BT

Connecting retail for a digital future

Key insights into achieving an effective digital transformation

Introduction

The past two years has been a perfect storm for retailers. Caught between the pandemic, rapidly evolving consumer demands, the supply chain crisis, and an increasing pressure to become more sustainable, retailers have been pushed to rapidly evolve and adapt in order to remain competitive. For many organisations, this has considerably accelerated their digital transformation agenda far beyond anything they could have predicted.

What's clear today is that despite the unprecedented boom in e-commerce, there will always be a place for brick-and-mortar retail. In the future there might be fewer stores but their importance as places for brands to provide immersive and engaging experiences will grow.

It's an opportunity to reinvent rather than rely on traditional sales by square metre metrics. Retailers should be reimagining their physical stores as a space for exploration, a place where they can redefine their strategy moving forward. By forging the path for the next-generation of retail, brands will increasingly provide high-touch and sensory driven experiences that tap directly into human emotion, connection, discovery and community.

The rise of omnichannel commerce now demands that retailers deliver seamless, integrated, and stress-free experiences which enable their consumers to move freely and frequently between the digital and physical worlds. But for the shopping experience to truly transform, they will need to focus their efforts on complete end-to-end integration from warehouse to inventory through to online and instore.

Most importantly, it can't be ignored that none of this is possible without an infrastructure that's fit for purpose. The benefits of new innovations like Artificial Intelligence (AI), computer vision and mixed reality can only be realised once organisations have secured their foundations with a modernised and standardised infrastructure that's built for future growth.

We've created this whitepaper to support your thinking about digital retail. I hope it helps shape your plans and future. Do get in touch if you'd like to discuss anything further. ⊙

Eyad Shihabi
Global industries and government, MD, BT

This whitepaper will examine:

- what's happening in the retail market

- our point of view on the landscape

- the key roadblocks to digital transformation in retail

- the innovations driving digital retail

- how to deliver sustainability for the retail industry

- how to implement effective digital transformation

- our proposition for digital transformation

- why BT for retail?

- case studies of digital transformation in retail.

What's happening in your market

Digital transformation has been on the agenda for some time, but a unique set of market conditions is forcing retailers to shift gears. Across the industry, the pandemic accelerated five-year adoption strategies down to as little as six months, as three key developments started reshaping retail as we know it.

Transformation driver #1 – the changing role of online and physical stores

During the pandemic, consumer behaviour had to adapt as the sudden closure of brick-and-mortar retail fuelled an unprecedented surge in online ordering.

Now there's no going back to how things were before. The rise of e-commerce means online platforms are the preferred option for browsing and checking product availability. In turn, physical stores are transforming into spaces for engaging with brands in new and exciting ways.

The shopfloor needs to become the centre for consumer experience, as forward-thinking retailers invest in strategies for immersive digital engagement. For example, leveraging Augmented Reality (AR) to create a virtual changing room or including digital touchpoints throughout the store that provide

additional product information and can connect to social media platforms. With so much information now available online, staff must be empowered with the right technology to provide an outstanding service.

Elevating the instore experience through digital transformation will enable brands to build deeper connections with consumers and drive physical footfall.

84%

of consumers believe retailers should be doing more to integrate their online and offline channels. ∞
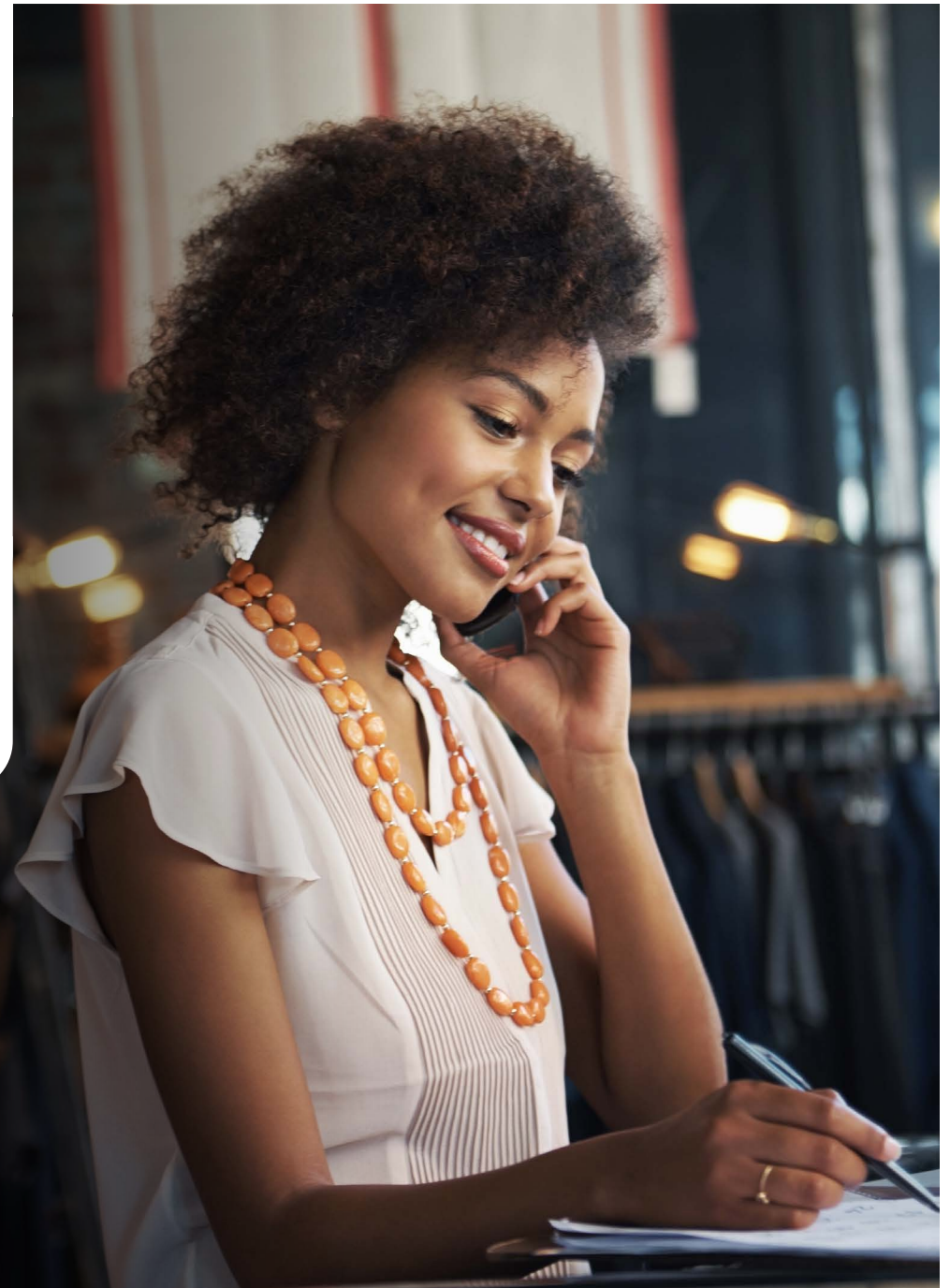
What's happening in your market

Transformation driver #2 – growing consumer expectations

Consumer expectations are currently at an all-time high – driving intense and previously unseen competition between retailers around fulfilment. Today, most shoppers have a range of convenient options at their fingertips including ultrafast delivery, click-and-collect instore and a free returns service.

In this increasingly competitive market, same day delivery is undoubtedly here to stay and will soon overtake next day as the expected standard. As a result, we're seeing a boom in rapid delivery, as new on-demand models commit to increasingly ambitious fulfilment times, with some even offering arrival within ten minutes.

These high-speed expectations around availability have changed how consumer loyalty works. Consumers will move on quickly from retailers who struggle to get their products into the hands of shoppers fast enough. They'll go with the most readily available and consistently reliable option.

Transformation driver #3 – pressure to increase operational efficiency

As demands escalate, retailers are turning their attention to increasing automation of their supply chain and in particular the warehouse to drive operational efficiency. Far too many major organisations still rely on manual processes to manage their stockrooms and use multiple legacy devices to run individual tasks. But the maturity model is now shifting towards greater automation – whether that's full automation or with 'cobots' working alongside the human workforce.

In search of greater efficiency, organisations are connecting Operational Technology (OT) to the network, breaking down silos to consolidate device management and embracing ways to generate actionable insights at every stage of the product journey. As part of this smarter, more connected warehouse, a network of sensors, scanners, and cameras can track assets in real-time. This advanced level of stock transparency and integration opens up possibilities for flexible, reactive decision making on where to ship items from at optimal times. Elsewhere, intelligent automation

tools are also capable of scheduling and allocating tasks to streamline workflows and reduce the cost of human error, whether that's through guided picking or fleet management software.
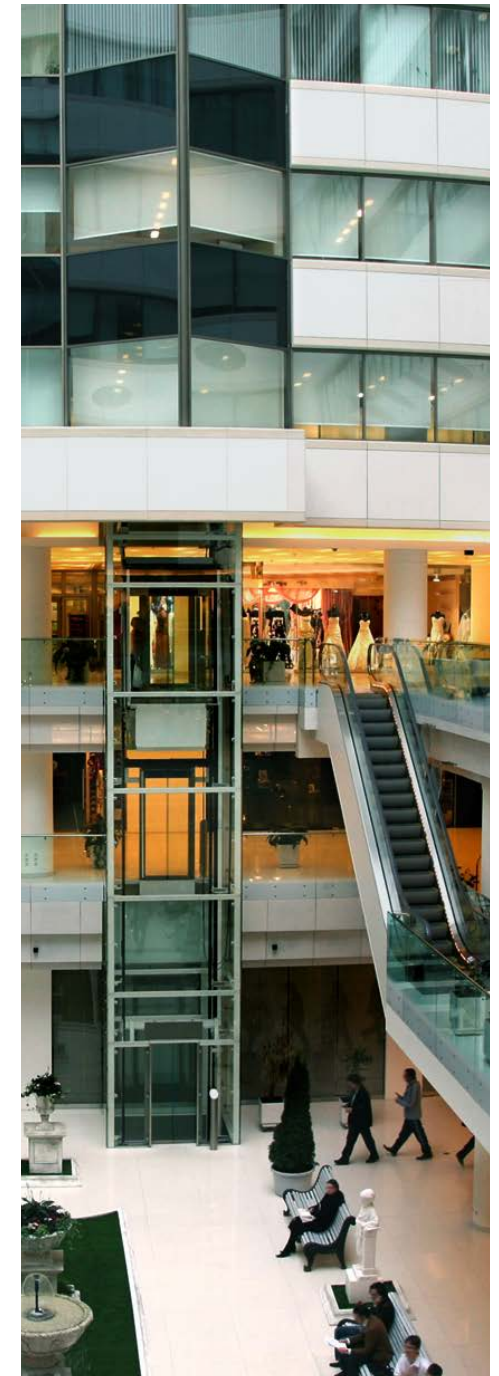
39%

of consumer say they are now more likely to spend money at a business that makes it easy for them to shop or interact with them online.

£

62%

of warehouse managers believe that human error from manual process management is the main cause of inventory fulfilment issues.

Our point of view

Customers are certainly the lifeblood of retail, but is a relentless focus on meeting today's customer demands holding retailers back from planning for tomorrow? It's easy to see how the constant race to satisfy customers in an incredibly competitive market can push more macro planning down the agenda. It often leads to an increase in separate initiatives to address what are seen as individual challenges.

In contrast, leading retailers are finding that adopting a unified digital transformation strategy is helping them meet today's demands – and is setting them up with the agile foundations they need to successfully deal with whatever the future holds. It's breaking the cycle of always chasing to keep up and letting them take the initiative. It's a power shift that's creating competitive advantage.

Digital transformation can deliver the seamless, integrated experience that's so vital in an omnichannel world. It can harmonise the technology across your business to give a comprehensive view of your inventory, assets and operations at all times. And it reaches from the warehouse, through the supply chain and on through to online and instore – bringing innovative solutions that improve operations, drive profit and satisfy customers.

In the warehouse, digital retail delivers workforce optimisation at the same time as building in loss mitigation measures and improving safety. In the case of inventory management, it means optimised shelf availability, seamless omnichannel fulfilment, straightforward stocktakes and absolute visibility of critical assets throughout the supply chain. And when it comes to the public face of the business, digital retail reshapes the store into an engaging, entertaining and personalised experience. Data works hard to deliver the insights that make this possible, allowing sales associates to tap into all the information they need to provide customer-delighting service.

Successful digital transformation depends on an openness to change and innovation. A lot of our customer conversations right now revolve around how retail can prepare for the emerging virtual world.

It's clear that today's connected customers are ready for new, innovative Virtual Reality (VR) and AR experiences, powered by 5G – the next generation of wireless connectivity. In fact, 5G will underpin a great deal of the transformational innovations across the end-to-end retail operation and is something any organisation looking to accelerate digitalisation should be starting to think about.

We're also seeing a growing sustainability imperative in retail that needs to be factored into digital transformation strategies. Consumer consciousness of how retailers use resources and generate carbon emissions is at an all-time high – and there's the very real risk that customers will switch away from your brand if you're not sufficiently green in your approach. Digitalisation opens the door to effective ways of operating more sustainably, without adversely affecting your profitability.
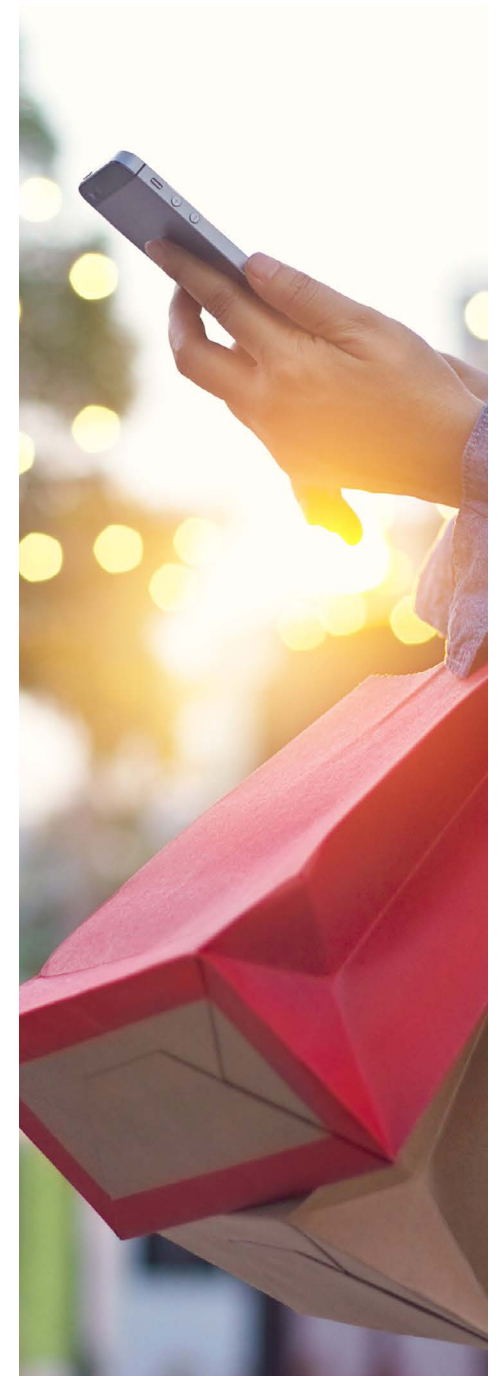
The key roadblocks to digital transformation in retail

In our experience of working with retailers to achieve digital transformation, we've found that 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. A shortage of experience, knowledge and skills paralyses decision making

Most organisations don't have a digital transformation department ready to go and, without the right internal skills or experience, they struggle to know where to start. For some, there's a strong reluctance to change what seems to be working well enough – what if it has a negative effect on operations? Others find the uncertainty of treading a new path makes agreeing a transformation strategy difficult – what would the implications be on security, cost, data and flexibility? Plus, there's a huge choice of vendors, solutions and options in the market which can add to the confusion, causing organisations to hold back. In some cases, just trying to navigate through this initial stage of complexity can stop the entire project from getting off the ground.

2. Tackling the cybersecurity risks that come with digitalisation

Many essential aspects of digital transformation, like the convergence of IT and OT, significantly expand an organisation's attack surface and open them up to a range of new and unknown vulnerabilities. And it's no secret that cybercriminals often see retailers as attractive targets with the potential to offer significant financial rewards. Retailers are also aware that it's not uncommon for attackers to exploit obscure points of entry and remain undetected; one major retailer even had millions of customer credit card details extracted through their air-conditioning system. 🔗

This awareness of the cyber vulnerability that can come with digitalisation can be a brake on transformation.

3. The expected disruption of replacing legacy infrastructure

Many retailers are still reliant on legacy infrastructure like dial-up and MPLS to carry out their core operations. Upgrading 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 accelerates.

4. Difficulties in unlocking valuable insights from data

Accurate, free-flowing data is essential for digital transformation, but many organisations are starting from a point where their data is stuck in silos, and some are even still paper-based. It feels like a gargantuan task to digitise complicated paper trails and bring the data together across many different systems to accurately report successes and identify organisational inefficiencies.

# The key roadblocks to digital transformation in retail

5. Maintaining compliance with regulations

New global data security standards and compliance policies increase the constraints imposed upon retailers and force them, understandably, to proceed with caution. Widespread public awareness of data rights and regulations means your ability to comply is now critical to upholding a trustworthy industry-wide reputation – especially because the growth of online sales and personalised platforms means organisations are processing more sensitive customer data than ever before.

6. Scaling up from a successful pilot

Beyond the pilot stage, scaling up your transformation to encourage organisation-wide adoption of new working habits can be difficult. Introducing new solutions can often be met with some initial distrust or opposition from sales associates or warehouse staff, who feel they're efficient and highly competent with the systems already in place. To support the roll-out of new technologies, these employees will need to understand how new solutions, like intelligent automation, reduce the burden of menial tasks and actually increase their value within the organisation as they can focus on providing outstanding customer experiences.
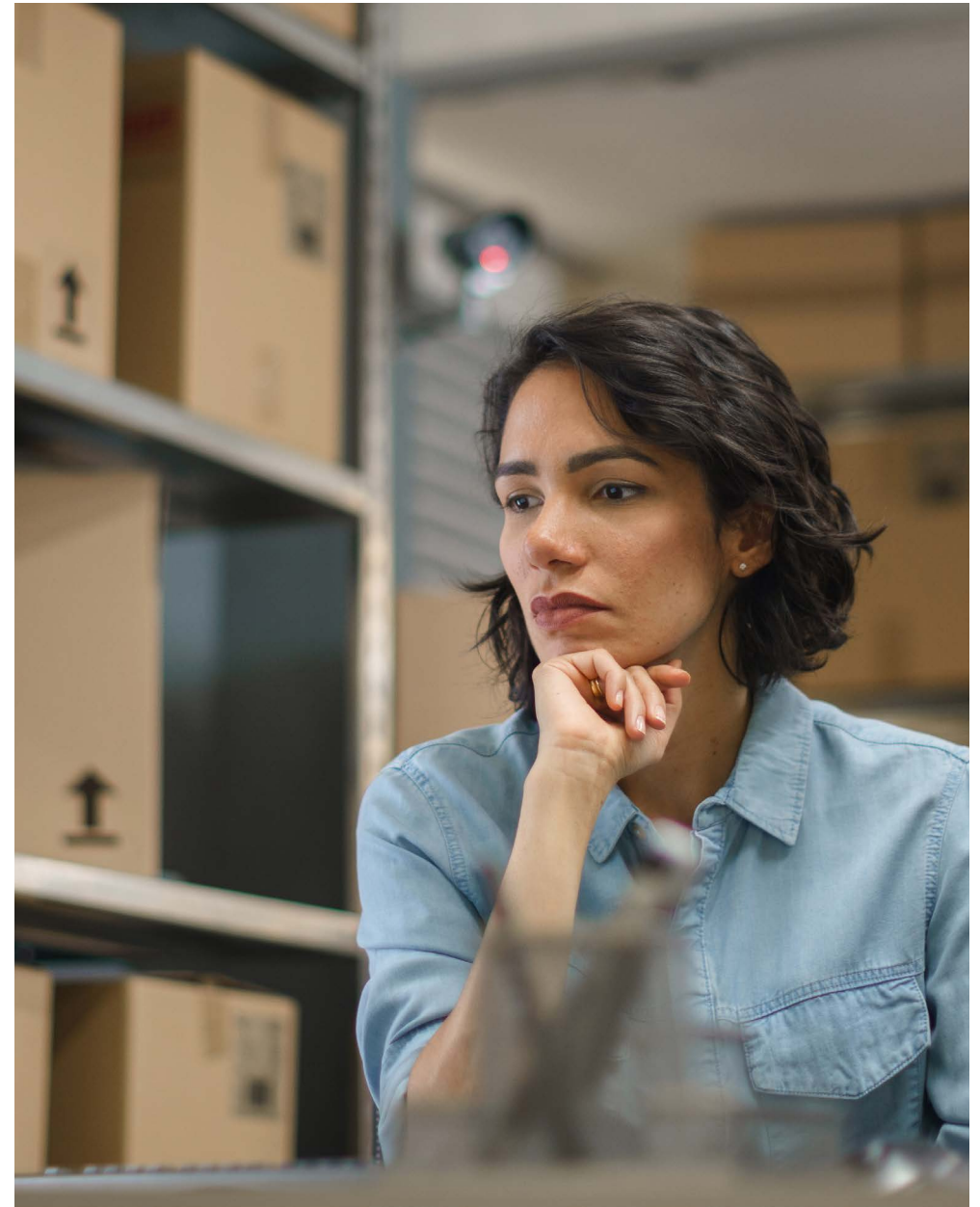
The innovations driving retail transformation

Across the retail sector, a series of game-changing technologies are pushing the boundaries of what's possible. The following three key innovations are set to transform both online and instore services, preparing them for a more profitable future:

1. 5G

5G is a foundation technology that'll enable and facilitate a lot of transformative innovations in the warehouse, on the shopfloor and out into the wider supply chain.

With its capacity for ultra-low latency and high throughput, 5G will enable physical stores to provide a full omnichannel experience. It will offer the processing power to deliver immersive technologies like VR, AR and digital signage for a range of instore applications such as intelligent mirrors that suggest matching clothing or enable virtual changing rooms on the shopfloor.

And, with more stores on the high street expected to offer free instore wi-fi, 5G's high-speed connectivity will support new forms of personalised and interactive marketing. With customer consent, retailers can deliver fast-acting and responsive messaging to customers' personal devices as they browse

the shopfloor. Then, after visiting, it will be possible to link behaviour in the physical store with the customer's online presence to send out individualised promotions and product suggestions.

5G is also a critical enabler for the smart warehouse. As the next generation of wireless connectivity, it's built to handle far greater volumes of data and devices. This means it can reliably support the continuous flow of information generated by rooms full of automated guided vehicles (AGVs), autonomous robots and Internet of Things (IoT) devices, and even relay information to front-of-house applications in real-time.

21%
of retail IT and business managers worldwide said their organisation was currently using 5G services, and

63%
expected their company to adopt 5G services in the future. ◯

The innovations driving retail transformation

2. The Metaverse

Often described as the next evolution of the internet, the Metaverse is a completely virtual, parallel universe. Inside this realm, users connect with VR technology to become digital avatars who explore, work or play across a wide range of different, augmented realities.

Already, many smart brands are investing in this space by buying up virtual real estate, building CGI environments, developing products or negotiating product placements. For example, some major fashion brands are now selling virtual trainers for users' avatars. Although it's still in its early stages, as its popularity grows, the Metaverse will further blur the lines between the virtual world and reality. It has strong potential to become another key touchpoint in the omnichannel experience, and retailers will want to offer virtual equivalents of their products and services or even create their own unique, branded experiences.
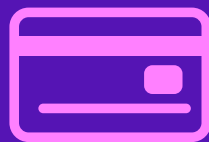
Interactions with products featuring 3D/AR content had a

94%

higher conversion rate than those without it. ⊘

74%

of contactless payment users state they would continue to use contactless payment methods after the pandemic ends. ⊘

3. Frictionless checkouts and self-service

Shoppers are so used to instant gratification online that they're becoming impatient with queues and easily frustrated with contact at checkouts. But increasingly, retailers are putting the control into the hands of consumers by deploying a range of new self-service technologies that take the friction out of the instore experience. Handheld personal shoppers and self-service kiosks empower customers to carry out their tasks at their own pace, while freeing up staff to focus on more value-driven tasks. We're even seeing smart carts with built-in cameras and sensors automatically scanning items as they're put in and then charging the total directly to digital wallets or mobile phones.
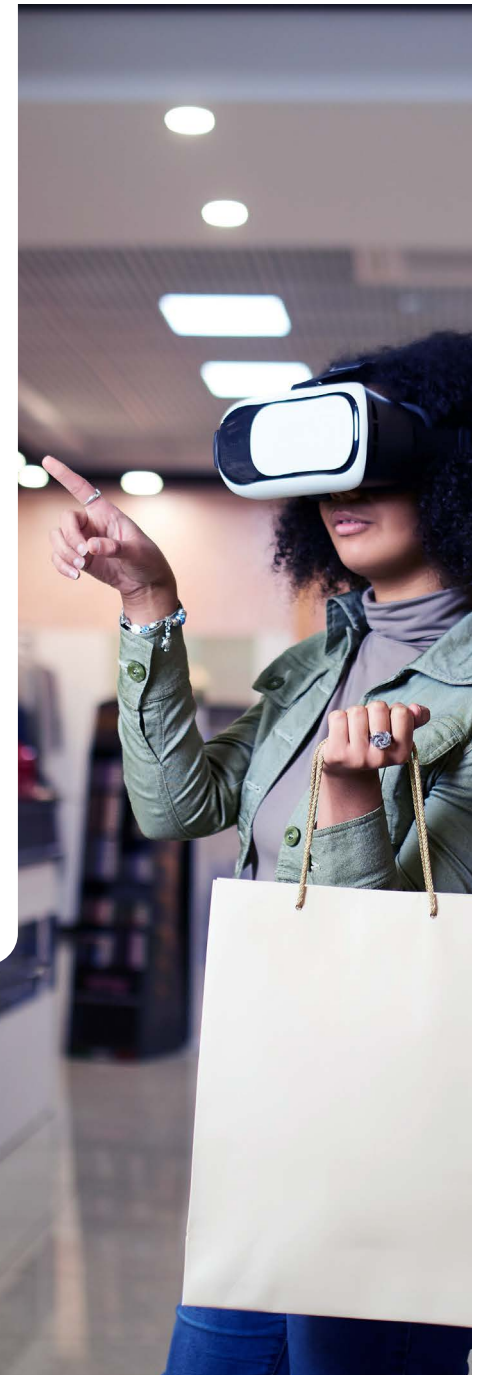
Delivering sustainability in the retail sector

Year on year, sustainability moves further up the list of consumer priorities and, as a result, the retail agenda. The pressure is now on for retailers 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 – retailers need to prove their sustainability credentials to satisfy the expectations of consumers.

Demonstrate transparent supply chains
From production to end-consumption, the rise of the conscious consumer is pushing retailers to embrace transparency across their supply chains, which can be challenging if you're dealing with complex global supply chains. But customers 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 retailers 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 organisations can carry out spot checks on suppliers, regardless of geographical barriers.

Reduce your carbon footprint and go circular
Single-use plastic packaging is one of the most notorious items for its long-term damage to the environment. Therefore, many retailers are limiting their use of plastic, using recyclable packaging, or even offering refills instore - sometimes with a financial incentive. In a bid to create a truly circular economy, across Europe more than 80 manufacturers and retailers have adopted a new digital watermark, the Digimarc. At smart waste facilities this will improve the accuracy of sorting plastic into its different types and create higher quality recyclates. Plus, compared to traditional UPC and EAN barcodes, the Digimarc saves up to 69% on ink. With the planet in mind, major brands are adopting circular fashion models to increasingly encourage resale, reuse and recycling of clothing items.

Make smarter decisions for energy consumption
In the smart warehouse, the digitalisation of decision-making has the ability to increase efficiency, optimise processes, and reduce costs and waste - all while reducing environmental impact. Powered by algorithms and machine learning, technology-based energy management can be integrated into warehouse control systems to monitor and optimise timings, temperature, and lighting and even recommend where improvements can be made. Already in the food sector, 81% of retailers are using these smart control systems to save energy during their production. But this technology is effective across a variety of different environments including stores and warehouses.

Elsewhere, more stores and warehouses are now adopting renewable energy sources onsite, by putting panels or turbines on their roofs or offering charging stations in their car parks. In fact, 56% of stores are already providing electrical vehicle charging for their customers, and 10% plan to in the near future.

How digital transformation can support sustainability:

- Right down to regional level, intelligent demand forecasting can improve supply chain planning, plus reduce consumption of raw materials and waste.

- To reduce empty miles and unnecessary journeys, AI-based fleet management software can optimise delivery routes while making products' ETAs as accurate as possible.

- Fashion items can now have a digital passport embedded in them that tracks their lifecycle to prevent them being unnecessarily incinerated or taken to landfill.

How to implement effective digital transformation

In retail, digital transformation will look slightly different for every organisation. But there are common foundations that every retailer will need to support their evolution.

Get the infrastructure and security building blocks in place for transformation

Laying the foundations for long-term digital expansion requires an infrastructure that's reliable, scalable and fit for growth. You might not be able to anticipate what the next generation of retail will look like, but there's certain things you can predict. In today's market, fast-changing consumer behaviours and quickly evolving trends are almost guaranteed. For this reason, scalable cloud services and a range of flexible network options, like the ability to rapidly extend bandwidth, will be essential to adapting and thriving in emerging markets.

On top of this, you'll need to embed security deeply from the start to protect your brand, reputation and bottom line. If you leave it as an afterthought, you'll expose yourself to a range of unknown entry points. Too many major retailers have fallen victim to high-profile attacks, and it's likely consumers will be less forgiving in the future if their data is compromised. Use threat intelligence to keep up to date with the latest vulnerabilities to prevent intrusion, and incorporate behaviour monitoring to identify suspicious activity inside your architecture. And segment your network so that you can isolate any intruder from accessing more sensitive information, like card details and personal data.

Make sure you have reliable connectivity

The future of retail is always connected and always on – whether that's in the warehouse, instore or online. Many of the emerging technologies on the path to digital transformation, like IoT, AR and VR, will require 5G, the next generation of wireless connectivity.

These days almost any outage is costly, if not reputation damaging. Moving towards a software-defined networking solution will help you to prioritise business-critical traffic and ensure consistent performance for the services that matter most, especially at times of high demand.

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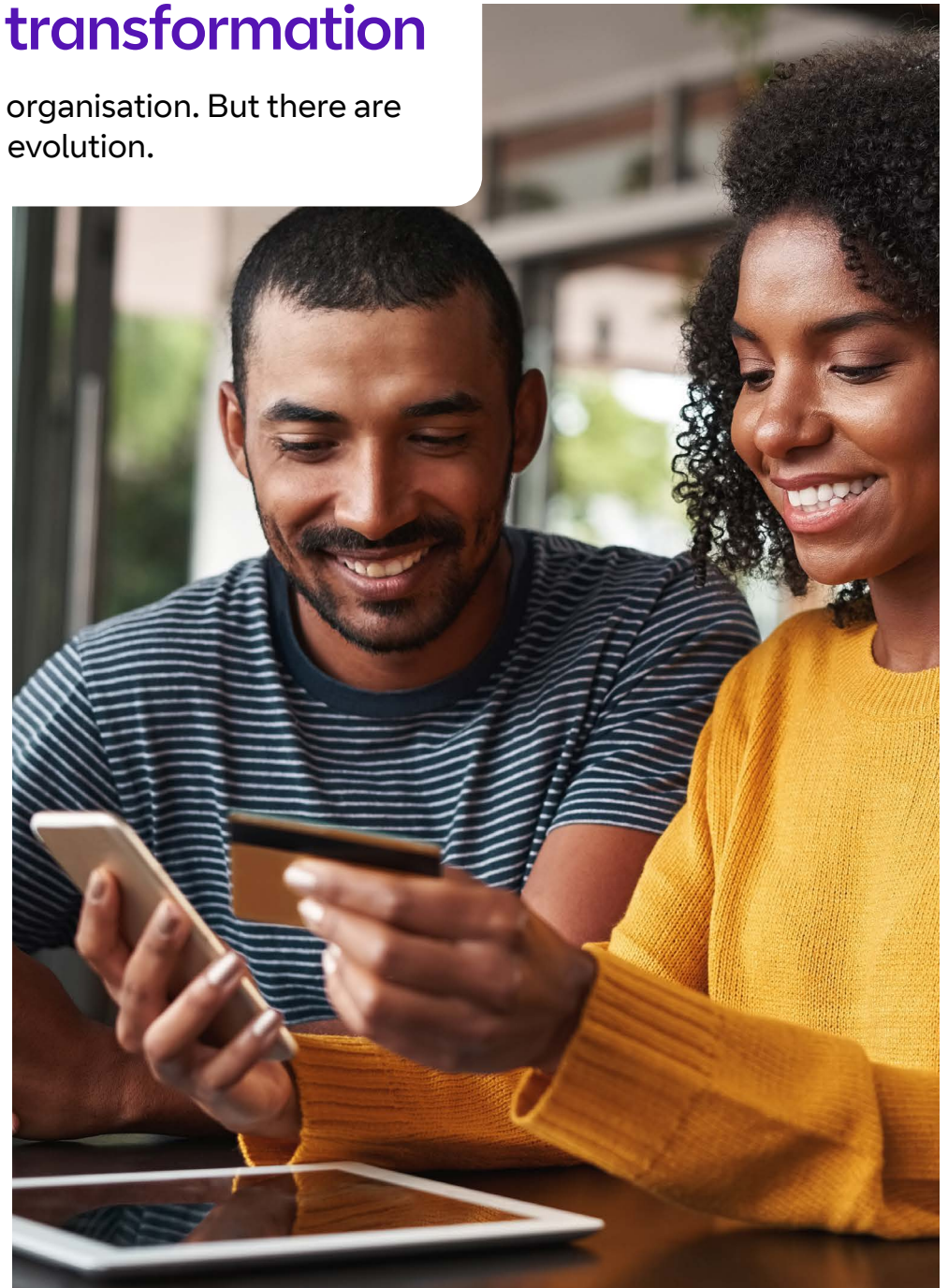
How to implement effective digital transformation

1. Build a smarter warehouse

The warehouse plays a key part in maximising organisational efficiency and, in turn, revenue. Review your operation and, if necessary, each premises carefully. Consider where there's potential to increase automation, integrate smart solutions, retrofit legacy technologies and upgrade manual processes. Greater automation and integration will not only boost your productivity, streamline processes, cut costs, and decrease errors, but will also replace repeatable, mundane tasks with technology so that you can reallocate your employees to more complex tasks.

Converging the IT and OT worlds will break down traditional silos to unlock actionable insights in areas you've never been able to accurately monitor before. From here, use your converged IT / OT as a launchpad for introducing more IoT into other areas, deploying a wider web of technology to monitor, track and report on the efficiency of your processes. There's even a range of software and solutions which can further optimise workflow, fleet management or workforce scheduling and, ultimately, lay the foundation for better engagement and service levels in the longer term.

2. Move to a digitalised inventory

With the shift to omnichannel order fulfilment and distribution, keeping track of your stock is important to everyone involved. But implementing a completely digitalised inventory relies on your ability to transform the technology across your business so that it can work together effectively to provide complete visibility of your assets, inventory and operations. Automated inventory management systems need to be connected with a string of sensors, tags and readers at every level of your operation, powered by an ultra-fast and ultra-low latency private 5G network. Thorough integration will deliver up-to-the-minute accuracy, reduce shrinkage and waste, and ensure every product is in the right place, at the right time.

How to implement effective digital transformation

3. Redefine your instore experience

Rather than just offering products on shelves, the physical store is now your key touchpoint for creating memorable, outstanding experiences. Without question, levelling up your digital engagement strategy inside your store must be a priority. For entertaining and interactive shopping, virtual mirrors and displays are among the transformative technologies to explore.

A core part of the omnichannel experience is giving customers the ability to move seamlessly between platforms. Bring the online world into your stores by experimenting with digital touchpoints that connect to online platforms or social media. Focus on taking the friction out of the journey, by introducing faster more integrated payment solutions, self-service kiosks and personal shoppers. Ultimately, retailers with the most seamless and immersive experiences will keep customers coming back.

4. Digitally empower your sales assistants

Today, online retail satisfies the most straightforward consumer needs. But the customers who visit stores and ask for human-to-human support expect a higher level of sensitivity and attention to detail than ever before. To create meaningful interactions that boost conversions, your sales associates need to listen to their needs, recognise personal preferences, and provide answers to increasingly difficult questions. Supplying handheld devices and headsets to your staff on the floor will enable effective collaboration, provide access to the most up-to-date information, and can even connect them to experts in remote locations. Installing productivity applications onto these devices can use real-time contextual information to allocate tasks. These tools will ensure you can offer the knowledgeable, proactive service instore that consumers now expect.

Our digital retail proposition

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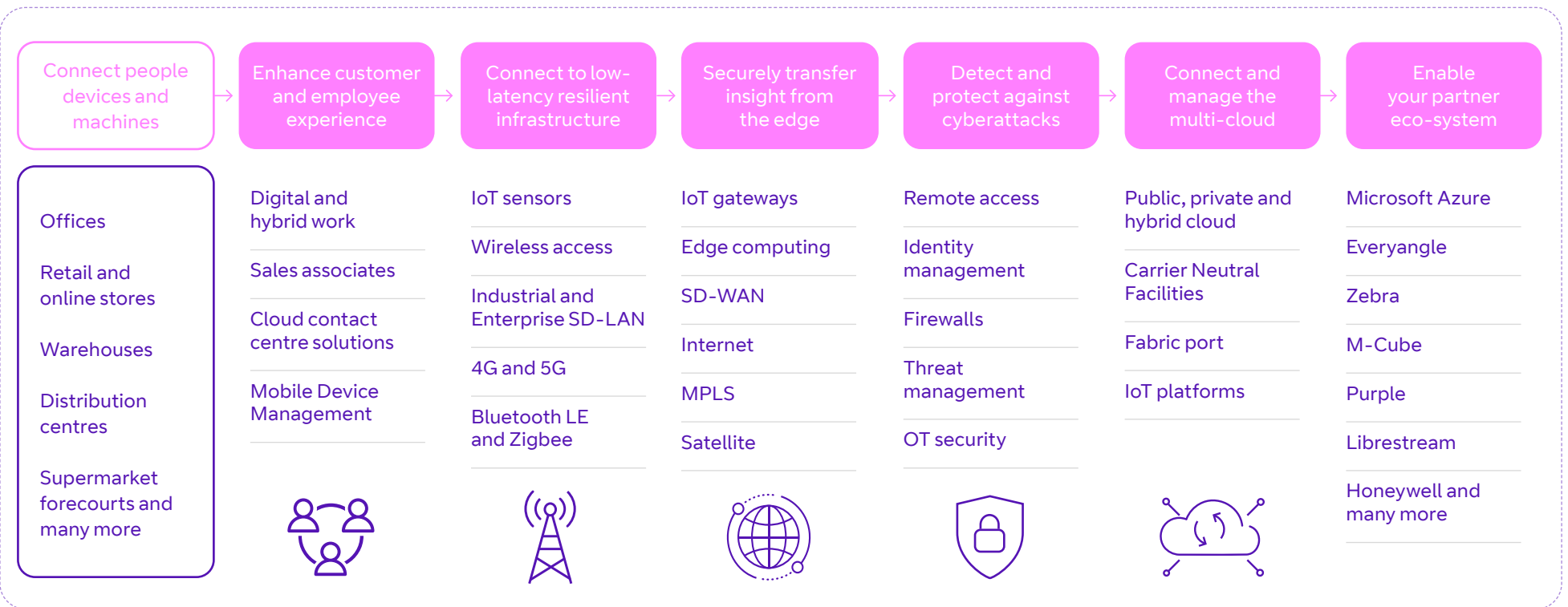
Our ambition: to become the world's most trusted connector of people, devices and machines.

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 retail 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
Retail and online stores	Sales associates	Wireless access	Edge computing	Identity management	Carrier Neutral Facilities	Everyangle
Warehouses	Cloud contact centre solutions	Industrial and Enterprise SD-LAN	SD-WAN	Firewalls	Fabric port	Zebra
Distribution centres	Mobile Device Management	4G and 5G	Internet	Threat management	IoT platforms	M-Cube
Supermarket forecourts and many more		Bluetooth LE and Zigbee	MPLS	OT security		Purple
			Satellite			Librestream
						Honeywell and many more

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

Why BT for retail?

We work from a retail-centric standpoint

We work with nine out of ten of the top retailers globally. So our retail portfolio is the result of 20 years of experience developing and delivering solutions to meet the specific needs of organisations like yours. It's a standard part of our approach to constantly look for innovative industry specific solutions to help major retailers with their digital transformation journey. We're committed to always delivering a portfolio of solutions that reflect the evolving needs of retail.

We're a one-stop-shop for retail transformation

We've focused on building an ecosystem of partners who are developing the emerging technologies that will secure a profitable future for retail. This allows our customers to tap into the latest developments via us. In today's complex marketplace we provide a one-stop-shop approach, combining our core infrastructure, connectivity and security services with innovative technologies.

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 longstanding 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 retail happen

Our experts are ready to help you bring digital retail to life in your organisation. To find out how to unlock the potential of digital transformation, please contact one of our specialists or visit our website. ∞

Digital industry in action

Carrying out audits in remote locations

The challenge
Unable to travel due to the restrictions imposed during the pandemic, one of our large retail customers suddenly found themselves facing difficulties with accessing sites across their global food production supply chain.

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

The result
Our customer is now able to undertake regular spot checks, ensure food safety, guide maintenance and maintain high standards for their customers across their global supply chain.

Supporting the community with interactive, virtual displays

The challenge
Recognising their role in the community, one of our major retailers wanted to digitalise their community boards in order the provide customers with useful information and reduce the quantity of paper and leaflets being used.

The solution
Alongside M-Cube, we successfully installed virtual, interactive community board displays into their stores. These now serve the community by providing local information, as well as important customer announcements or notices that can be updated in near real-time. Similarly, the boards also provide recipe suggestions, as well as a range of production information and interactive features.

The result
By shifting from passive to active signage, the retailer can now update their community boards in real-time to provide contextual information or even assist sales with relevant suggestions and promotional information about ongoing offers.

Eyes in all the right places with computer vision

The challenge
A leading supermarket wanted to obtain accurate footfall data and measure their conversion rates and dwell time across different parts of their store.

The solution
Along with Everyangle, we implemented a new computer vision system which uses AI to interpret videos and images. The technology is highly accurate at gauging instore footfall by age and gender and recognising which parts of the store customers visit and how long for. Combined with point-of-sale data, it helps calculate average basket size and overall conversion rates, as well as understand customers' buying habits. Plus, in the self-scanning area it can detect scan avoidance in order to reduce shrinkage.

The result
The computer vision system improved their security, reduced financial losses from theft and fraud and boosted overall performance. Connected with an advanced analytics platform, they could even measure the success of marketing campaigns and instore promotions and push direct messaging to customers instore to inspire them to buy.