How to Build the Store of Tomorrow

A practical guide

Extreme networks

NEWS WAYS, BETTER OUTCOMES

Retail is change. Given the macroeconomic, societal, and technological shifts of the last decade (or even the past few years) hardly any other sector has undergone such significant transformation in such a short period of time yet continues to evolve. In retail, consumer expectations are pushing store operations to the next level, pressuring businesses to inject more and more tech to win market share. Considering the exploding growth of AI, automation, robotics, and IoT, it's safe to assume that the **store of tomorrow** will look and feel a whole lot different than it does today.

When discussing technology, it's easy to get wrapped up in the specifics of how certain solutions work while losing sight of what really matters — and the **new ways and better outcomes** they enable. To address the growing complexity of the IT environment, workforce shortages, and evolving cybersecurity threats, enterprise networks need to be simpler and more intuitive to use, manage, and maintain.

In this eBook we'll explore the challenges that retailers are facing and the business outcomes that are achievable by treating the **enterprise network** as a strategic asset. Read on to discover your building blocks for the **store of tomorrow**, creating new and effective ways to:

- **drive revenue and build brand affinity** by delivering exceptional in-store digital experiences,

- **gain operational efficiencies** by optimizing associate and IT staff workloads,

- **strengthen data protection** with security fully integrated into the network.

1. THE MEGATRENDS IN RETAIL BUSINESS

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The increasing pace of technological advancement has forced the innovation ecosystem to move even faster, and this has caused more complexity. To succeed fully in this dynamic landscape, retail companies will need to weave the new focus areas into their strategies.

The top driving factors are threefold:

• Consumer demand for perpetual connectivity to match the rise of smart devices

• The need for more granular comprehension and optimization of business operations to reduce costs, employee turnover, financial loss, and redundancies

• An evolving cyber threat landscape to go along with technological advancements like AI

Let's explore these challenges more deeply, and find out how the network can help.

1. THE MEGATRENDS IN RETAIL BUSINESS

1.1. EXPLODING DEMAND FOR DIGITAL EXPERIENCES

In today's world, the primary reason why customers choose certain brands over others no longer hinges upon the quality of the product or service alone, but much rather on the entire **customer experience** (CX) that accompanies them through their purchasing journey. As much as 86% of consumers admit that they're willing to pay more to receive a harmonized, holistic, and individualized experience[1].

Retailers worldwide are not sitting idle; according to the 2023 Superoffice study, CX will be the top priority for nearly 46% of businesses in the next 5 years, having beaten product (33.6%) and pricing (20.5%) for the third consecutive year[2]. The game is worth the trouble. Temkin Group estimates that companies that earn $1 billion annually can expect to earn, on average, an additional $700 million within 3 years of investing in CX[3].
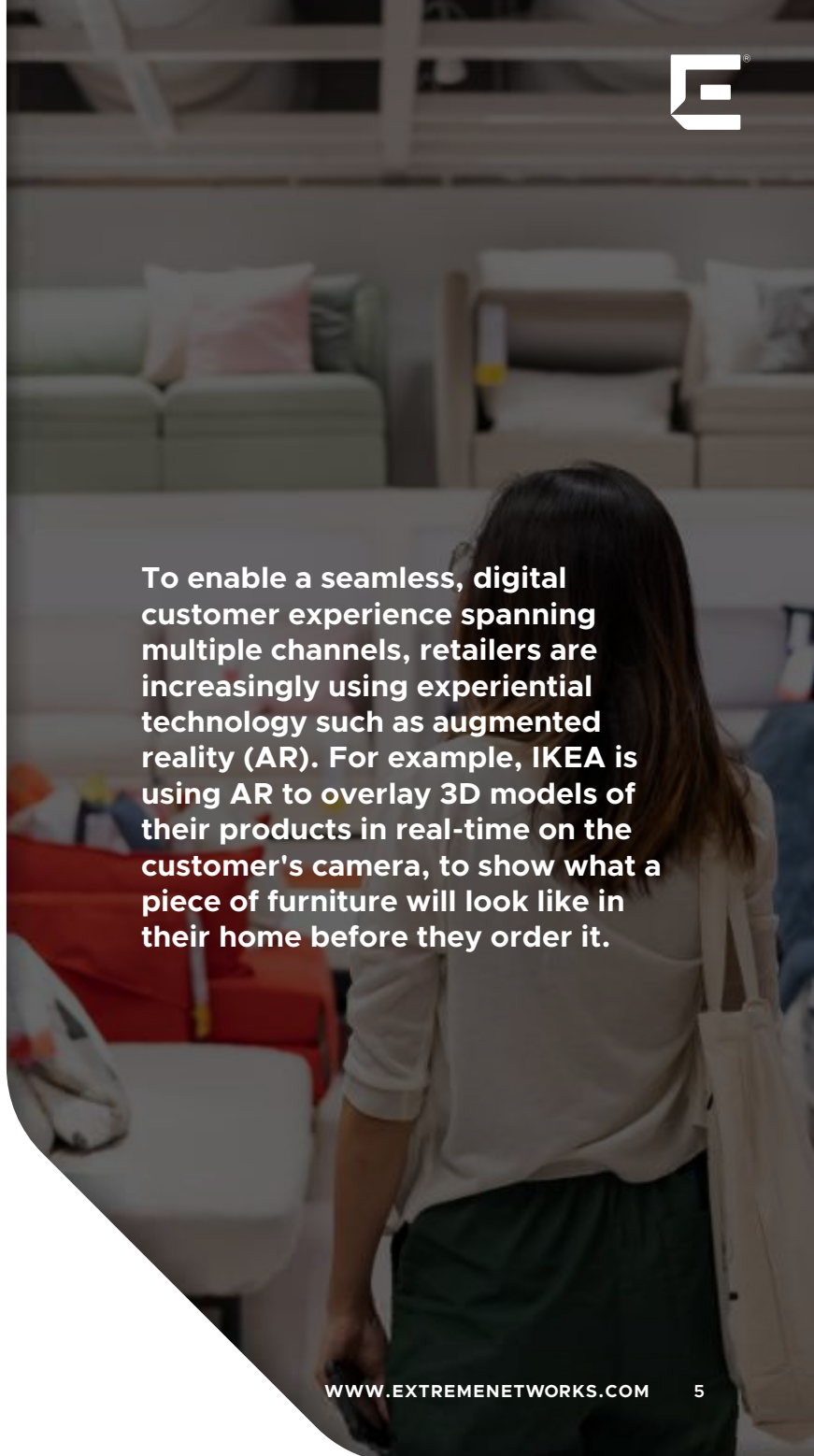
The only channel is omnichannel

Since purchase journeys involve a growing number of channels both online and offline, they're becoming increasingly complex to strategize, execute, and monitor. Enabling enjoyable and memorable shopping experiences is one thing, but delivering them in a consistent way across all channels, all the time, is quite another. And there's a lot at stake. Studies show that companies that utilize three or more channels retain 90% more shoppers and earn 250% more conversions over a single channel[4]. It turns out that nearly 75% of consumers prefer to shop via multiple channels[5], and more than 80% research products online before making a purchase in store[6].

There is a clear link between changing customer expectations and the rapid surge of new technologies, including artificial intelligence (AI), automation, robotics, and the Internet of Things (IoT). Three-quarters of consumers are expecting companies to use those new capabilities to deliver cutting-edge digital experiences across all channels[7].
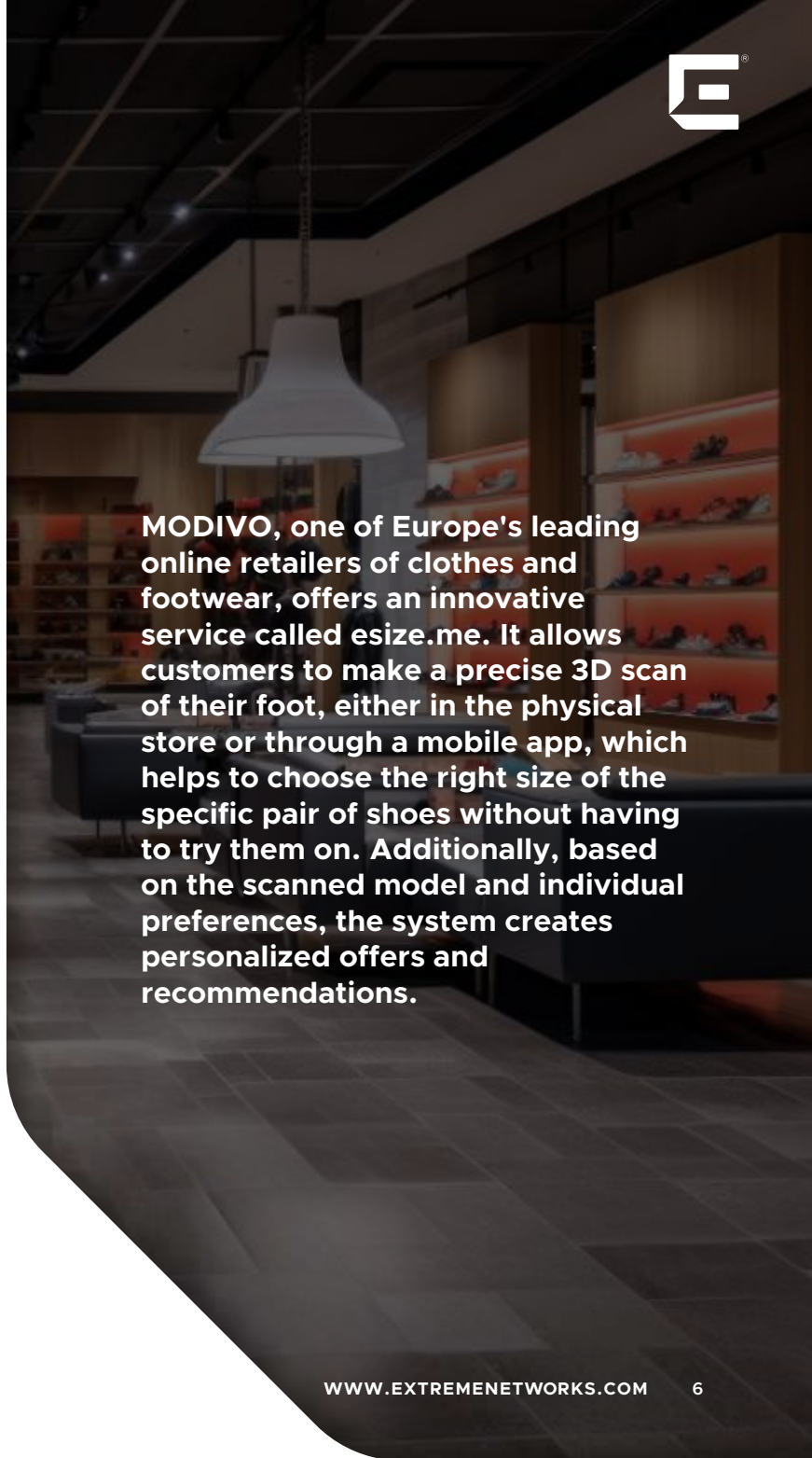
To enable a seamless, digital customer experience spanning multiple channels, retailers are increasingly using experiential technology such as augmented reality (AR). For example, IKEA is using AR to overlay 3D models of their products in real-time on the customer's camera, to show what a piece of furniture will look like in their home before they order it.

1. THE MEGATRENDS IN RETAIL BUSINESS
1.1. EXPLODING DEMAND FOR DIGITAL EXPERIENCES

Digital experience? Now it's personal.

While COVID-19 has led to an unprecedented surge in e-commerce, shoppers are returning to brick-and-mortar stores en force, as evidenced by in-store retail sales growing almost 14% compared to the pre-pandemic levels[8]. However, buyers are now expecting the convenience and product availability of online shopping to be translated into instant, intuitive, and interactive in-store shopping experiences such as contactless payment, automated checkout, and immediate order fulfillment.

But, above anything else, customers today desire personalization. Rather than off-the-shelf merchandise, they're way more interested in products and services that are tailored to their individual needs. According to a Salesforce study, 79% of shoppers are willing to share relevant information about themselves in exchange for contextualized interactions in the form of product suggestions, sizing, unique benefits, smart cross-sells etc[9].

MODIVO, one of Europe's leading online retailers of clothes and footwear, offers an innovative service called esize.me. It allows customers to make a precise 3D scan of their foot, either in the physical store or through a mobile app, which helps to choose the right size of the specific pair of shoes without having to try them on. Additionally, based on the scanned model and individual preferences, the system creates personalized offers and recommendations.

1. THE MEGATRENDS IN RETAIL BUSINESS
1.1. EXPLODING DEMAND FOR DIGITAL EXPERIENCES

Mobility First

To personalize interactions, brands have to know their customers better than ever. Collecting relevant data and bringing out valuable insights with speed and precision can help marketers understand and measure shoppers' behavior at every touch point, across multiple channels – including the physical store. To ensure a fast, simple, and seamless digital experience, retailers have no choice but to take advantage of the omnipresent smartphone use. Suffice to say, the share of website traffic coming from mobile devices worldwide grew from 31.16% in Q1 2015 to 58.33% in Q1 2023[10].

In fact, smartphones have become an essential part of the in-store experience, serving multiple functions. According to Google, 82% of smartphone users consult their devices on purchases they're about to make in a store[11]. Interestingly, almost 25% of shoppers admit they have changed their mind after comparing pricing and inventory in competing stores or looking up details and reviews online while waiting in a checkout queue[12]. Smartphone also plays a pivotal role in the contactless "buy-and-go" experience, which more and more consumers are demanding.
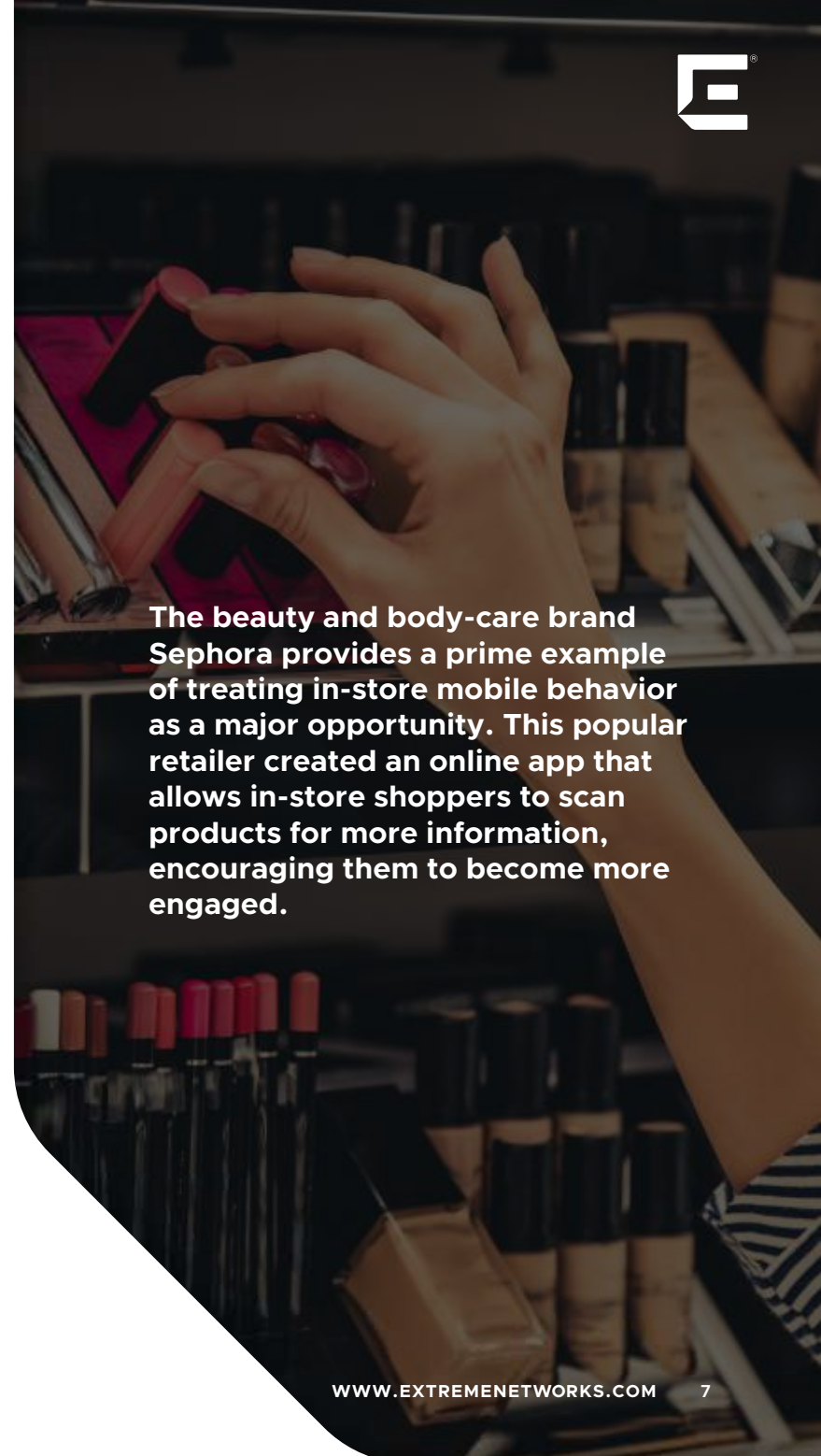
The beauty and body-care brand Sephora provides a prime example of treating in-store mobile behavior as a major opportunity. This popular retailer created an online app that allows in-store shoppers to scan products for more information, encouraging them to become more engaged.

Mobility First

The rise of mobile connectivity supports increased Wi-Fi usage, which enables targeted, personalized messaging tailored to the shopper's interests and location. By delivering exceptional digital customer experiences in-store through a fast and reliable wireless network, retailers can increase dwell times, customer loyalty, and higher revenues. The benefits of high mobility extend to the store staff as well. A quick and real-time visibility to pricing, product details, availability, current lead times and other key information goes a long way in helping employees to be more productive and making them a critical part of the customer buying journey.

However it's important to note that the value of Wi-Fi isn't realized fully, either for customers or employees, unless the connectivity is seamless. To spare the frustration of slow-loading times or failing captive portals, store Wi-Fi needs to enable enough bandwidth and coverage for a high-density environment.

1. THE MEGATRENDS IN RETAIL BUSINESS
**1.1. EXPLODING DEMAND FOR DIGITAL EXPERIENCES**

1.2. NEED FOR BETTER BUSINESS AND OPERATIONAL EFFICIENCY

Profit can be described as the amount of income that remains after accounting for all expenses like overhead, operating costs, taxes, etc. By minimizing the latter, retailers can maximize the former. In other words, what every commerce business is after is **greater efficiency** from warehouse to customer, and with the current macroeconomic shifts like inflation, supply chain issues, and labor shortages breathing down on the industry's neck, that need has never been more urgent.

As one of the top strategic priorities for retailers these days is simplifying their supply chains, companies are increasingly turning to technologies that help them reduce costs, optimize and automate processes, and drive profitability. These investments include IT solutions for increased automation for routine tasks, real-time inventory visibility, and more granular in-store insights, all based on the new and emerging capabilities of artificial intelligence and machine learning.
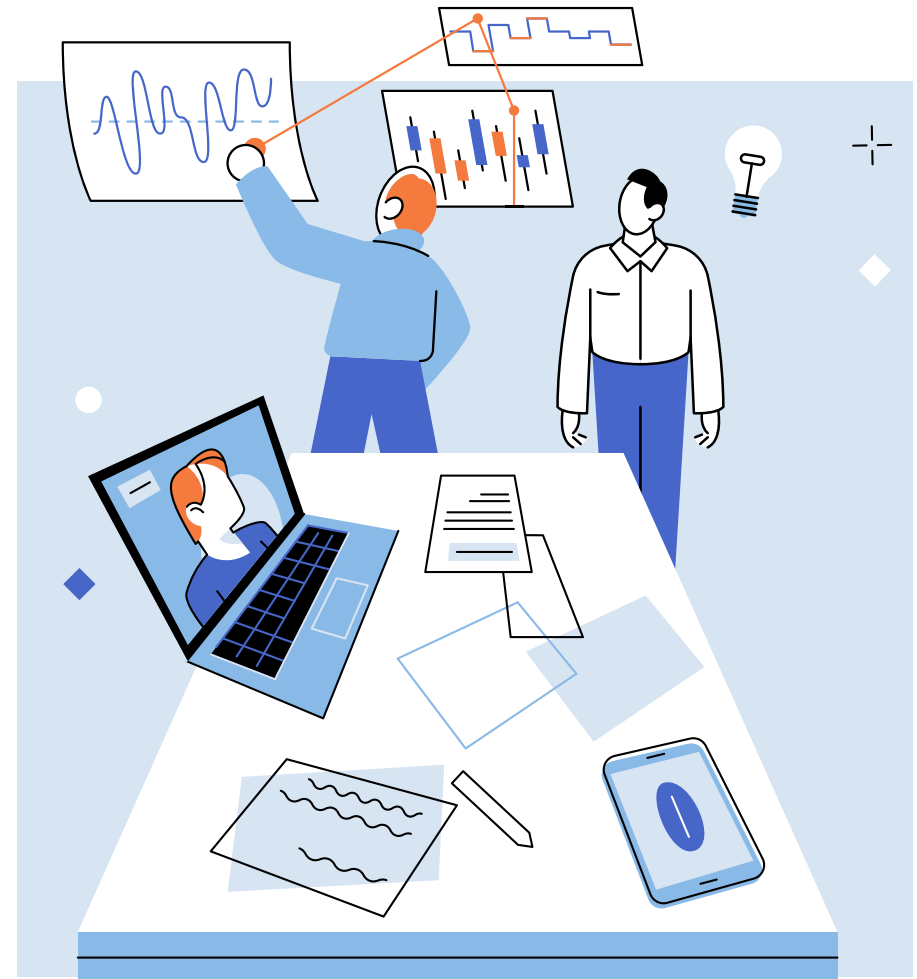
Empowering employees with in-store insights and automation

High employee turnover. The constant need for training new hires. Skeleton crews running the stores, warehouses, and back office operations. While the Great Resignation and Quiet Quitting is not a new thing, retail industry might be the one that has been affected by them the most. According to a study conducted by Forrester Consulting, as much as 63% of retail companies in early 2023 were operating with a frontline employee deficit[13]. This has been reflected in the budgets for employee hiring/retention, which increased for 49% of retailers, while employee training/engagement budgets rose for 61%[14].

It is quite a vicious cycle: the enduring labor shortages create poor experiences for the staff (not to mention the customers), and the following drop in productivity and morale is contributing to high employee turnover. This shouldn't be underestimated, as studies show that companies with engaged workers are 21% more profitable and see 41% lower absenteeism[15].

One key factor driving employee frustration and burnout can be attributed to the lack of data access. There are few more disempowering experiences than trying to take care of your customers but being unable to because you are lacking critical information and resources.

1. THE MEGATRENDS IN RETAIL BUSINESS
**1.2. NEED FOR BETTER BUSINESS AND OPERATIONAL EFFICIENCY**

Empowering employees with in-store insights and automation

This can be addressed by leveraging network data analytics and AI intelligence to drive actionable in-store insights into products and how consumers are engaging with them. By better understanding customer buying patterns, behaviors, and trends, the rights products can be ordered, and the right human touches can be assigned. The result is more accurate, informed decisions on inventory, as well as higher sales margins and turnover rates.

To further enhance employee productivity and essentially 'do more, with less' in today's competitive landscape, where supply chain issues and customer expectations are ramping up, retailers are increasingly embracing **automation** and **simpler management** of the in-store technology. The potential is definitely there. McKinsey estimates that between 30% to 40% of processes related to merchandise planning or the supply chain can be automated[16]. In response, according to the recent study from Incisiv and Verizon, retailers plan to automate up to 70% of routine store tasks by 2025[17]. By leveraging tech investments that boost operational efficiency and streamline processes, companies can effectively re-deploy employees to customer-facing and more high-value tasks, as well as support for business operations.
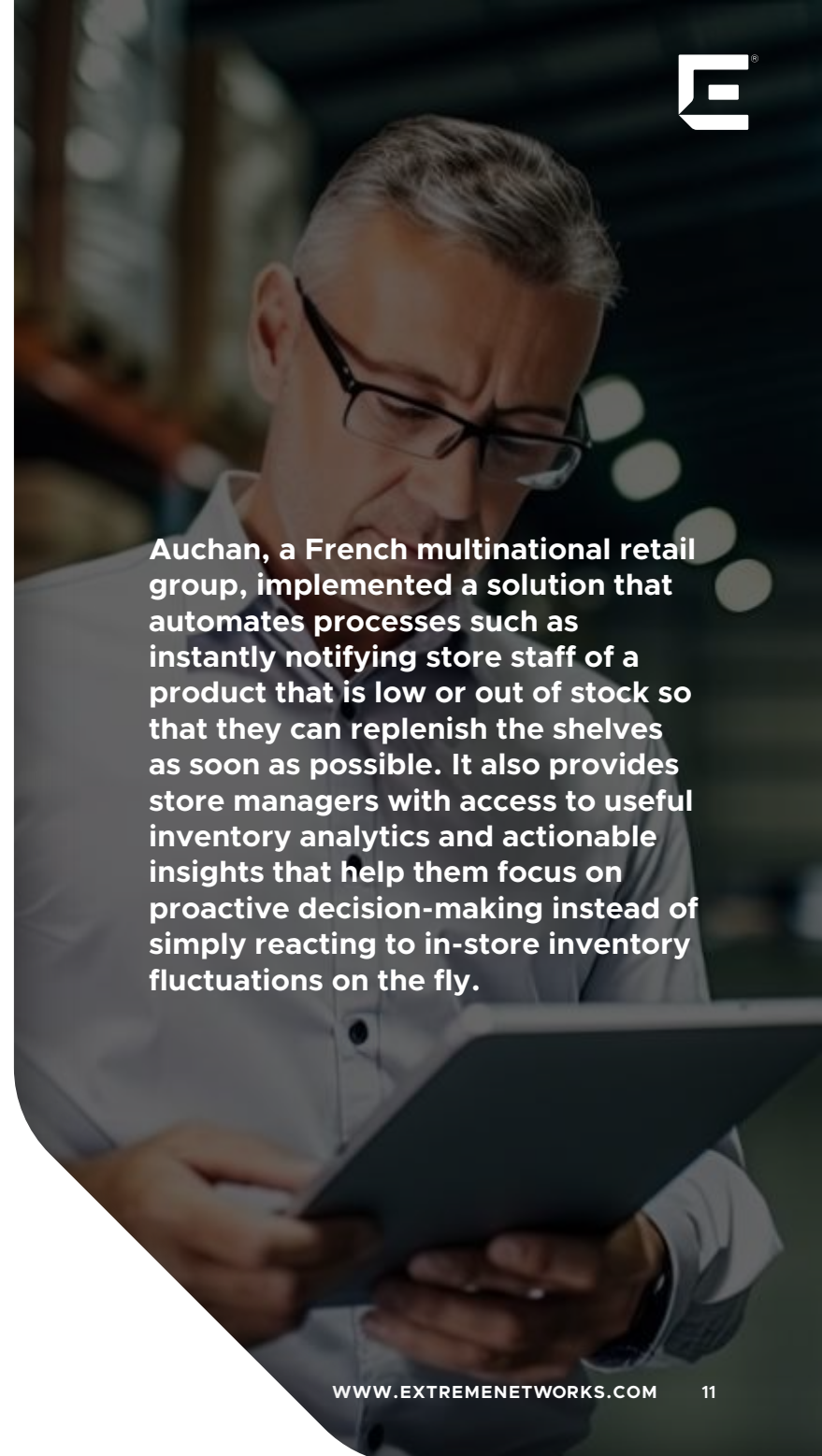
Auchan, a French multinational retail group, implemented a solution that automates processes such as instantly notifying store staff of a product that is low or out of stock so that they can replenish the shelves as soon as possible. It also provides store managers with access to useful inventory analytics and actionable insights that help them focus on proactive decision-making instead of simply reacting to in-store inventory fluctuations on the fly.

1. THE MEGATRENDS IN RETAIL BUSINESS
1.2. NEED FOR BETTER BUSINESS AND OPERATIONAL EFFICIENCY

Real-time inventory management

If there is one thing that the uncertainty brought by the recent years has taught retail businesses, is that the flexibility and capacity to react quickly to changes is worth more than gold. Unexpected supply chain disruptions, high fluctuation in demand resulting in stock exhaustion, the fact that today's customer expects a fast, convenient and fully transparent order fulfillment – all these factors are increasingly pushing retailers to rethink their inventory management. Especially when companies turn global and have hundreds of warehouses spread across the world.

Despite the capabilities of IoT, many retailers continue to use manual tracking processes, relying on spreadsheets or multiple dashboards updated periodically at predetermined intervals, usually through inventory counts. But as with any type of manual work, this costs time and money, not to mention the risk of human error. A study of 25 sample spreadsheets sourced from real-life companies, conducted by the Tuck Business School at Dartmouth College, found a total of 117 errors, and 7 of them generated losses ranging from $4 million up to $110 million[18].

1. THE MEGATRENDS IN RETAIL BUSINESS
1.2. NEED FOR BETTER BUSINESS AND OPERATIONAL EFFICIENCY

Real-time inventory management

Since the speed at which retailers get out inventory matters now more than ever, IT is getting more involved. Real-time inventory management, supported by network-powered AI, ML, and automation capabilities, not only allows businesses to streamline warehouse processes, lower the holding costs, and reduce stockouts. It also holds the key to improving customer satisfaction. Real-time inventory data enables accurate demand forecasts, helping ensure product availability and increasing sales potential. It should come as no surprise that the global inventory management software market is expected to reach an outstanding CAGR of around 11.2% for 2022 to 2028[19].

ZARA, a Spanish multinational retail clothing chain that specializes in fast fashion, embeds RFID apparel tag on every single cloth within the logistics centers. When the products arrive at the store, the system helps the logistics workers to identify which stock of shipments needs replenishment. An RFID-based inventory management solution allows the brand to take a garment from design through the manufacturing process to a smart warehouse in just 10 days.

1.3. EVOLVING CYBER THREAT LANDSCAPE

If there is one industry that never goes out of fashion in the eyes of cybercriminals, it is, without a doubt, retail. It should probably come as no surprise, considering the wealth of customer data, including personal information or purchasing history, combined with the fact that even a relatively small brand can have access to many credit card or bank details. An average data breach price tag in retail? $2.96 million, according to IBM[20]. And while it ranks second to last among other industries, nearly a quarter (24%) of all cyberattacks are levied against retail companies – more than any other sector[21]. Why go through the trouble?

According to a study from Chain Store Age, cybersecurity is one of the top-three concerns for more than half of retail IT leaders (59%), leaving behind labor shortages (43%), supply chain issues (45%), and even the growing inflation (55%). And yet, **fewer than four in ten respondents** admit they feel fully prepared to address current cybersecurity threats[22].

Today, as retailers store more personal information and payment data than ever before, they become a ripe target for bad actors utilizing a plethora of tactics, including credential phishing, ransomware, malware, and more. Let's take a closer look at the evolving cyber threat landscape that retail organizations must navigate today.
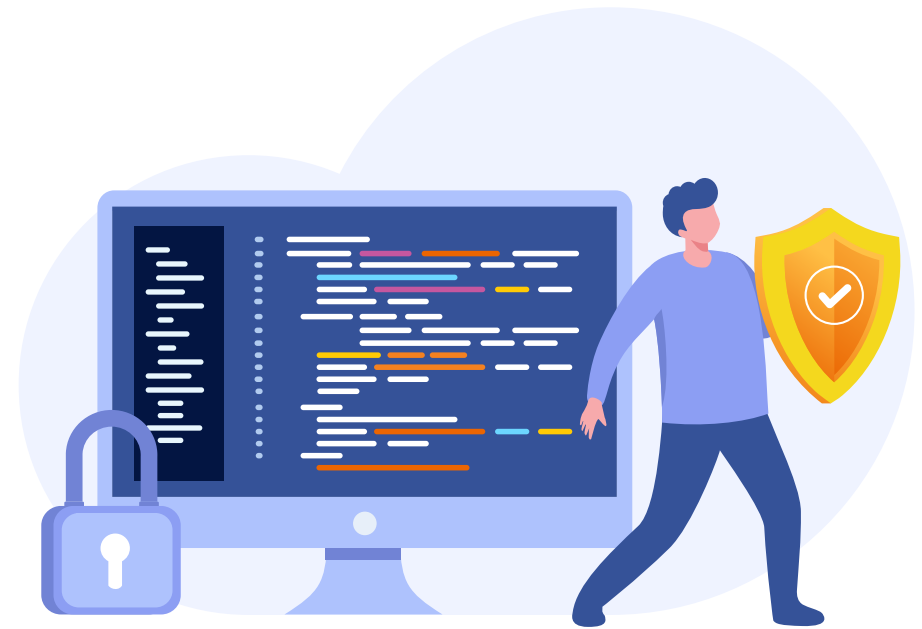
Growing attack surface

Retailers from far and wide are utilizing an increasing number of advanced, data-driven technologies to boost their sales and increase operational efficiency. While the use of big data or sophisticated data warehouse models may be beneficial for the business, more digital transactions, more information in the cloud, and more data being shared at more touchpoints throughout the store – all of that is widening the attack surface. It's a bit of a Catch-22: the more retailers increase their digital footprint, adopt more cloud-based services, and deploy more complex IT stacks, the more vulnerable to cybersecurity breaches they become.

This is further compounded by the hybridization of brick-and-mortar stores and e-commerce. To manage a complex ecosystem like that, retailers are using a mix of technologies (e.g. PoS in stores and cloud-based systems for online platforms). However, cloud-based storage and mobile apps are leaving a larger data presence on the web, leading to new threat vectors. According to Verizon, as much as 70% of retail data breaches originate from Web applications[23].

According to Trend Micro report, 71% of retail IT and business leaders are concerned with the size of their digital attack surface. Over a quarter (27%) say they are "very concerned" and 40% argue that the attack surface is spiraling out of control[24].
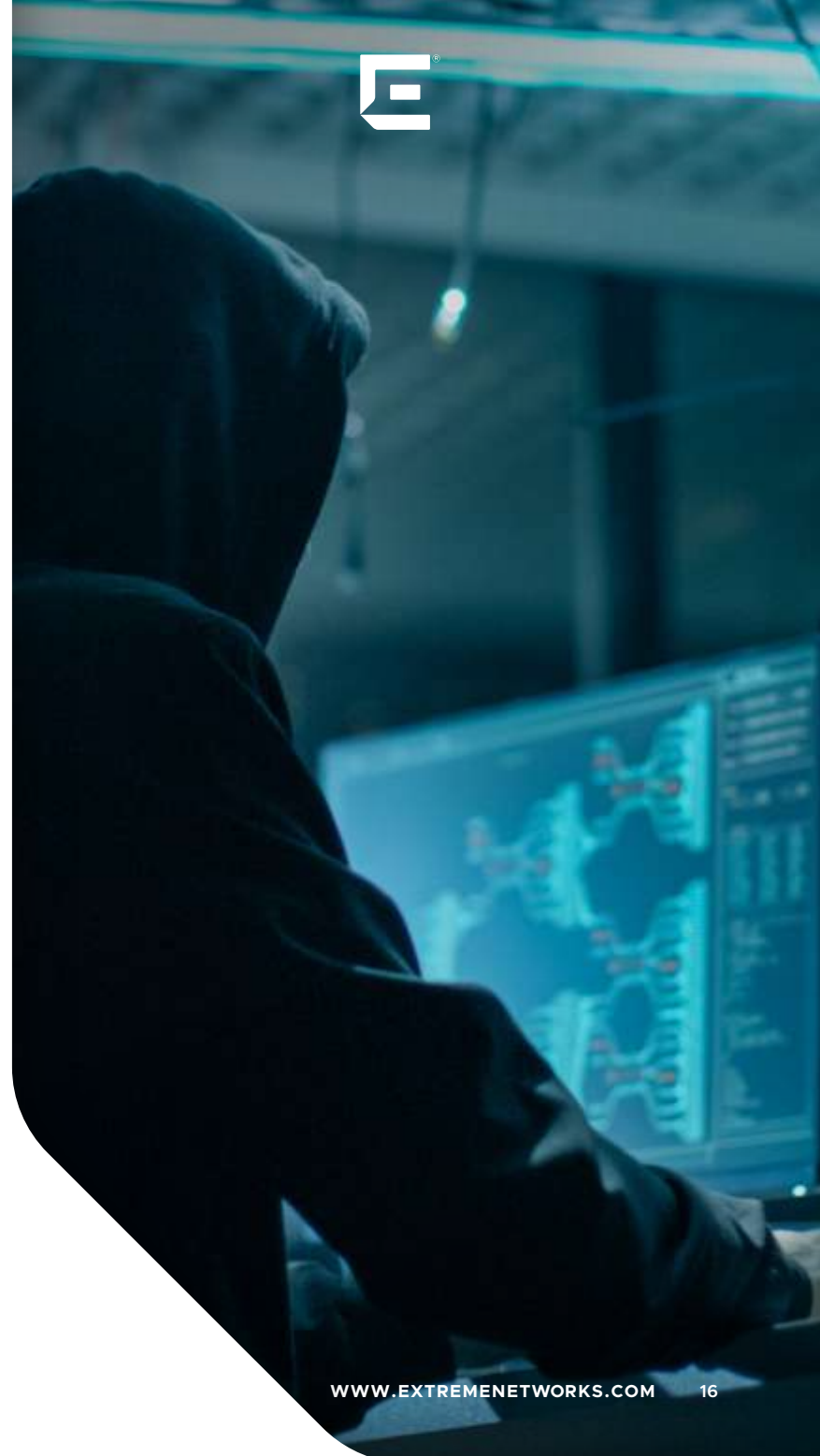
Threats both old and new

Cybercriminals deploy a range of tactics, techniques and procedures (the so called TTPs) to target various elements of victim organization's corporate attack surface. The most common types of cyber threats facing retailers today include system intrusion, social engineering, and basic web application attacks – together, they represent 88% of breaches.

The ever-present threat of ransomware continues to be a major concern for the industry in particular. Threat actors, both external and internal, exploit vulnerabilities in retailer networks to encrypt systems and bring transactions to a standstill, until the ransom is paid, which leads to major financial and reputational losses. According to a recent Sophos study, more than two-thirds (69%) of retail organizations were hit by a ransomware in 2023, up from 44% in 2020[25]. It is clear that bad actors are able to execute attacks at scale consistently, making this type of cybersecurity threat the most important risk factor in the industry today.

Threats both old and new

Following the massive surge of investments in contactless transaction technologies caused by the COVID-19 pandemic, retailers are now relying heavily on IoT endpoints, e.g. to process payments. It is estimated that as much as 84% of retail enterprises use IoT devices, while less than half have taken solid security measures against cyberattacks[26]. Meanwhile, ever since the pandemic started, nine out of the top ten exploits fell into IoT or Content Management Systems (CMS) categories[27]. Hackers can exploit IoT devices to e.g. track customers' movements and purchase histories.

Secure doesn't mean complex

While being an intricate, multifaceted and challenging concept to get right on its own, IT security at its core actually… doesn't need to be complex. In their effort to become immune to cyberthreats, retailers must strike a fine balance between robust security posture and operational efficiency. In other words, the undertaken safety measures should not come at a price of impeded day-to-day operations, nor unnecessary disruptions to customer experiences.

Secure doesn't mean complex

This can be achieved by deploying technologies and systems that are designed to integrate seamlessly into the existing operations and workflows. Some of the best practices retailers can implement to protect shopper, staff, and store information while improving compliance include fabric networking with reliable and easy-to-implement segmentation capabilities, identity and access management based on the Zero Trust Access (ZTA) approach, as well as integrating automation into their security programs. By incorporating these concepts into their enterprise networks, organizations can connect people, data, and applications securely and at scale, while driving significant IT efficiencies at the same time.

Increase in data breach costs for organizations that had high levels of security system complexity Organizations that reported low or no security system complexity experienced an average data breach cost of $ 3.84 million in 2023. Those with high levels of security system complexity reported an average cost of $ 5.28 million, representing an increase of 31.6%[28].

1. THE MEGATRENDS IN RETAIL BUSINESS
1.3. EVOLVING CYBER THREAT LANDSCAPE

2. VISITING THE STORE OF TOMORROW

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Current macroeconomic outlook, combined with the ever-changing landscape of consumer behavior, further disrupted by the post-pandemic reality, are pushing retail brands big and small not only to rethink the role and shape of their existing brick-and-mortar outlets, but also to develop new formats and platforms for a physical interaction with their customers – from inventory to a shopper's in-store browsing, the consideration stage, and finally the checkout process. In either case, what's at the forefront of the ongoing changes that will determine what the store of tomorrow will look like, is technology.

2.1. TRANSLATING CUSTOMER EXPERIENCES BETWEEN SALES CHANNELS

What are the typical pains of offline shopping? For example, driving multiple kilometers just to find out that your dream couch is out of stock. Or little to no product information in store, making the decision a lot harder. Or a long checkout line. Customers can easily avoid these annoyances when choosing to shop online.

However, even though the pandemic pushed the gas pedal on ecommerce, physical outlets still constitute the vast majority of retail sales in Europe – 86.4% by the end of 2023 and 83.7% in 2027, as forecasted by Statista Market Insights. On the other hand, it's critical that the conveniences and benefits of online shopping, i.e., immediacy, contextualized offers, promotions, and other personalized perks, are translated into the new generation of brick-and-mortar stores and their logistics operations. From here, consumers gain a seamless and consistent experience across all channels and touchpoints.

This is what the store of tomorrow will be about.

What is the Store of Tomorrow?

In essence, the concept of the Store of Tomorrow serves two primary purposes:

1. Offering a seamless and engaging shopping experience that meets your customers' changing needs and expectations, to enhance satisfaction, increase brand loyalty, and maximize sales.

2. Simplifying and enhancing time-consuming, labor-intensive, and demanding processes, both in-store and in the back office, to drive better operational efficiencies, increase profitability, and support sustainability goals.

To achieve these goals, the store of tomorrow will rely on emerging technologies powered by artificial intelligence, automation, and robotics, including:

• Smart sensors and controls for optimizing lighting and temperature for comfortable shopping environment, energy savings, and a reduction in spoilage

• Digital signage systems for engaging communication and real-time adjustments based on foot traffic, weather, trends, etc.

• Smart mirrors and smart AR fitting rooms for unique customer experiences supported by mobile apps

• Smart carts and automated, self-checkout systems for a frictionless transaction and buying process

2. VISITING THE STORE OF TOMORROW
2.1. TRANSLATING CUSTOMER EXPERIENCES BETWEEN SALES CHANNELS

How does the Store of Tomorrow work?
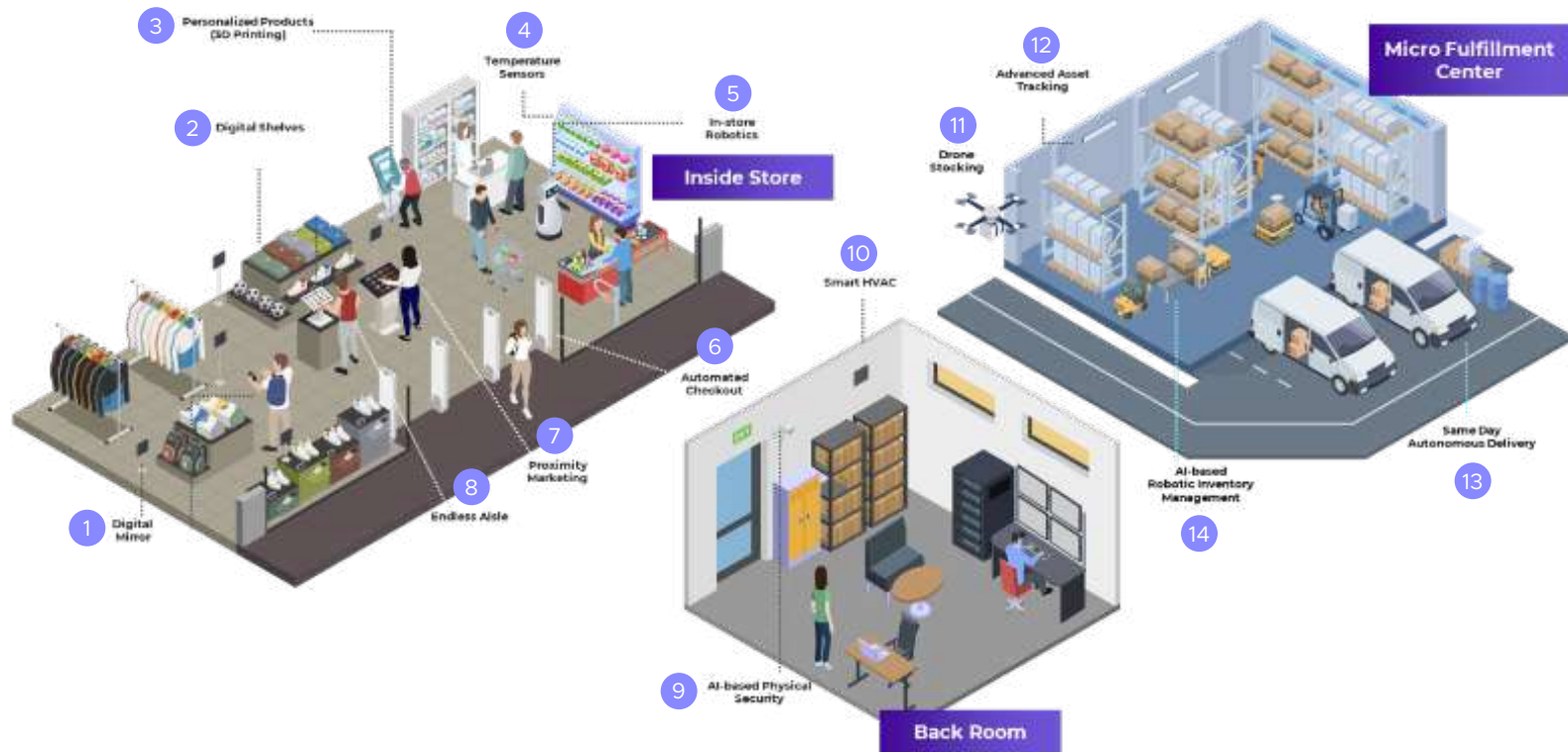
1. Digital Mirror – Measures the dimensions of the person standing in front to either display outfits that best fit their body type or virtually "try" different hairstyles and colors in real-time, allowing more personalized experiences for the shoppers.

2. Digital shelves (electronic shelf labels) – Communicate with a central hub to display dynamic, automatic pricing or other signage, saving manual labor costs and enabling more consumer interaction and engagement.

How does the Store of Tomorrow work?

3. 3D printing – Allows consumers to create fully customized, unique products like apparel or home décor on the spot, for a highly personalized experience with the brand. This also helps reduce the costs of manufacturing, logistics, and inventory waste.

4. Temperature sensors – Help manage and optimize temperatures in freezers for grocery stores, and reduce spoilage for perishable goods.

5. In-store robotics – Can perform a number of functions, from conducting real-time inventory tracking and replenishing store shelves to helping customers get additional information or find a specific product — even providing entertainment.

6. Automated checkout – Allows users to pick up an item, scan it with an app, and pay for it, saving customer's time and offloading in-store staff during peak hours.

7. Proximity marketing – Targets shoppers with personalized advertising content based on their current location by leveraging wireless communication technology such as Bluetooth beacons, Wi-Fi, geofencing, near-field communications (NFC), and QR codes.

8. Endless aisle – Shoppers can order products online that may otherwise not be available for immediate purchase and have it shipped to their home. Adds more convenience for the customer and helps retailers increase revenue by offering a wider range of products while reducing the need for in-store space for inventory.

9. AI-based physical security – Can detect if a store visitor is acting out of the ordinary, trigger an alert if a banned person attempts to enter the store, notify security staff if movement is detected outside of working hours, or if someone enters an off-limits area.

10. Smart HVAC – Sensor-based heating, ventilation, and air conditioning systems help reduce maintenance costs and minimize the store's environmental footprint with an optimized energy usage.

11. Drone stocking – A high mobility, combined with the ability to read RFID labels and barcodes from a distance allows to complete a full stock check and update inventory data faster, safer, more reliably and cost-effectively.

2. VISITING THE STORE OF TOMORROW
2.1. TRANSLATING CUSTOMER EXPERIENCES BETWEEN SALES CHANNELS

How does the Store of Tomorrow work?

12. Advanced asset tracking – Mitigates inefficiencies, inaccuracies, and financial losses attributed to traditional inventory management systems by enabling real-time, IoT-powered insights and visibility throughout the whole supply chain.

13. Same-day autonomous delivery – Enables faster, contactless, and more sustainable deliveries with lower emissions attributed to traditional truck service.

14. AI-based robotic inventory management – Coordinates and optimizes procurement, warehousing, distribution, and order fulfillment processes, improving accuracy, reducing costs, and enhancing customer satisfaction.

2.2. NETWORK – THE KEY TO UNLOCKING THE FUTURE

What connects all smart technologies used in the store of tomorrow, literally and figuratively? Two simple words: network infrastructure. As retail businesses embark on exploring new and innovative ways to take their customer experience to the next level and enhance business operations, they require a comprehensive, reliable and powerful network foundation. One that doesn't just enable connectivity but unlocks the full potential of emerging technologies and increases their return on investment (ROI).

High-Density Wi-Fi Connectivity

Unfettered Consumer, Associate and Application Usage

Mobile QR code and Contactless Services

IPTV, Digital Signage, Content Distribution, Electronic Shelf Labels

IoT Connected Devices

360 Analytics for IT, Operations, Marketing

Locations-Based Services and Insights

Biometric Screening and Payment

Digital POS/Payment, Touchless Transactions

Interactive Security/ Public Safety

Digital Twain to Stage, Validate, Deploy a Network

Intelligent POE Lighting, HVAC, Energy Management

5G-LTE and Wi-Fi Carrier Offload

What is network infrastructure?

The primary purpose of network infrastructure in any organization is governing the flow of data in an efficient and secure way. It consists of a variety of elements, both physical and digital, that are critical for the organization's online communication, connectivity, and cybersecurity. Think of it as system of roads and highways, but instead of cars and trucks there is data traffic.

Whether it's processing online orders, sending documents between branches or delivering personalized marketing communication to your in-store shoppers – the network is always running behind the scenes, controlling and monitoring accessibility to key data and files.

There are three core types of components that constitute network infrastructure in every retail organization:

• **Hardware:** Switches connecting and powering devices in a local area network (LAN) like barcode scanners, POS terminals or digital signage systems; Wi-Fi access points providing wireless connectivity to business and guest client devices like smartphones, tablets, and laptops.

What is network infrastructure?

- **Software:** Different tools and solutions used to monitor, manage, and secure connections and data transfers (i.e., cloud or on-site management platforms; security appliances like firewalls or intrusion prevention systems.

- **Network logic:** Various networking protocols that govern data exchange (i.e., virtual private network (VPN) gateways and fabric technologies).

Key considerations for building your network

As retailers increasingly adopt new and emerging technologies, let's delve into some key factors to consider when building a network for your store of the future.

- **Bandwidth and capacity needs** – With more users, devices, and applications that are increasingly moving to the cloud, retailers require higher network bandwidth and capacity to support them. Having a clear picture of your bandwidth needs and making sure that your network can handle them is critical for the smooth, day-to-day operation of your business.

Key considerations for building your network

- **Wireless network primed for retail** – To support hyper-connected guest and employee experiences in high-density environments like retail outlets and shopping centers, businesses increasingly rely on the next generation of wireless networks, primarily Wi-Fi 6 and its extension Wi-Fi 6E, in some cases supported by private cellular networks like 4G and, more recently, 5G. It's important to note here that while the latter offers some great benefits like low latency, high speeds, and flexibility, Wi-Fi will continue to be the retail industry's first choice for wireless connectivity, primarily due to the better support for both new and legacy client devices, more control, and analytics functionalities. High speed, capacity, and reliability of Wi-Fi 6 and Wi-Fi 6E allow bandwidth-hungry devices and apps to run concurrently on one network, without compromising on the data rates and response times.

- **Scalable and resilient wired infrastructure** – A reliable, flexible, and easy-to-handle wired infrastructure is key to future-proofing an enterprise network in the rapidly shifting retail landscape. To ensure the continuity of operations with a high network uptime and facilitate the process of changing and expanding the network to new locations, more and more businesses are adopting fabric networking.

- **Connectivity options between branch offices, data center and cloud** – Given that legacy connectivity options like MPLS connections across wide area networks (WAN) take time to set up, can be quite expensive to use, and require a contracted service from a carrier or telecoms company, many retailers are considering more flexible, scalable, and cost-effective alternatives like SD-WAN.

- **Cloud management** – With centralized, granular visibility and control, accessible from virtually any place on earth, cloud platforms enable retailers to monitor and manage their networks more effectively while providing a level of agility that is difficult to accomplish with a traditional on-premises model.

- **Network analytics** – With AI-based, predictive and location-based analytics, retailers can stay on top of the foot traffic patterns and customer visitor counts in their stores, among other things. IT managers may harness data running through the network, devices and applications to understand

Key considerations for building your network

the customer experience, have an inside look into their purchasing habits and preferences, and turn that knowledge into more informed decisions on store layout, product placement, etc.

Challenges with in-store use cases – ESL

Electronic shelf labels serve as a prime example of additional complexities and costs, if not set up with a proper networking foundation in place. In a traditional network, the deployment of this particular technology would normally require IT teams to deploy additional ESL gateways or add USB dongles or PCI add-on cards to the existing wireless access points to enable communication between ESLs and their cloud services. In other cases, there's a need for an additional, on-premises price update server. This drives costs, both in the implementation phase (cable runs, additional PoE switch ports), as well as the subsequent operation (security monitoring, maintenance). Particularly, the latter one rises proportionally to the complexity of the ESL deployment.

Challenges with in-store use cases – ESL

This is just a single example of how the adoption of retail-tech can breed unnecessary inefficiencies from the network perspective. To mitigate this and similar challenges with other proprietary technologies, businesses require a unified connectivity layer that allows them to utilize their existing networking devices and minimize total cost of ownership (TCO). Simple deployment also means fewer outages and less troubleshooting, making life easier for the staff and providing better experience for the shoppers.

Challenges with warehouse use cases – robotic inventory management

With the growing adoption of autonomous robotics, drones, smart sensors and Internet of Things (IoT) equipment which usually lacks built-in security, the need for consistent access policy and traffic separation to isolate vulnerable end points in the network has never become paramount. Relying on open interfaces and ease of connectivity on the one hand enables uninterrupted communication between sensors and other devices. On the other hand, it creates an open door for malicious actors to exploit. This can pose a significant risk to operational performance, as the variety and volume of new

devices makes it difficult and expensive to retroactively address.

Additionally, retailers require their networks not only to be reliable and secure, but also flexible and scalable, as the business needs evolve at an unprecedented rate (as in the time of pandemic, which has driven the need for warehouse space to unprecedented levels). In other words, CTOs and IT managers need to control the growing environment and accommodate future expansion. Both tasks involve streamlining multiple aspects of their network (i.e. provisioning, change propagations, and configurations), optimizing resource use, and cutting operating costs.

3. BUILDING BLOCKS FOR THE STORE OF TOMORROW

No two retail brands are the same, so they can't be measured identically. The same applies to networking solutions, which should be tailored to the specific needs and goals of the business. Let's consider three standard scenarios based around desired outcomes and the new ways to achieve them.

Please note: *The following curated scenarios are focused around specific, individual goals. In most real-life deployments, these goals would typically co-exist in various sets, requiring a proper, customized combination of hardware and software.*

3.1. ENHANCED EXPERIENCES FOR SHOPPERS AND STAFF

In this scenario, the retailer's primary goal is to enhance brand affinity, increase basket size, and drive more footfall into the brick-and-mortar store by delivering unique and memorable digital experiences for customers.

The first and most important step towards achieving this goal is implementing a reliable [wired] and [wireless infrastructure] allowing seamless connectivity for both store applications and guests. A [cloud-managed Wi-Fi] not only can meet customer needs of today, but also anticipate what they'll need tomorrow. Delivering an exceptional in-store digital experience has never been simpler!

- **Universal Wired and Wireless** – Allows associates and shoppers to reliably connect to super-fast Wi-Fi 6 or Wi-Fi 6E, providing always-on access from any device to business-critical applications.

- **ExtremeCloud IQ** – Simplifies network management; helps store operations better understand network performance and provide an exceptional user experience; provides useful insights and tools, including fast-loading guest access.

- **ExtremeGuest Essentials** – Provides completely customizable location-specific splash pages and a rich set of analytics providing business insights.

- **ExtremeLocation Essentials** – Offers Wi-Fi and BLE-based location services, current and historical location analytics, presence, zone tracking, and asset tracking.

- **ExtremeCloud SD-WAN** – Gives the best possible experience for the store's business-critical applications, whether they're residing in the cloud or data center; enables comprehensive visibility tools for network and application performance management.

Case study – Colruyt

![colruyt logo]

Colruyt Group, one of the largest retailers in Belgium, Luxembourg, and France, operates more than 600 stores ranging from supermarkets to gas stations to apparel. The company is also a supplier of products to hundreds of independent retailers across Western Europe. Colruyt maintains a significant e-commerce presence across Europe, and its subsidiaries include more than 40 consumer and business brands.

> We have been making use of Extreme's technology for many years. The intuitive cloud platform will support our experts in managing our wireless environment and provide a stable and performant wireless solution for our business.
>
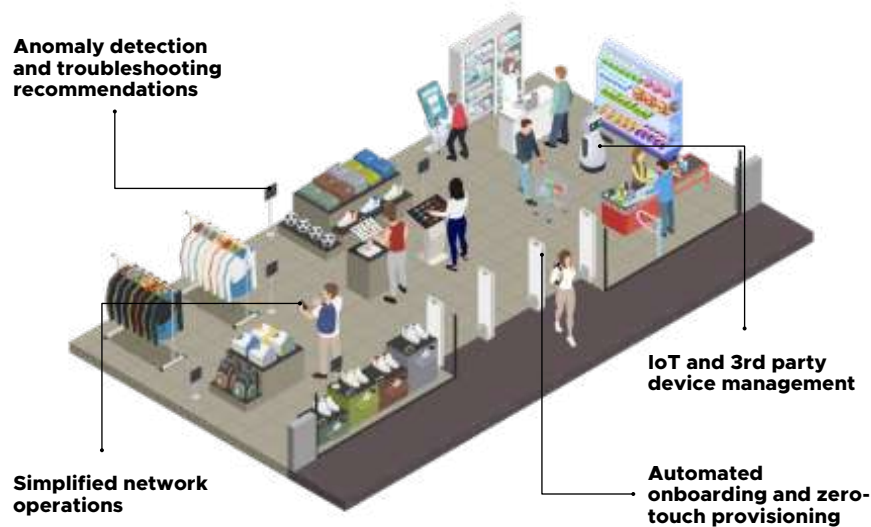> **Wim Pletinckx**
> Head of IT Infrastructure
> Colruyt Group

3. BUILDING BLOCKS FOR THE STORE OF TOMORROW
3.1. ENHANCED EXPERIENCES FOR SHOPPERS AND STAFF

New Ways	Solution	Better Outcomes
Scalable network that grows alongside business growth Increased bandwidth and capacity for increasing number of connected devices Better insight into network performance and analytics for actionable data	**ExtremeCloud IQ** **Universal Wireless Access**	Installation of over 10,000 Extreme Wireless Wi-Fi 6 APs guarantees seamless mobile experience Connectivity for thousands of end users and their devices in shops, offices, and warehouses Installation of over 10,000 Extreme Wireless Wi-Fi 6 APs guarantees seamless mobile experience

3. BUILDING BLOCKS FOR THE STORE OF TOMORROW

3.1. ENHANCED EXPERIENCES FOR SHOPPERS AND STAFF

3.2. REDUCED COSTS AND BETTER EFFICIENCIES

In this scenario, the retailer improves decision making and drives better operational efficiencies by harnessing the data resident in the network. Extreme Networks can help enhance productivity across the retail workforce by enabling infinitely distributed, highly scalable networks.

Anomaly detection and troubleshooting recommendations

Simplified network operations

IoT and 3rd party device management

Automated onboarding and zero-touch provisioning

- **Universal Wired and Wireless** – Reduces risk and complexity (simplifies operations) across stores, warehouses and more; extends the flexibility and lifecycle of the networking equipment by enabling the adoption of new use cases in the future with a quick and simple change of the device's persona.

- **ExtremeCloud IQ** – Simplifies management of wired, wireless, SD-WAN, third-party and IoT devices across the store network, simplifying operations and providing time-saving efficiencies to IT teams.

- **ExtremeCloud IQ CoPilot** – Delivers enhanced AIOps capabilities empowering IT with proactive insights and faster problem resolution so they can focus on higher value tasks such as the in-store experience.

- **Extreme Fabric Connect** – Streamlines network deployment and day-to-day operations by enabling zero-touch onboarding and auto-sensing of networking devices.

- **ExtremeCloud SD-WAN** – Simplifies and automates services management and extends Extreme Fabric seamlessly to branch offices over low-cost internet access.

Case study – Leen Bakker

LeenBakker ⌂

With nearly 2 million customers visiting the physical stores each month, [Leen Bakker](#) is the largest omnichannel value discounter of the home furnishing sector in the Benelux region. To enable reliable wireless connectivity at a reasonable price for a high-quality experience for both customers and employees, the company decided to introduce a new cloud-managed Wi-Fi in more than 150 retail outlets across the Netherlands and Belgium.

> We have been using Extreme Networks products since 2016, so we are very much familiar with their technology and what it's bringing to the table (...) We chose Extreme Networks (...) because our Kwantum and Leen Bakker stores especially need a reliable, well-performing Wi-Fi. The specifications just fit exactly what we needed.
>
> **Gertjan Pruim**
> IT Infrastructure
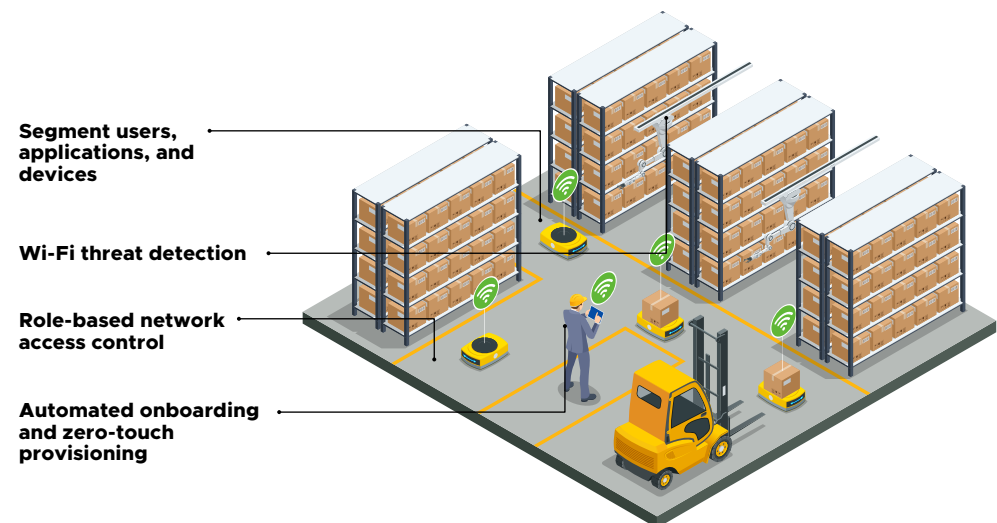> & Operations Manager
> Homefashion Group

3. BUILDING BLOCKS FOR THE STORE OF TOMORROW
3.2. REDUCED COSTS AND BETTER EFFICIENCIES

New Ways	Solution	Better Outcomes
Higher speed, coverage and capacity for increasing number of connected devices Enhanced scalability and flexibility to support both current and future use cases required across stores Management of the entire network from one cloud-management system	**Wi-Fi 6 access points** **Universal Wireless** **ExtremeCloud IQ**	Seamless mobile experience for customers and associates powered by a reliable, problem-free, and high-performing wireless network Increased return on investment with high hardware flexibility and reduced hardware obsolescence Smooth and cost-effective implementation process of more than 1,200 access points with cloud-enabled automations Proactively detect anomalies, suggest potential solutions, and address issues before they become problems Excellent price-quality ratio

3. BUILDING BLOCKS FOR THE STORE OF TOMORROW
3.2. REDUCED COSTS AND BETTER EFFICIENCIES

3.3. BETTER PROTECTION OF STORE AND CUSTOMER DATA

In this scenario, the retailer dramatically enhances the organization's cybersecurity posture, protects shopper, associate and store information, and improves compliance by connecting people, data, and applications securely and at scale.

- **ExtremeCloud IQ** – The only cloud-based management platform with ISO, CSA-STAR certifications, SOC 2 and GDPR compliance.

- **ExtremeAirDefense Essentials** – Provides best-in-class Wi-Fi threat detection; extends wireless security beyond rogue detection and mitigation to include wireless threat detection.

- **ExtremeCloud Edge** – Helps retail store address data privacy, protection, and sovereignty.

- **ExtremeControl** – Provides central management and the ability to define granular policies to meet compliance obligations, locate, authenticate, and apply targeted policies to users and devices.

- **ExtremeCloud Universal ZTNA** – Allows to easily establish and maintain a consistent security policy across their network with a single solution to manage and enforce an identity-level zero trust policy for all users

- **Extreme Fabric Connect** – Enables robust, easy and cost-efficient segmentation of devices, applications, and users, ensuring that any personal or financial information transversing over the network is secure; protects the network with a stealth design that blocks lateral movement and prevents network breaches.

- **ExtremeCloud SD-WAN** – Enables secure access to business-critical applications, including POS systems, from the data center or cloud.

Segment users, applications, and devices

Wi-Fi threat detection

Role-based network access control

Automated onboarding and zero-touch provisioning

Case study – Dino Polska

Given the rapid increase of new spaces, end-devices and employees, as well as the ambitious plans for future expansion, Dino Polska – one of the fastest-growing chain of proximity markets in Europe – needed a more efficient, scalable, and most importantly secure solution that would streamline and improve processes in the central office and warehouse complex.

> The SPB protocol itself, which Extreme Fabric Connect is based upon, takes our information security to a whole new level. Additionally, we have the Fabric Attach feature that leverages the flexibility and extensibility of Fabric Connect to quickly and automatically add switches and access points to the network.

Dariusz Włodarczyk

Head of IT Infrastructure
Dino Polska

3. BUILDING BLOCKS FOR THE STORE OF TOMORROW
3.3. BETTER PROTECTION OF STORE AND CUSTOMER DATA

New Ways	Solution	Better Outcomes
A unified solution for managing, monitoring, and deploying wired and wireless networks, focused on inherent security A combination of Shortest Path Bridging technology a network access control The ability to quickly and automatically add switches and access points to the network	**Extreme Fabric Connect** **ExtremeControl** **ExtremeCloud IQ – Site Engine**	Dramatically improved security posture with fully isolated virtual networks without any visibility and accessibility, set up easily and at scale Time savings for the IT team thanks to the automated onboarding of each connected device with the correct access level and privileges A frictionless modernization of the subsequent warehouses in a highly secure fashion with simplified provisioning, change propagations and configurations Ability to manage the entire network infrastructure without expanding IT staff, minimizing operating costs

3. BUILDING BLOCKS FOR THE STORE OF TOMORROW
3.3. BETTER PROTECTION OF STORE AND CUSTOMER DATA

4. ENTERPRISE NETWORK, REDEFINED

Today's world of retail business is not changing – it's transforming, and it's happening right in front of our eyes. Innovation can no longer be seen as an optional advantage, but much rather as the only advantage. However, succeeding in this dynamically shifting landscape **is not just about being technology-centric anymore**. Anyone can invest in innovation, but whether the outcome of such effort is successful for our company or brand, is – literally and figuratively speaking – *another pair of shoes*.

Rising complexity, distributed workforces, and the need to control costs are all top of mind for organizations as they continue to adapt to an unprecedented rate of change. To succeed, retailers need to develop and execute technology-empowered strategies that will successfully navigate them through the complexities of their digitally-enabled environments.

As enterprise networks surround, penetrate and bind all technology initiatives together, at Extreme Networks we are focusing on redefining the traditional approach to networking, **reducing complexity, costs, and risks**, and applying those benefits to all areas of business at scale. To that end, we've developed a unique strategy and architecture that we call **One network, One cloud, One Extreme**.

4.1. EXTREME STRATEGY

In essence, our One Network, One Cloud, One Extreme architectural approach enables your organization to connect, manage, and optimize everything, everywhere, at scale. This translates into pivotal outcomes for your retailer business by:

DELIVERING enhanced, seamless and differentiated experiences demanded by shoppers, IT teams, and staff through infinitely distributed connectivity.

INCREASING IT productivity by making the network highly scalable, easier to deploy and manage with industry-first cognitive AI and automation.

REDUCING operational expenses (OPEX) and increasing return on investment (ROI) providing investment protection and simple migration from existing to new technologies.

SECURING the hyper-connected stores, web, call centers, and headquarters with capabilities woven throughout the network to protect users, customers, devices, and data.

This strategy is based on three key capabilities:

CONNECT EVERYTHING

One Network approach combines industry leading wireless and wired access with SD-WAN and the industry's most deployed fabric.

MANAGE EVERYTHING

One Network approach combines ind**One Cloud** enables unified management of one network, with centralized, remote configuration and managem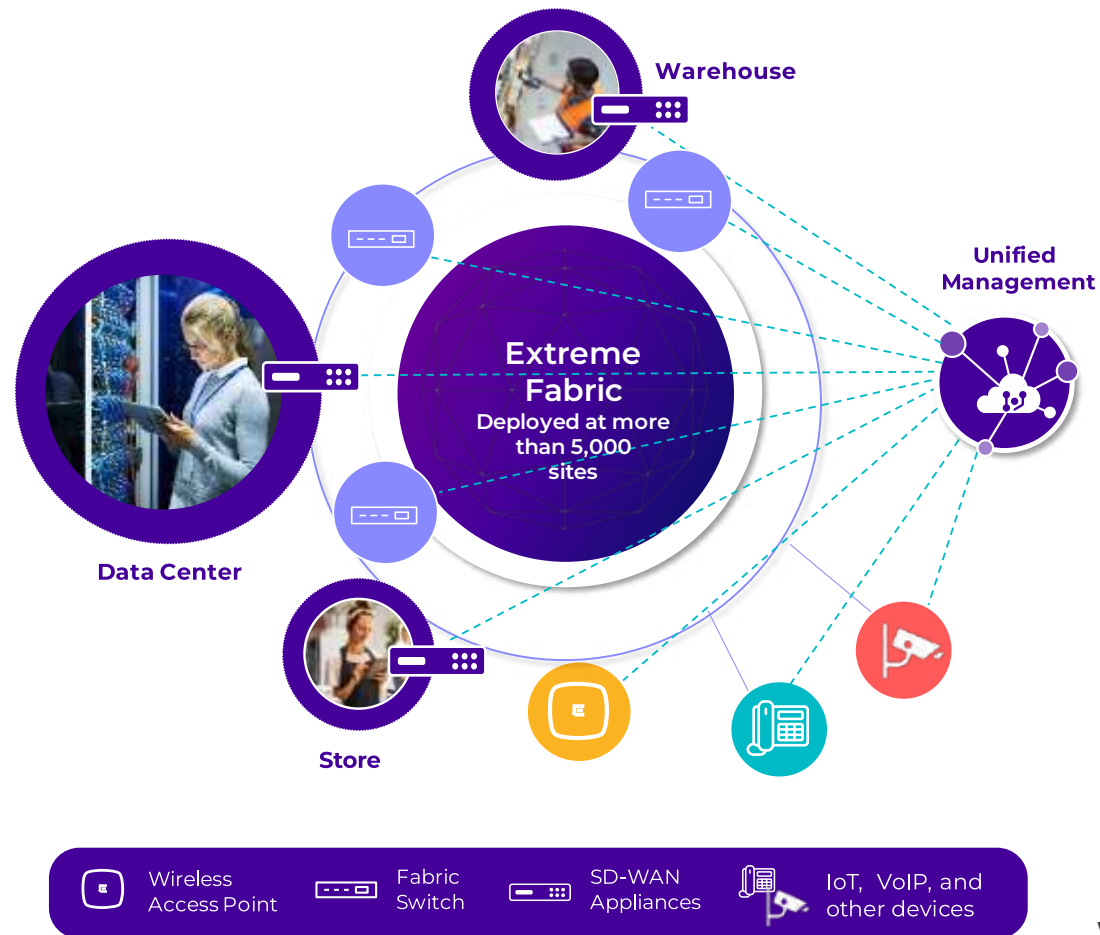ent through a range of deployment options. ustry leading wireless and wired access with SD-WAN and the industry's most deployed fabric.

OPTIMIZE EVERYTHING

One Extreme enhanced services help customers optimize solutions and maximize value, while simple universal licensing enables predictable costs.

4.2. ONE NETWORK

A network is as good as the hardware behind it. Our wired, wireless, and SD-WAN devices, combined with the Extreme Fabric solution, connect everything in a unified, secure, and automated network as a single topology spanning campus, data center and branch. We are industry pioneers with universal switches and access points that support multiple use cases by leveraging the dual-persona capability from a single platform. To drive the flexibility even further, these devices can be managed either in cloud or on premises. Extreme's best-in-class hardware enables infinitely distributed, highly scalable, and secure solutions that deliver exceptional Quality of Experience (QoE).

Warehouse

Unified Management

Extreme Fabric
Deployed at more than 5,000 sites

Data Center

Store

Wireless Access Point	Fabric Switch	SD-WAN Appliances	IoT, VoIP, and other devices

Universal Wired

A broad range of high-performance, multi-rate switches and routers with integrated fabric and advanced PoE capabilities securely addresses edge, core, and aggregation needs. A flexible choice of operating systems, possible at any given point in time, enables organizations to easily repurpose and redeploy their network, providing an unparalleled agility in the face of change.

In terms of security, Trusted Delivery, Measured Boot, Remote Attestation features, combined with optional MACsec protecting data at the data link layer, make Extreme's Universal Wired the industry's most trusted switching platform.

Universal Wireless

Industry-first Wi-Fi 6 and Wi-Fi 6E technology with built-in AIOps troubleshooting, guest, IoT, and location services deliver a modern connected experience. Organizations can easily adopt new technologies and/or use cases through a simple software change, avoiding hardware lock-in and protecting their investment.

The cost savings extend to electricity bills as well, as products from the Universal Wireless portfolio have the lowest power requirements on the market. For example: AP3000, the industry's smallest and greenest indoor Wi-Fi 6E access point, delivers excellent performance even in some of the most demanding environments like high ceiling warehouses, while drawing as much as 13.9 W of power.

As far as the security is concerned, Extreme's Universal Wireless access points provide a built-in security layer via a TPM chip with stateful firewall, DoS prevention, and policy enforcement at the point of access.

SD-WAN

ExtremeCloud SD-WAN connects sites, users, data, and applications securely and at scale, enabling the highest performance for least cost. A range of speed tiers and applications that support the smallest branches to the largest data centers.

Built-in zone-based firewalling, IPsec encrypted tunneling, firewall as a service, secure web gateway, and bring-your-own-security options secure the WAN and internet access.
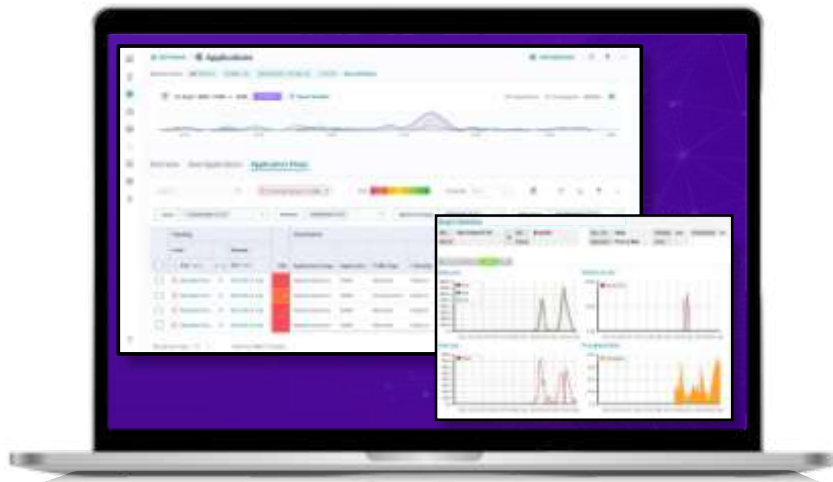
Fabric

Retailers can unify, automate, and secure their network from campus and data center to branch, across wired, wireless and SD-WAN environments, with Extreme's end-to-end, standards-based network fabric. With more than 5,000 across customer networks today, our market-leading solution has become the industry's most widely deployed.

Extreme Fabric connects both Extreme and non-Extreme devices in a secure and automated topology, extending sub-second failover, zero trust hyper-segmentation, and zero touch provisioning to the entire network. Auto provisioning streamlines deployments and operations, and inherently protects unsecured devices while minimizing risk of outside attack.

4.3. ONE CLOUD

To address the new demands and pain points in the area of cybersecurity, digital transformation, and exponential growth in data, retailers are increasing their cloud investments at an unprecedented scale. The industry is already cloud-first, with many critical applications that benefit from cloud already in place.

As the industry leader in cloud-managed networking, Extreme supports you in this critical direction by offering you a unified management infrastructure for your wired, wireless, SD-WAN, and IoT devices, built for scale, flexibility, and security. For data privacy and protection, we are the only cloud networking vendor with ISO, CSA-STAR certifications, SOC2 and GDPR compliance.

Retailers can reduce risk and simplify operations with robust management and monitoring across data center, campus, and branch for third-party networking and IoT devices (e.g., Cisco, Aruba, Juniper, Zebra handheld scanners) as well as Extreme devices including non-cloud native equipment.

The same cloud enables centralized visibility and simple migration to Extreme solutions when you are ready to replace legacy third-party hardware.

A continuum of deployment options including public (shared or private) and edge cloud, as well as air-gapped and enterprise services, enables you to strike the best balance between data control and privacy, performance, and cost for your needs.

ExtremeCloud IQ

At the core of our One Cloud approach lies **ExtremeCloud IQ** – the industry's first fourth-generation cloud-management platform driven by AI and machine learning (ML), designed to take full advantage of our end-to-end networking solutions. With a plethora of features, including intuitive configuration workflows, real-time and historical monitoring, comprehensive troubleshooting tools and integrated network applications, this solution provides unified, full-stack management of your access points, switches, and SD-WAN appliances.

ExtremeCloud IQ operates on Extreme's cloud services architecture, capable of supporting millions of infrastructure devices and hundreds of millions of clients per Regional Data Center. All Extreme cloud services components are hosted in secure SOC Type 1 data centers with 24/7 monitoring, scheduled backups, and built-in disaster recovery capabilities. The ExtremeCloud IQ offers rapid feature velocity, increased availability, and advanced flexibility desired for modern access network management.

ExtremeCloud IQ CoPilot

ExtremeCloud IQ CoPilot is an AIOps solution that constantly scans, compares, and computes network data to alert network administrators and recommend actions to mitigate issues or anomalies before they result in a disruption of service. This simplifies and facilitates troubleshooting and customer resolution so that your IT staff can spend less time fixing the network and more time on essential activities.

ExtremeCloud IQ CoPilot also allows device simulation **with the industry's first Digital Twin capability**. This technology facilitates network assurance by allowing devices to be virtually staged before deploying them, helping to reduce risk. Users can create a digital copy of network infrastructure in a cloud-based digital sandbox environment to assess if the new configuration or device would cause problems prior to deployment. Users can test and operationalize a new network or expand network infrastructure rapidly, then push the tested changes into production.
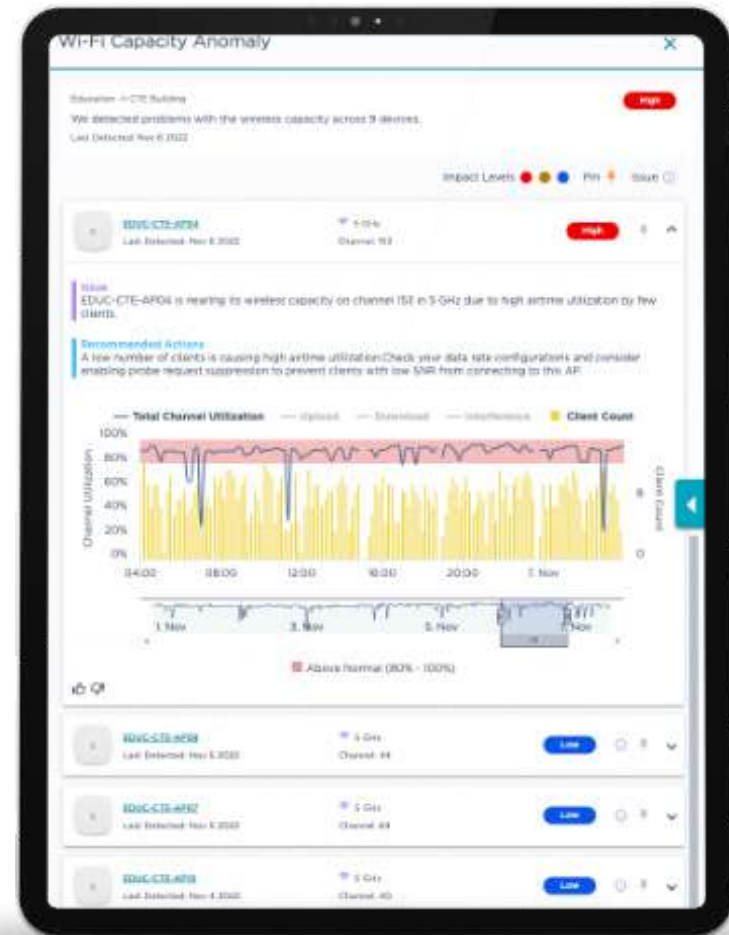
ExtremeCloud Universal ZTNA

ExtremeCloud Universal ZTNA (Zero Trust Network Access) is the industry's simplest, most complete network access solution. Offered as a subscription service for ExtremeCloud IQ customers, Universal ZTNA is the first network security offering to integrate network, application, and device access security within a single solution.

Organizations can easily establish and maintain a consistent security policy across their network with a single solution to manage and enforce an identity-level zero trust policy for all users. IT teams can simply create policies to establish least-privileged access for users, extend secure access for multiple guest cohorts, and set up and revoke access for trusted IoT devices. Remote traffic travels securely to the cloud, improving performance for remote users and reducing reliance on point solutions like VPNs.

4.4. ONE EXTREME

At Extreme Networks, we are first and foremost driven to improve your business outcomes as a retailer. Connectivity is just a starting point. Aside from a range of advanced wireless, wired, and SD-WAN devices, a unified, automated and secure fabric, and unified management, we are offering you a rich portfolio of additional programs, solutions, and services to help you increase the capability and value of your network **as a strategic asset**.

Universal licensing

With many big-name networking vendors, one major hurdle on the road to the company's growth is quite mundane: exorbitant licensing and operational costs that translate directly into reduced ROI. To make things worse, the hidden costs, which often become apparent only after the actual implementation, can quickly spiral out of control, surpassing initial estimations and eating through the budget, especially in more dynamically-growing environments.

Here at Extreme we have created the simplest licensing in the industry with clear business predictability and no hidden cost. We are the only networking vendor on the market that offers simple, universal licensing with a single license per device, portable and poolable across wired and wireless platforms, cloud or on-prem managed, and extendable beyond Extreme platforms to integrate third-party devices. Full business predictability without hidden costs!

## Ecosystem of Partners and Technology Alliances

There is strength in numbers. We've joined forces with best in the industry so that you can be confident not only in Extreme but also with fully validated and supported multi-vendor solutions. These partners span security, location services, IoT, public cloud, industry verticals such as retail, and much more.

Improve in-store experiences and associate productivity

Enhance security and store operations
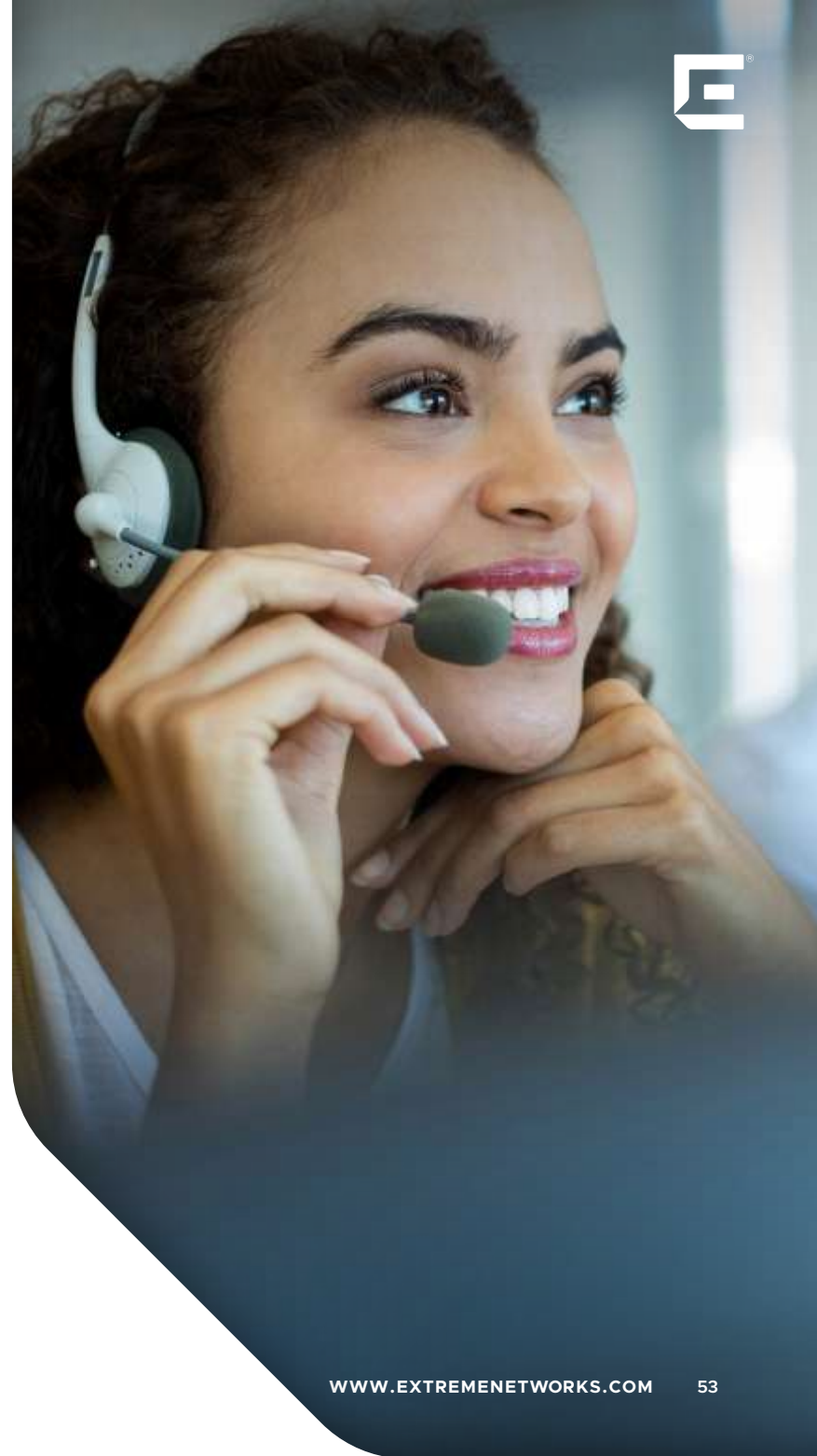
Comprehensive global services

At Extreme Networks, we are devoted to your success, and that commitment extends far beyond our innovative products and solutions. Whether it's planning, deploying, maintaining, and supporting your IT environment, bridging existing technologies with new ones, needing a new network design, or realizing maximum value from your IT investment, you can count on our 100% in-sourced, industry top-rated support of highly skilled networking experts. How can we be of service?

- **Professional Services** – Expert IT assistance, when you need help, on your terms

- **Maintenance and Support** – 7x24x365 Global Technical Assistance Centers

- **Premier Services 1:1** – designated access to Extreme experts for priority queuing and fast IT issue resolution

- **Managed Services Network** – monitoring and proactive management of your network availability and performance

- **Customer Success** – included with select ExtremeCloud solutions to that you get the most from your Extreme Networks investment

Extreme Capital Solutions

Industry-leading networking solutions are not the only thing that's flexible in Extreme's offer. We realize that transforming your IT environment doesn't happen overnight, yet retailers more than ever need to build agility, scalability, and consumer-centric experiences into their network – fast. To address this challenge, we are offering you simple, flexible financing models so that you can keep pace with market changes, technology innovation, and stakeholder demands.

Extreme Capital Solutions finds the right payment plan for your network acquisition. Cash purchases, leasing and subscription offerings, a flexible monthly subscription rate, are all options. Whatever your financial needs, we're flexible and creative so that you can be too.

CONNECTIVITY IS JUST THE BEGINNING, BUT BEGINNINGS HAVE A WAY OF SHAPING OUR FUTURE

When Bob Dylan sang *The Times They Are A-Changin'* in the '60s, he couldn't have possibly imagined just how much would these five simple words define the retail business in decades to come. In the early '90s, Barnes & Noble superstores changed how Americans shopped for books. Just a few years later, Amazon started another revolution, but took it globally and eventually transformed how we shop basically for everything.

Not everyone can be a disruptor, but all successful commerce companies have at least one thing in common: the ability to recognize change early and the flexibility to address it head-on. And though retail leaders may be well aware of how critical it is for their business to adapt, the execution often remains the tricky part. However, being prepared for persistent fluctuations is no longer a competitive edge – **it's a necessity**.

As we progress and move closer to the fourth decade of the 21st century, we embrace it as the time of opportunity. Time of **new ways and better outcomes** for retail companies. We believe success will come to those who dare to reimagine the ways they operate, empower their workforce, and interact with customers. At the center of it lies a robust **networking foundation** that helps retailers big and small embrace innovation faster, better, more securely and cost-efficiently than others, keeping their revenue flourishing and the customers coming back.

Connectivity is just the beginning, but beginnings have a way of shaping our future. If you'd like to discuss the possibilities for your **Store of Tomorrow** – we are delighted to accompany you on that journey!

GET IN TOUCH WITH US.

FOOTNOTES

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