

Maximize the potential of your retail technology

Reduce costs, secure the network and empower employees
with comprehensive solutions from Spectrum Business®





Escalating demands from new technology and evolving consumer expectations have become a daily reality for retail leadership.

Retailers increasingly depend on data and networks to strengthen their market position and drive brick-and-mortar and online sales. This is apparent in the growing share of transactions that must move seamlessly across cashless fulfillment methods like buy online, pick up in-store (BOPIS); buy online, return in-store (BORIS) and buy online, pick up at curbside (BOPAC). In one survey, more than a third of shoppers had placed a BOPIS or BOPAC order in the previous six months.¹

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The expanding troves of data from retail transaction paths such as BOPIS, BORIS, BOPAC and others enable technology investments in product personalization, targeted upsell offers and more effective post-sale support. These efforts can all boost a retail business's bottom line: Over half of consumers (55%) say they are willing to spend more money for a customized experience.² While shoppers report spending about 36% more with brands that personalize engagement, businesses estimate that the actual spending increase is closer to 54%.³

High-performing networks are essential for making the most of e-commerce and point-of-sale (POS) data. Reliable and secure connections among stores, data centers and supply chains support innovations that include:

- Advanced analytics from omnichannel transaction data that enable personalization at scale.
- AI and machine learning (ML) to drive better sales decisions, dynamic pricing and consumer insights to grow revenue.
- Technologies that include 5G (to enable smart store experiences), mobile edge computing, edge computing and the [Internet of Things \(IoT\)](#), enabling data analysis in real time to deliver benefits such as improved inventory management and personalized shopping experiences.
- Network security technologies to counter growing cyber risks and those associated with connected supply chains, retail IoT devices and digital transaction data.

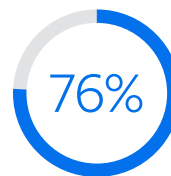
New challenges facing retailers

Organizations dealing with tight operating budgets and uncertain economic headwinds still need to innovate and modernize. Facing systems that have grown ever more complex, retailers are looking for ways to make network management simpler while safeguarding performance and uptime. Limited IT resources also add to the challenge of meeting the needs of stores, remote workers and e-commerce operations.

In-store demands

Connectivity between store locations and data centers now supports much more than digital payments and internet access. Data collection must span operations to deliver the benefits of advanced analytics and support application availability. A reliable in-store retail customer experience frequently depends on WiFi and backups with 4G and 5G wireless technologies to help prevent disruptions to internet access. Bandwidth must scale to support in-store digital solutions like kiosks, tablets, POS systems and inventory devices. Smart cameras and sensors offer video analytics to reveal customer behaviors such as foot traffic patterns. All of this must be secured to protect customer privacy and transaction data in compliance with the Payment Card Industry Data Security Standard (PCI DSS).

Growth poses additional challenges. Introducing new stores or opening a pop-up site means adopting technologies that can add branch locations to the WAN in days, rather than the weeks it can take using legacy multiprotocol label switching (MPLS) connections. Uniform security and access controls must be established quickly for new users. The network also needs to accommodate high-capacity connections to e-commerce operations and distribution centers for a consistent customer experience.



of retail executives said in spring 2024 that they planned to increase their company's technology budget over the next 12 months.⁴





E-commerce demands

The pursuit of deeper, faster and more flexible interactions with customers is driving retailers to optimize their network planning. This includes expanding the integration of cloud resources and adapting bandwidth to accommodate seasonality and peak demand in a new multichannel environment. Building a network to deliver a reliable direct-to-consumer or [e-commerce customer experience](#) also requires planning for path diversity and other business continuity strategies. This enables high network uptime across websites, warehouse automation and distribution centers. Just as it must in stores, connectivity for other corporate locations needs to support regulatory compliance for financial data and safeguard against business disruptions online.

A comprehensive portfolio for retail networking and connectivity

Spectrum Business solutions for enterprise span connectivity, networking and security services to help retailers realize their goals as technology shapes the customer experience. We will partner with you to help reduce the total cost of ownership (TCO) for your network while meeting your unique bandwidth demands and [retail cybersecurity](#) challenges.

Our integrated unified communications solutions enhance your network further by empowering employee collaboration and supporting customer service. Across the managed network solutions, capital outlays for equipment are replaced by a predictable monthly cost that includes fully or co-managed services to free IT teams to tackle bigger priorities. We create

a blueprint for your network modernization, helping you address your priorities and performance needs consistently across locations.

Improve application performance on-site and in the cloud

Customers are unlikely to wait out disruptions to your network. Retail businesses rely on POS systems, inventory management technologies and other applications to run without interruption throughout the entire business day. In e-commerce, customers expect reliable connections to your platforms 24/7/365.

Safeguarding customers' digital experience requires careful management of bandwidth and network traffic. Retailers face complex routing among stores, headquarters, the cloud and the internet. Traffic for essential applications in areas like sales and inventory control can also compete with other applications that are less time-sensitive but are bandwidth-intensive, potentially causing slow application performance, jitter, lag and downtime.

Fast Growing Trees sees business blossom by embracing enhanced connectivity

Learn how Spectrum Business connectivity and advanced camera technology integrated with the network to support the growth of the world's largest online nursery.

[Read case study](#)

Spectrum Business helps address these challenges by bringing key networking services into all-in-one platforms that streamline management for IT and deliver the performance required for modern retailing. Your business can benefit from:

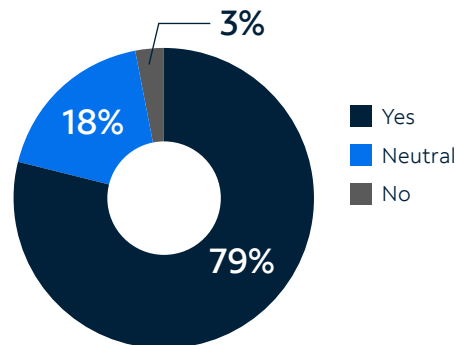
- **A software-defined wide area network (SD-WAN)** that can transport data directly from the store to the cloud or data center, reducing latency, eliminating bottlenecks and improving application performance.
- **Pre-provisioned branch technology** that can deploy WANs to new locations quickly, with support for 10,000+ branches and speeds up to 100 Gbps.
- **Networking that helps branches use the optimal network transport** for specific types of traffic.
- **Easy-to-add broadband, WiFi and wireless connections** to help accelerate retail branch deployments, including pop-up sites.
- **Support for retail IoT integration** to promote efficiency, enable automation and benefit from in-store analytics.
- **Low-latency and high-throughput network services and connectivity** to help retailers support distributed workers and architectures with multiple clouds.

Retailers can also rely on scalable, reliable connectivity to support their needs and those of their networks nationwide. Our **Dedicated Fiber Internet** helps manage growing bandwidth demands with fast, symmetrical internet service up to 100 Gbps. Brands can serve new locations easily and expand internet capacity with our nationwide reach, dense metro coverage and 100% uptime service-level agreement (SLA) guarantee,* with coverage all the way into the store or office. Additionally, Spectrum Business is connectivity-agnostic and multi-carrier compatible, allowing retailers to use multiple public and private network connections for greater flexibility.

Strengthen security and compliance

As retailers adopt multiple sales channels to grow and reach new customers, cybercriminals can find new vulnerabilities to exploit, with potentially severe consequences. In 2024, the average cost of a data breach at retail organizations reached \$3.4 million — an increase of 17% from the previous year.⁵ At the same time, urgent adoption of omnichannel capabilities to stay competitive has revealed a shortage of needed security expertise within many organizations.

Retail and consumer CEOs on whether cyber insecurity will have near-term organizational impacts:⁶



Spectrum Business solves this challenge with managed security solutions to safeguard access to the cloud, networks and applications — wherever users are located. Our managed WAN solutions integrate security with PCI DSS-compliant encryption and firewall configuration that help protect consumer data and guard against disruptions that jeopardize the customer experience and your brand reputation.



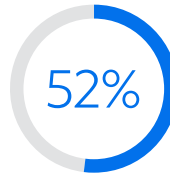
Spectrum Business security solutions

OFFERING	SECURITY BENEFITS
Enterprise Network Edge	• Safeguard operations with unified threat management (UTM) that includes application-based firewalls, intrusion prevention, URL filtering and automated updates, all built into the SD-WAN technology. • Enable secure, direct access to cloud-based applications through branch internet breakouts via SD-WAN for better performance. • Configure, manage and monitor security measures from a central platform and portal. • Integrate secure access service edge (SASE) to prevent unauthorized access to cloud and network resources from any user device or location. • Establish security protections across all locations — including public clouds.
Managed Network Edge	• Gain complete visibility of security events and threats, virtual LAN (VLAN) port configurations and traffic prioritization through a centralized, easy-to-use portal. • Rely on automated updates to keep pace with changing network requirements and emerging security risks and save IT time. • Create a built-in, always-up-to-date security profile with an integrated firewall, advanced malware protection and intrusion prevention. • Keep security policies consistent across all locations and automatically updated to meet regulatory needs. • Bring physical security into the network portal with integrated cameras and environmental sensors that support loss prevention, monitor environmental conditions and track shopper behavior and store assets.
SASE protection for user access	• Manage permissions for data or applications based on user, device and location with multi-factor authentication (MFA) provided by Secure Access with Cisco Duo. • Create a universal security experience regardless of user location, with cloud-based firewalls, secure web gateways and zero trust network access (ZTNA) provided by Cloud Security with Cisco+ Secure Connect.
Managed WiFi	• Provide secure wireless access for guests that is separated from the store network and from devices connected to inventory and POS systems. • Help prevent hacking of IoT sensors.
DDoS Protection	• Keep network and web properties online by automatically thwarting volumetric distributed denial of service (DDoS) attacks that can impact revenue and reputation.
Cloud Connect	• Rely on secure, reliable performance of public cloud applications with direct, Ethernet-based WAN edge connectivity to cloud service providers.

Simplify network administration

Successful retailers consistently reach for new ways to expand their store footprints, deliver better customer experiences and incorporate new technologies, online and in-store. Mergers and acquisitions can add more network demands, as can new branch locations. For many organizations, this can result in a complex network distributed across hundreds of locations, often without a standard network design and using multiple vendors, making management a challenge. Managed networking and [connectivity services](#) from a single provider and customized to retailers' needs can provide relief to stretched IT teams while increasing return on investment.

For example, all-in-one platforms from Spectrum Business enable retailers to dramatically simplify their network administration. The fully or co-managed SD-WAN helps enable cost savings through better allocation of bandwidth and a transition from costly MPLS connections. Hands-off management removes routine maintenance from IT to-do lists while the solutions' intuitive portals provide easy management of complex routing and enhanced network visibility to better balance and improve traffic performance across sites. Adding new locations is easier as well, no longer requiring an on-site technician thanks to an SD-WAN that provides policy-based remote configuration and access to corporate applications. With comprehensive visibility and integration, Spectrum Business partners with retailers to simplify today's complex, ever-changing IT demands.



of retailers say the pace of technology change is a top inhibitor to modernizing their stores.⁷

Better connectivity improves service at MAACO of Greensboro repair shops

When the owner of multiple franchises in a national chain of auto repair shops needed an easier, more reliable partner for its network, Spectrum Business delivered better performance, wireless redundancy, enhanced security and improved visibility into its technology.

[Read case study](#)



Spectrum Business can accelerate your retail modernization

By working with one trusted partner, retailers can move faster while reducing TCO, strengthening security and enhancing the customer experience. Our reliable, secure and enterprise-grade portfolio streamlines the networking technologies retail organizations need to thrive.

Whether the solutions are fully or co-managed, Spectrum Business offers comprehensive services customized to meet your unique challenges. Our experts eliminate installation complexity and execute professional integration services built around the optimal configuration for retailers' needs, backed by 100% U.S.-based support, available 24/7/365.

[Learn more](#)

*100% uptime SLA guarantee applies only to Dedicated Fiber Internet, Secure Dedicated Fiber Internet, Ethernet Services, Cloud Connect and Enterprise Trunking.

1. Abbas Haleem, "[Free and Fast Shipping Remain Consumers' Top Delivery Priorities in 2024](#)," Digital Commerce 360, September 13, 2024.
2. "[The State of Customer Engagement Report](#)," Twilio, 2024.
3. Ibid.
4. "[2024 Retail Technology Report: An Analysis of Market Trends, Buying Behaviors, and Future Opportunities](#)," Total Retail and NAPCO Research, September 2024.
5. "[Cost of a Data Breach Report 2024](#)," Ponemon Institute and IBM Security, July 2024.
6. "[KPMG 2024 Consumer and Retail CEO Outlook](#)," KPMG, December 2024.
7. Brian Kilcourse and Steve Rowen, "[Why the Retail Store Won't Survive as a 'Tech-Free Zone'](#)," Retail Systems Research and Jumpmind, April 2024.

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