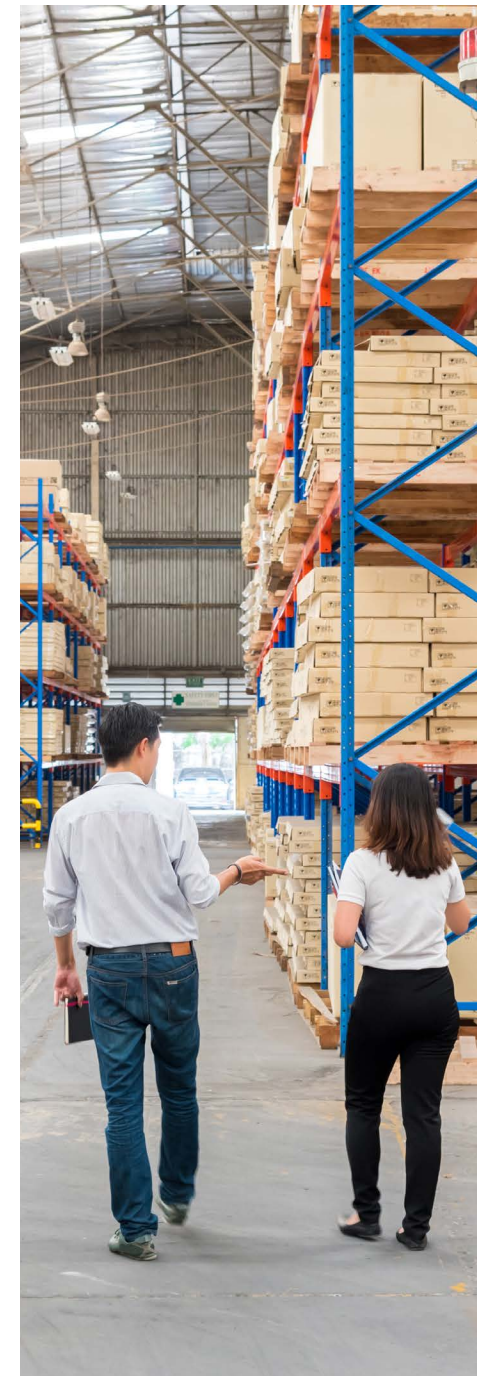
The key roadblocks to digital transformation in consumer goods

In our experience of working with consumer goods companies to achieve digital transformation, we've found the same issues, concerns and attitudes emerge. Recognising what's holding your organisation back allows you to address the roadblocks in your digital transformation strategy.

1. Lack of skills and concerns over job security

Without the right internal skills or experience, most consumer goods companies struggle to know where to start. Introducing new, often automated solutions into the factory can also be met with distrust or opposition from a workforce who feel their jobs are at risk. To support the roll-out of new technologies, employees need to understand how innovations, like intelligent automation and AI, reduce the burden of menial tasks and free up time to focus on human qualities, like creativity and complex problem solving.

2. Getting internal buy-in for your transformation

There's a very real risk that, without strong commercial models and clear ways of demonstrating a rapid return on investment, the organisational mood will be against wider digital transformation, and nothing will get past pilot stage. Often consumer goods companies don't have board-level sponsorship for wider change or clear proof of value data to support the business plan and haven't included using efficiency savings to fund innovation in their strategy.

3. Meeting the expectations of conscious consumers

Adopting sustainable practices and technologies requires a change of mindset from more traditional business models. In the short term, there might be initial investment costs. But in the future, many of these processes will create savings by driving efficiency, ensuring long term loyalty from consumers, and promoting industry-wide change.

5. Poor supply chain visibility creates lost opportunities

A lot of companies lack comprehensive visibility across their supply chain or access to notifications of what's going on. This can lead to valuable missed opportunities and time-consuming and expensive inefficiencies including slow shipments, mismanaged orders, poor communication between vendors and customers, and additional expenses from incorrect orders and cancellations.

4. Building trust between IT and OT teams

Digital transformation shakes up how the organisation works internally and requires people to let go of territorial, entrenched attitudes such as the lack of trust between teams. But without upgrading legacy infrastructure, manufacturers will struggle to scale digital transformation beyond the pilot stage. Often, OT teams see IT as a threat vector that has the potential to seriously disrupt production. It's important to help them understand how smart technology will work for them and how a greater flow of data will unlock actionable insights to boost operations.

The key roadblocks to digital transformation in consumer goods

6. Tackling the cybersecurity risks that come with digitalisation

Convergence of IT and OT can significantly expand an organisation's attack surface and open them up to a range of new and unknown cyber threats. The number of high-profile attacks on internet-connected OT systems understandably makes organisations hesitant to take the risk. Securing your OT estate before making the leap requires considerable investment in people, processes, and cybersecurity technology.

7. Capturing data

In the connected factory, capturing accurate data and analysing it in real time helps drive productivity and gauge overall equipment effectiveness, while collecting and analysing consumer data will enable you to shape products and services around their needs. But many consumer goods companies are starting from a point where their data is stuck in silos and a lot is still paper based. It feels like a gargantuan task to digitalise complicated paper trails to bring the data together across many different systems to create a clear, overall picture.

8. The expected disruption of replacing legacy infrastructure

Many consumer goods companies are still reliant on legacy infrastructure to carry out their core operations and use many different single point solutions from multiple suppliers. Upgrading all this technology can initially seem expensive, disruptive, and complex, but failure to do so will be far more costly in the longer term, affecting their ability to keep pace as competition and consumer demand accelerates.
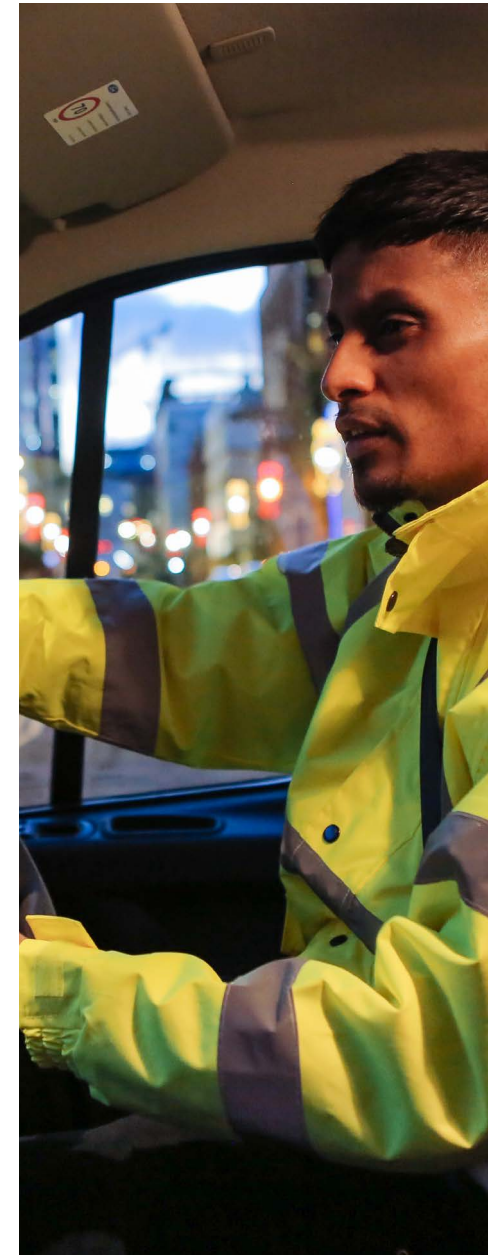
The innovations driving consumer goods

5G is, without a doubt, the technology of the moment across all digital industries. However, we see it as a facilitator for other innovations rather than as a standalone technology. Its latency is approximately half that delivered by 4G, and it provides consistent connectivity without the dropouts that can happen with 4G, which makes it essential in the connected factory.

This combination of low latency and high reliability opens the way for a range of new advances including greater production optimisation from accurate real-time data and improved safety in the factory as more sensors are deployed. Introducing more sensors across production also allows for predictive maintenance and more responsive monitoring of equipment, alerting to issues before problems even arise, minimising delays and increasing efficiencies.

Here are three further innovation areas which are redefining the future of the consumer goods industry:

1. Blockchain technology

Gaining momentum across consumer goods, blockchain technology uses cryptographic algorithms and encryption to create unique digital signatures for individual products. Then across each stage of a product's journey or 'chain', a range of transaction and user information is embedded that's completely impenetrable and impossible to replicate. As a result, it's enabling companies to establish a heightened level of trust with consumers, by offering unprecedented reassurance into the origins, production methods and journeys of products.

In today's market, this end-to-end visibility into the supply chain is proving hugely valuable, particularly for the growing market of consumers who demand transparency, ethical production, and reduced air miles. It's also a greater assurance of quality with its completely unique codes preventing product forgeries. By using IoT and sensor technology that reads each product's unique signature, food brands can even optimise conditions for perishables based on the journey they've taken.

By the end of 2024, it's expected that corporations will spend

$20bn

per year on blockchain technical services.

The innovations driving consumer goods

2. Edge manufacturing

Industry 4.0 requires IoT and autonomous devices across every level of the manufacturing process, and this generates enormous volumes of data. Traditionally, all of this information would be sent off-site to a centralised location on the network – either the cloud or data centre – to be processed, which can overload the network and cause high latency. Instead, edge computing brings processing closer to the source of transmission by using local devices onsite or at 'the edge'. Bringing this process as close as possible hugely accelerates the analysis of information and enables much faster or real-time response times from the insights generated.

When every second or even millisecond counts, the competitive advantage consumer goods companies can achieve through edge manufacturing is far too attractive to ignore, delivering faster, more dynamic decision-making across a range of applications like predictive maintenance, condition-based monitoring, and inventory management.

> Processing inventory information at the edge can be up to
>
> # 50x
>
> faster than the cloud. ⬭

3. New DTC strategies using AI and IoT

In consumer goods, the rapid rise in DTC sales is causing companies to increase strategic investments in innovations like AI and IoT to drive closer consumer connections and interactions. Today, many companies are boosting their front-line services by exploring AI-driven chatbots that can field more complex enquiries, recognise individual preferences or carry out parts of the fulfilment process. By embedding AI into communications, the data captured during interactions can then be converted into intelligent demand forecasting or timely product recommendations.

In an omnichannel world, friction is bad news. So, to reduce the need for contact or even online ordering, brands are creating IoT devices that enable almost effortless and instant reordering of products from the comfort of consumers' homes. Increasingly, smart homeowners will choose which brands are integrated into their houses or even connected cars by incorporating branded payment gateways, press-to-order smart buttons, or voice activated reordering features. At the same time, IoT is also supporting the growth of servitisation and flexible 'pay-as-you-use' subscription models by enabling the ability to monitor product usage remotely.

> # 65%
>
> of consumers have cut ties with a brand over a single poor customer service experience. ⬭

Delivering sustainability for the consumer goods sector

Year on year, sustainability moves further up the list of consumer priorities. In fact, 85% of consumers have become 'greener' in their purchasing in recent years. The pressure is now on for consumer goods companies to prove they're taking considerable steps to protect the environment, whether that's through ethical sourcing, reducing their carbon footprint or seeking out renewable energy sources.

Today, just putting a statement or an endorsement on your website isn't enough – brands need to prove their sustainability credentials to satisfy the expectations of consumers.

Deliver transparent supply chains
From production to end-consumption, the rise of the conscious consumer is pushing the consumer goods sector to embrace transparency across their supply chains, which can be challenging if you're dealing with complex global supply chains. But consumers are adamant that they expect information around sourcing to be made as readily available and in-depth as possible.

Fortunately, there are a range of solutions to achieve this by giving organisations access to a global database of accredited suppliers and recommendations of safer, more sustainable and responsible alternatives. Similarly, AR solutions exist to support remote auditing, so that companies can carry out spot checks on suppliers, regardless of geographical barriers.
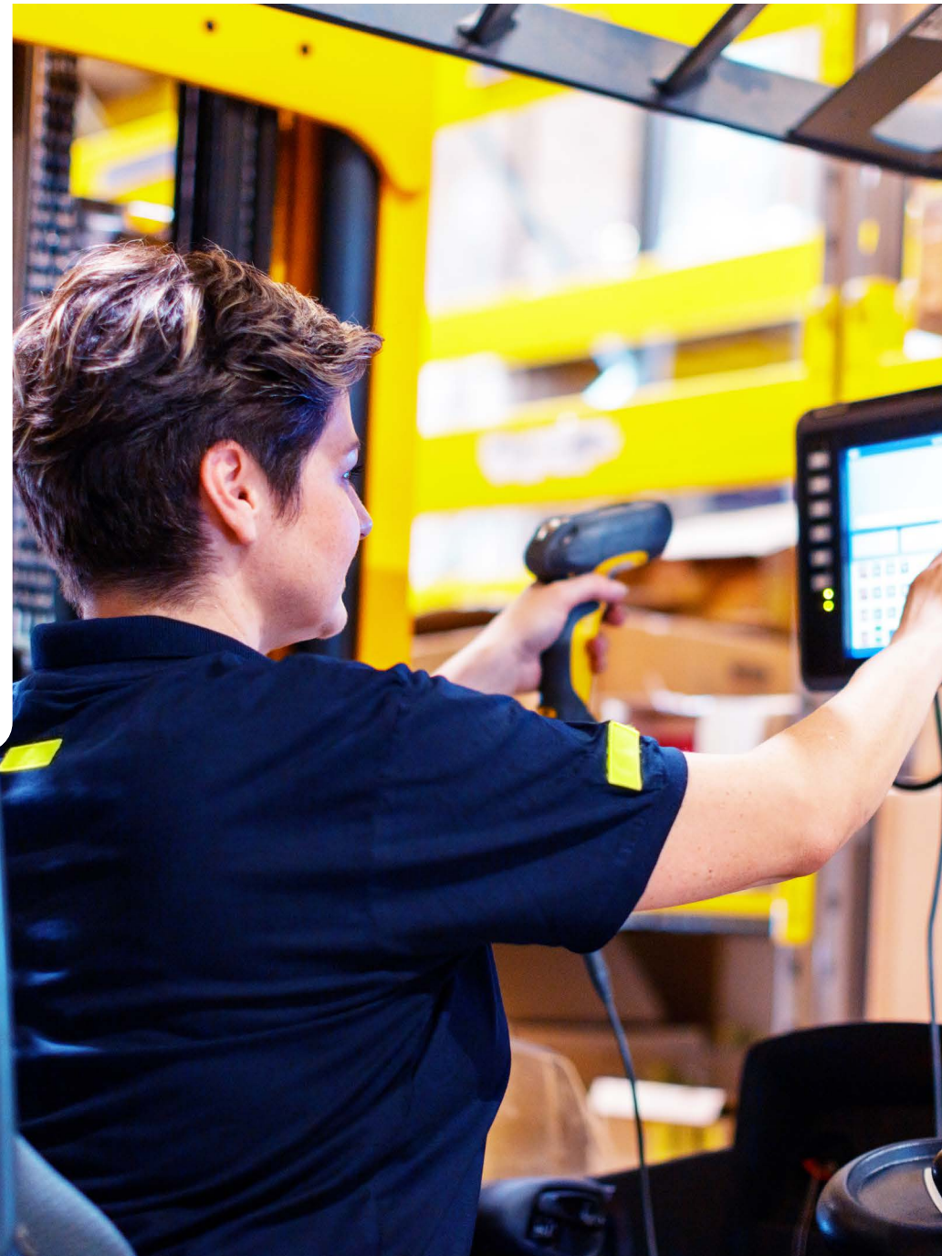
Delivering sustainability for the consumer goods sector

Reduce carbon footprint and use of raw materials

Single-use plastic packaging is one of the most notorious items for its long-term damage to the environment. Therefore, many companies are limiting their use of plastic, using recyclable packaging, or seeking biodegradable alternatives as well as demonstrating the provenance of their products and raw materials. In a bid to create a truly circular economy, across Europe more than 80 manufacturers have adopted a new digital watermark – the Digimarc. This enables traceability all the way to back to the origin and at smart waste facilities improves the accuracy of sorting plastic into its different types to create higher quality recyclates. Plus, compared to traditional UPC and EAN barcodes, the Digimarc saves up to 69% on ink. ○○

Make smarter decisions for energy consumption

In the smart factory, the digitalisation of decision making can increase efficiency, optimise processes, and reduce costs and wastage - all while improving environmental impact. Powered by algorithms and machine learning, technology-based energy management can be integrated into control systems to monitor and optimise timings, temperature, lighting, and even recommend where

improvements can be made.

Digital transformation can support sustainability by:

Data-driven insights generated by connecting industrial equipment and automation software to intelligent manufacturing platforms have been shown to reduce energy consumption by up to

18% ○○

- using intelligent demand forecasting, right down to regional level, to improve supply chain planning and reduce consumption of raw materials and waste

- reducing empty miles and unnecessary journeys using AI-based fleet management software to optimise delivery routes while making products' ETAs as accurate as possible

- detecting counterfeit goods with a number of track and trace serialisation solutions for consumer goods. This helps restrict the use of banned ingredients and unethical production methods.

How to implement effective digital transformation

Across the board, digital transformation will look slightly different for every consumer goods company. But there are common foundations that every organisation will need to support their evolution.

Get your building blocks in place for digital transformation

Laying the foundations for long-term digital expansion and a fully connected factory requires an infrastructure that's reliable, scalable, and fit for growth. Organisations will need scalable cloud services and a range of flexible network options, like the ability to rapidly extend bandwidth, as well as the computing power and IT support onsite to process OT data at the edge.

On top of this, an essential part of successfully connecting OT and IT is working out what's connected to your factory networks and where there might be vulnerabilities. We know that the majority of malware gets into factories from the IT world, and many current manufacturing systems were never designed to be connected to the internet, making them more susceptible to cyberattacks.

Plus, adding in IoT functionality lengthens system borders, increases the potential attack surface, and once data leaves the factory you need to know it's distributed securely. To counteract all these potential vulnerabilities, it's essential to build cybersecurity into your transformation by design.

Make sure you have reliable connectivity

Many of the emerging technologies on the path to digital transformation, like IoT, require a strong connection you can always rely on.

These days, any outage will mean costly downtime or service disruption. Moving towards a software-defined networking solution will help you to prioritise business-critical traffic and ensure consistent performance for the tools or operations that matter most, especially at times of high demand.

Only once these solid foundations are in place, can you move onto the next four focus areas for digital transformation in the consumer goods industry.
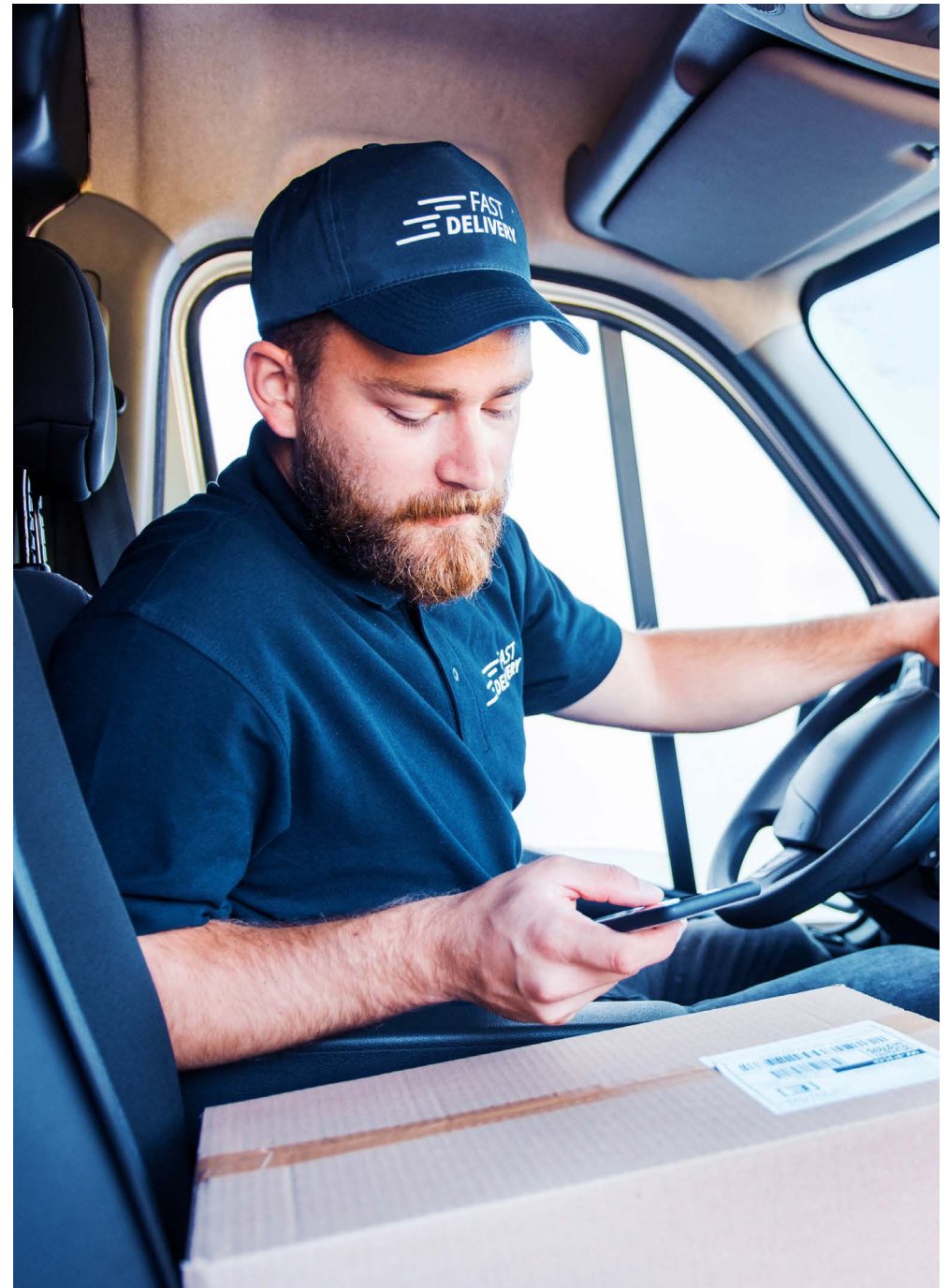
How to implement effective digital transformation

1. Build an entirely digital supply chain

In today's omnichannel world, it's vital to have a fully connected supply chain that's integrated with all your platforms to ensure that every product is in the right place, at the right time. Especially now that many consumers expect to be able to follow the progress of their package from the warehouse all the way to their front door.

First of all, look at boosting visibility with an RFID inventory management system connected to a string of sensors, tags, and readers at every stage of the product journey. Thorough integration will deliver up-to-the-minute accuracy while reducing shrinkage, wastage, and unnecessary loss.

Then, once everything is properly synchronised, look at where you can further optimise workflows and drive productivity by using fleet management and workforce scheduling software to boost efficiency across your entire fulfilment journey. In the warehouse, this software can also be connected to smart glasses or headsets that guide picking and packing, as well as improving safety.

2. Adopt intelligent manufacturing

In the connected factory, greater adoption of IoT is the key to capturing, sharing, and analysing data on all of your operations. Ideally, everything should be connected into a single control platform that brings all the different types of data across your operation together, regardless of system or format. Feeding this into AI-powered analytics tools or machine learning models will then generate valuable insights on how to improve productivity, reduce downtime through preventative maintenance and even reduce energy consumption.

3. Create a smarter workforce

The speed and success at which you're able to deploy new innovations will rely on the rate at which employees are able to adapt to new ways of working. Truly smart workplaces should improve staff safety, wellbeing, and satisfaction. Implementing a range of solutions like voice technology and unified communications platforms will boost collaboration across departments. It will enable some staff to work from home, provide the ability to access remote experts or even offer voice-guided workflows to boost safety and enhance training.

4. Explore new channels to market

As you trial DTC models, focus on delivering a consistent and seamless brand experience across all your platforms. Then, to handle the increasing volume in consumer communications, look at investing in customer contact solutions like multi-channel call centres, direct messaging platforms and even incorporating AI-driven chatbots to handle more straightforward queries.

Once the basics are there, you can begin to experiment with providing more immersive, engaging and interactive digital experiences to make you stand out from your competitors. For example, many consumer goods companies are already using live streaming platforms to host Virtual Reality (VR) product launches.

In fact, a recent VR product launch from One Plus Nord attracted 7 million views. ⚭

Our digital consumer goods proposition

We provide industry-specific, global managed services that enable secure data distribution across global supply chains, operations and businesses.
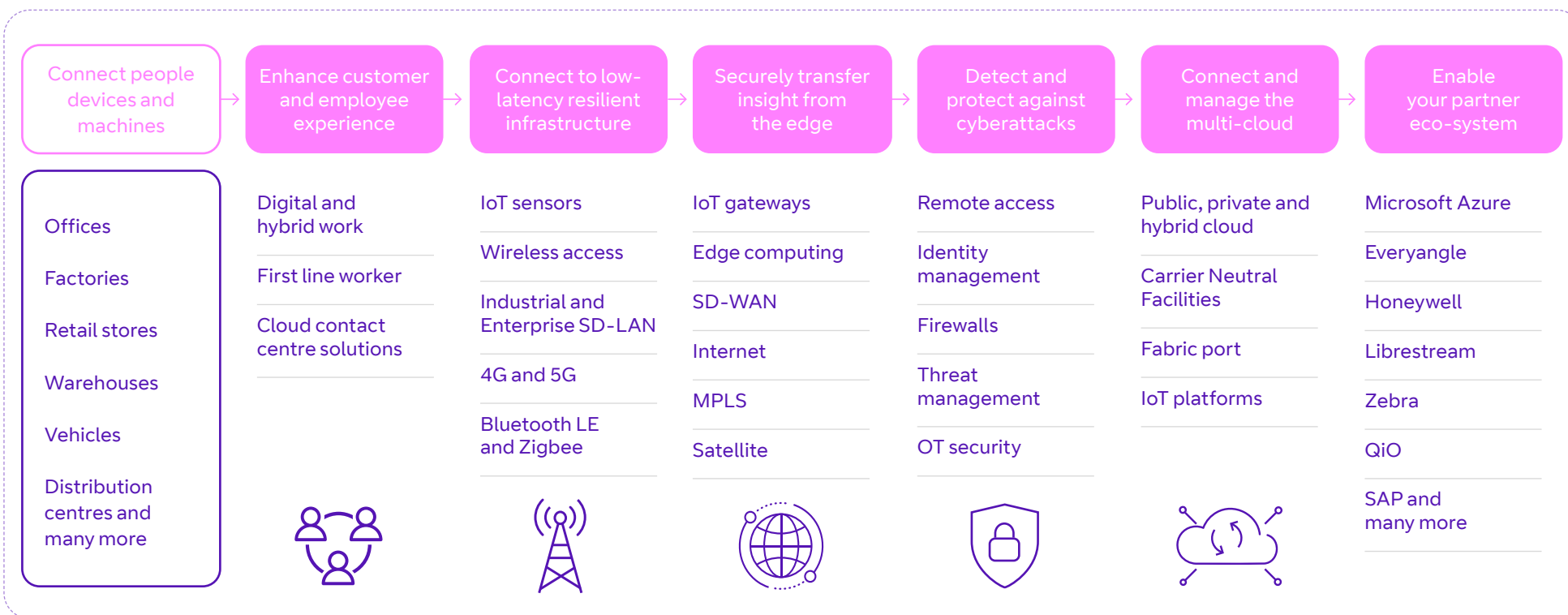
Our ambition: to become the world's most trusted connector of people, devices and machines.

To power the digitalisation of your business, we can help you with:

- an end-to-end-infrastructure design, based on composable architectures
- the products, tools and services to support your digitalisation globally
- a service framework supporting your business on a scalable basis
- a security-by-design approach that protects your data, assets and business.

What your business can achieve with our digital consumer goods solutions:

1. ensure your network infrastructure is digital-ready
2. resolve your cybersecurity challenges
3. deliver your data securely and globally to improve business outcomes.

Connect people devices and machines	Enhance customer and employee experience	Connect to low-latency resilient infrastructure	Securely transfer insight from the edge	Detect and protect against cyberattacks	Connect and manage the multi-cloud	Enable your partner eco-system
Offices	Digital and hybrid work	IoT sensors	IoT gateways	Remote access	Public, private and hybrid cloud	Microsoft Azure
Factories	First line worker	Wireless access	Edge computing	Identity management	Carrier Neutral Facilities	Everyangle
Retail stores	Cloud contact centre solutions	Industrial and Enterprise SD-LAN	SD-WAN	Firewalls	Fabric port	Honeywell
Warehouses		4G and 5G	Internet	Threat management	IoT platforms	Librestream
Vehicles		Bluetooth LE and Zigbee	MPLS	OT security		Zebra
Distribution centres and many more			Satellite			QiO
						SAP and many more

Industry-specific global managed service across **infrastructure, security and digital workplace**

Why BT for consumer goods?

We build trust before solutions

We understand that solutions that feel imposed upon factory teams are rarely as successful as those that are co-created. Recognising that your people know more about your business than we do, we value the trust of your teams on the ground and work collaboratively with them to develop a solution.

We're a one-stop-shop for transformation

We've focused on building an ecosystem of partners who develop the emerging technologies that will secure a profitable future. In today's complex marketplace we provide a one-stop-shop approach, combining our core infrastructure, connectivity and security services with the latest developments and innovations.

We're security specialists

Our experience and expertise in protecting governments, nation states, critical national infrastructure and large global corporations from over 6,500 cyberattacks each day gives us a ringside seat on the complex security threat landscape. We use this unique position to support organisations to detect and respond to threats in a Zero Trust world with real time visibility and monitoring, drawing on the expertise of our 3,000 security experts and 350 consultants based in our security operations centres around the globe.

Our renowned global network

We're a reliable partner with global experience and credentials, and the research and development capabilities to turn the latest innovations into resilient and trusted services on a global scale. We've delivered thousands of solutions globally with our ever-increasing choice of secure services and solutions. Our approach means that multiple technologies and legacy systems can be easily managed to create a single, secure global network infrastructure for your business.

The breadth and depth of our portfolio

Through our broad portfolio of solutions, we can easily integrate with the collaboration applications, data and third-party cloud providers you need globally. Then our end to-end management of your entire solution simplifies operations for you – and improves user experience for your team and your customers. Our portfolio combines our deep expertise and extensive capabilities in cloud, networking and security services.
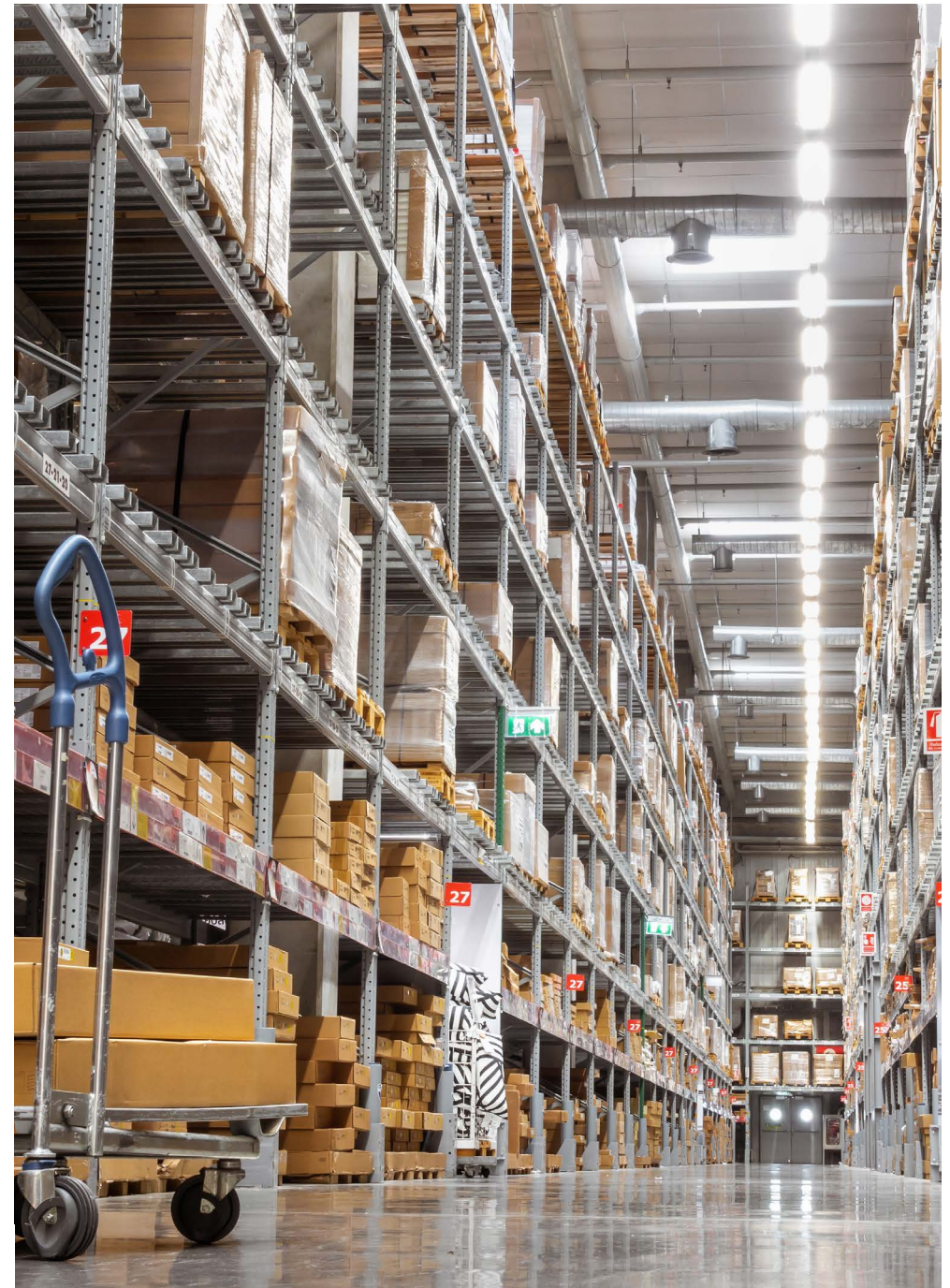
Our investment in R&D and innovation

A commitment to innovation is part of our DNA. We've invested £2.5bn in research and development over the last five years, making us the third largest investor in R&D in the UK. Our 13,000 scientists and technologists worldwide have filed over 10,000 patents since 1990 to push forward the boundaries of what we can help our customers achieve. We have a particular focus on technologies that will shape manufacturing, such as blockchain, quantum computing and the security around them.

We take an open approach to innovation, working in close collaboration with our customers and strategic partners or specialist innovators such as universities, government organisations, standards bodies and technology companies. Our innovation scouting teams are always scanning the horizon for ideas and expertise generated by third-party organisations that we can incorporate into our search for the next technological breakthrough. Our own BT Labs at Adastral Park is a globally recognised centre for telecoms research and a key source of UK Intellectual Property, and our 4,000 scientists, IT experts, engineers and collaboration partners based there continue to push the boundaries of innovation.

Our long-standing commitment to sustainability

We've been on a climate action journey for over 25 years, since setting our first carbon reduction target in 1992. Since 2016/17, we've reduced the carbon emissions intensity of our operations by 57% and have reduced carbon emissions by 19% in our supply chain over the same timeframe. We've pledged to be a net zero and circular business by 2030, and 2040 for our supply chain and customers.

Make digital consumer goods happen

Our experts are ready to help you bring digitalisation to life in your organisation. To find out how to unlock the potential of digital transformation, get in touch with your account manager today or visit our webpage. ⟲

Digital industry in action

Transforming operations with cloud-based connectivity

The challenge
With larger numbers of employees connecting to the cloud and the launch of a new 'on demand' cloud platform for their customers, one of our client's networks was struggling with the surge in demand.

The solution
We built a custom, scalable networking solution fit to handle increased traffic flows, while leveraging intelligent connectivity that prioritises business-critical applications. Plus, to keep everything safe in the cloud, we added several layers of cybersecurity measures including a new firewall and endpoint protection for individual users' devices. As part of our service wrap, our team continues to make sure their global network is up to date and protected from the latest vulnerabilities.

The result
Today, our client's network can flex to tackle whatever's around the corner, while their customers continue to get the best possible experience on their platforms and services. Their network supports their expansion, while reducing cybersecurity risk and limiting IT maintenance costs.

Reimaging the warehouse

The challenge
A large consumer goods company wanted help in monitoring, controlling and optimising its warehouse operation, particularly in terms of improving the efficiency of their forklift truck routes and asset tracking.

The solution
We developed a solution that brought together sensors, two-way cameras, RFID, connectivity, digital twins, security and devices. This gave the company insights on parts and picking performance, location and forklift status availability, forklift route times, and on the number of trips needed per job.

The result
Efficiency, safety and order accuracy and the speed of order fulfilment have all increased, while workloads, returns and idle time have all fallen. Near real-time pallet management and automated mixed pallet building, plus workforce optimisation have streamlined operations.

Rethinking remote working

The challenge
Employees of a global food and beverage company were unable to travel due to the pandemic restrictions, and faced significant difficulties in accessing production sites.

The solution
Using Librestream's Onsight AR platform, powered by our low-latency connection, we delivered a real-time immersive experience that allows users to capture and share live video, audio and data with their people on the ground. Experts can now immerse remotely into work environments via headsets, regardless of distance, for onsite training, maintenance support or carrying out safety inspections.

The result
Our customer is now able to speed up maintenance operations and new line set-up. They've improved employees' information retention and their operational safety. Plus it's easy to undertake regular audits and save on travel costs.