WHITE PAPER

Enabling the Agile, Omnichannel Store with Cybera Cloud Managed SD-WAN
In the age of Amazon, it is unsurprising that a Retail Perceptions study found 76 percent of shoppers practice showroombing—shopping in a store but then buying online. However, 86 percent also practice webroombing—researching online and then buying in the store.

It may seem that online retailers have the upper hand, but the numbers tell a different story. Ninety-five percent of all retail sales are captured by retailers with a brick-and-mortar presence, and two-thirds of customers who purchase online use the store before or after the transaction. Modern shoppers prefer retailers that offer both an online presence and a physical presence. It's not an either/or world. It's a both/and world.

So if you were thinking that the future of retail belongs to the online retailers, welcome to the good news. The future belongs to the retailer that offers its customers an integrated omnichannel shopping experience, giving the advantage to brick-and-mortar retailers with a digital presence that is frictionless and presents a unified experience to the customer. That may explain why Amazon opened physical stores in 2016.

To create an integrated shopping experience, stores must embrace tools that consolidate and unify every interaction with the brand—mobile, online, physical—to serve up a seamless, frictionless, and personalized experience. Many retailers are deploying order tracking across channels regardless of whether it is an online purchase with an in-store pickup or in-store research with online purchase. These solutions are frequently augmented by personalization technologies that increase customer wallet share and create a win-win with proximity-based marketing such as beacons that alert in-
## Status of In-Store Technologies

<table>
<thead>
<tr>
<th>Technology</th>
<th>31%</th>
<th>12%</th>
<th>11%</th>
<th>9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-store shipping</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>WiFi for customers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-store pickup/return of web goods</td>
<td>29%</td>
<td>20%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Mobile devices for associates/manager</td>
<td>27%</td>
<td>20%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Real-time store monitoring/KPIs</td>
<td>25%</td>
<td>21%</td>
<td>21%</td>
<td>6%</td>
</tr>
<tr>
<td>Digital devices (signage, kiosks, magic mirrors, etc.)</td>
<td>19%</td>
<td>22%</td>
<td>17%</td>
<td>14%</td>
</tr>
<tr>
<td>Shopper tracking capability</td>
<td>16%</td>
<td>20%</td>
<td>19%</td>
<td>12%</td>
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<tr>
<td>Clienteling/guided selling</td>
<td></td>
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<tr>
<td>In-store video analytics</td>
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<tr>
<td>Location-based sensing for marketing/communication</td>
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- **Up-to-Date Tech in Place**
- **Started Major Upgrade**
- **Will Start within 12 Months**
- **Will Start within 12-24 Months**

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**Source:** RIS News 26th Annual Retail Technology Study

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The future of retail belongs to the retailer that offers its customers an integrated omnichannel shopping experience, giving the advantage to brick-and-mortar retailers. More specifically, the advantage goes to retailers with a physical presence and a digital presence.
store shoppers to relevant, custom-tailored offers and apps that empower sales associates by arming them with detailed product and promotional information combined with shopper history and preferences. The RIS News 26th Annual Retail Technology Study captures the state of in-store technology adoption, with enabling solutions coming together for the ultimate frictionless experience in guided selling that combines shopping efficiency with potentially better in-store “conversions”.

Sixty-one percent of shoppers have a better opinion of brands that offer a compelling mobile experience and forty percent will turn to a competitor based on a bad mobile experience. Currently, the online-only retailers make the most of mobile apps, but the omnichannel retailer that employs technology to enable the convergence of webrooming, showrooming, loyalty programs, sales associate tools, and mobile apps can create a seamless shopping experience, positioning their business for greater market relevance.

**TAKING THE BATTLE TO THE CLOUD**

For retailers choosing to implement a modern commerce strategy, the challenge becomes one of building an agile network that can power the increasing range of applications required to create a dynamic and personalized customer experience with minimal to no field level IT/security staff across all its locations. And just as importantly, this agile network must be able to preserve the significant investments already made in legacy networks while providing a bridge to these newer and next generation applications.

Such a network must support table-stake solutions such as point-of-sale systems, including mobile point-of-sale apps that are tightly integrated with easily-redeemable loyalty program mobile apps. Completing that equation also requires improved associate training, customer-facing apps, Wi-Fi and, inevitably, an increasing variety of IP-enabled devices and sensors that drive personalization i.e. Internet of Things (IoT).

However, every time an app or device is added to the network, the potential for security exposure also arises. As a result, the network must not only implement a sustainable PCI compliance solution, but go beyond checklist compliance to deploy the ubiquitous security a business needs to protect the brand and safeguard customer privacy.
This duality of creating a welcoming, frictionless and yet truly secure network can put IT and security teams on a collision course with marketing departments that are measured on the effectiveness of their customer loyalty and retention programs. Moreover, given the competitive landscape, an operator must create this secure and yet adaptive network quickly against a backdrop of tight margins.

We see three potential approaches:

1. Invest in in-house IT skills and networking expertise to manage an enterprise private cloud
2. Outsource IT/security to an experienced Managed Services Provider (MSP) for secure cloud WAN services
3. Augment in-house expertise with the skills and benefits offered by an MSP

For most retail locations, thin profit margins prohibit the investment in equipment and human resources required to manage a private WAN. They are better served by focusing on core competencies and growing the business. Consequently, evaluating an MSP that offers a secure cloud and software-defined WAN solution (secure SD-WAN) is typically the preferred alternative.

Until recently, “security concerns” were cited as the biggest obstacle to cloud adoption, but as the market has matured, concerns about security are being diluted by a “lack of resources and expertise.” That being said, retail outlets generally lack onsite IT and security staff. Consequently, they remain fertile ground for the types of security breaches that we routinely see in the press due to the volume

![Cloud Challenges 2016 vs 2015](image.png)

Source: Rightscale 2016 State of the Cloud Report
of cardholder data traversing their networks. An MSP that offers managed-cloud SD-WAN service can be one of the most secure, nimble and cost-effective ways to go beyond mere checklist PCI compliance to protect the brand against breaches and deliver an innovative shopping experience while preserving investments in legacy networks.

The shopping experience is undergoing a constant re-invention with immersive experiences enabled by new and varied tools for targeting and promoting engagement both inside and outside the store. As detailed earlier, strategies range from increasingly expansive consumer-focused solutions such as digital kiosks, mobile payment, loyalty programs, guest Wi-Fi, virtual reality/augmented reality and IoT, to corporate tools such as big data and geo-targeting with beacons. Frequently, these new applications and devices have no standardized security mechanisms and can open new security holes if they are not implemented with great care. However, if securely integrated into a continuous shopping experience across channels, these technologies can yield significant competitive advantages and measurable increases in foot traffic and customer loyalty.

Moreover, like retail operators, MSPs share a vested interest in assuring no downtime for services.

ASKING THE RIGHT QUESTIONS TO FIND THE RIGHT PARTNER

When sifting through the offerings for managed services, it can be difficult to make comparisons due to the variability of the architecture of the solutions. Because of the mission-critical nature of a WAN, the procurement process must drill down to the nuts and bolts of implementation, but the initial stages of evaluation can be streamlined by assuring that the offering includes certain essential attributes.

**Business agility**—Enables rapid and seamless deployment of new applications

**Defense-in-depth**—Combines multi-layered security with application segmentation; Segmentation isolates applications into their own virtual networks to prevent lateral breach propagation across applications, narrowing the scope and cost of PCI compliance

**Simplicity**—Reduces or eliminates the need for IT expertise at remote sites

**Centralized management and automated provisioning**—Maintains centralized, automated policy enforcement to eliminate error-prone manual configuration, enhance application agility, and propagate software and security updates across all sites
**Investment preservation**—Operates on any existing network, preserving legacy investments while supporting affordable and predictable scalability

**Business continuity**—Provides high availability of mission-critical operations through automated failover to a wireless network with 24x7x365 monitoring and customer support

A solution that delivers on these elements will result in a measurable reduction in total cost of ownership (TCO) that will contribute directly to increased profit margins while enhancing the quality of your core business.

### THE CYBERA SD-WAN SOLUTION

By simplifying the distributed network to the point of absolute zero touch provisioning at the remote site, Cybera helps retailers focus on their core business and reduce network costs without being distracted by IT and security concerns. The solution combines five unique elements:

- A centralized intelligent cloud that manages and automates the provisioning of remote sites at virtually unlimited scale, dramatically reducing TCO
- A simple on premise device that consolidates the functions of alternate and costly, multi-box solutions
- A platform that takes a defense-in-depth posture and micro-segmentation approach that goes beyond PCI compliance to safeguard company brands and protect operators and their guests from breaches
- A virtual overlay employing SD-WAN technology that rides on top of existing networks to rapidly enable future applications and quality customer experiences
- World-class services that are 365x24x7 with continuous monitoring and support

For more information about Cybera, visit www.cybera.com.

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1 Retail Perceptions study “The Rise of Webrooming: A Changing Consumer Landscape”
2 AT Kearney study “On Solid Ground: Brick-and-Mortar Is the Foundation of Omnichannel Retailing”
3 AT Kearney study “On Solid Ground: Brick-and-Mortar Is the Foundation of Omnichannel Retailing”
4 Latitude study “Next-Gen Retail: Mobile and Beyond”
5 RightScale 2016 State of the Cloud Report