EXECUTIVE BRIEF
SD-WAN: A Better Network for Omnichannel Retail

Omnichannel retail arose when your customers started actively embracing digital technologies in the shopping experience. New shopping habits, like ordering online and picking up instore, create new expectations for retailers. This pressure, in combination with a drive for growth, is making execution of the omnichannel strategy an imperative in the retail space. As retailers move to compete with online businesses, their IT organizations must facilitate a transformation in the shopping experience.

Omnichannel retailing succeeds when customers can seamlessly transition from online to mobile to in-store shopping and back. Today’s customers expect strong in-store Wi-Fi, quick checkout for products ordered online and interaction with rich media. Expectations for integration between online and offline channels has never been higher.

The bandwidth intensive technologies being introduced at retail locations exert additional pressures on the wide area networks (WANs) that support them. The network must be considered a core component of any technology transformation to ensure the delivery of an optimal customer experience. The advent of the software-defined wide area network (SD-WAN) offers a potential solution for your retail footprint. SD-WAN, which virtualizes network functions enables you to maximize bandwidth and flexibility so your instore experience keeps customers coming back.

The New Retail Landscape

The fundamentals of retail never change. The goal is always to sell the most high-margin products to the best customers and get them to come back, often, for more. The delivery of this kind of successful shopping experience, however, is evolving briskly. Customers have different expectations today. Indeed, the “State of Retail 2016” survey by Retail Touchpoints found that 58% of retailers found that changing customer preferences and behaviors were negatively affecting their businesses.

Opening new stores used to be a reliable way to grow. No more. Now, retailers are seeing omnichannel retailing as the strongest strategic mandate. In an earlier era, retail customers might interact discretely with stores over different channels, such as in-store visits, direct mail, catalogue, eCommerce, phone ordering and so forth. These channels are starting to merge.

For instance, a customer might see an ad online, share it with a social media circle, get feedback, go to a store to see the item and then order it online. Increasingly, consumers want to order over the web and pick up their merchandise in-store. Customers expect the experience to be seamless across all channels. This is omnichannel retailing.

Industry data backs up this trend. Cited in eMarketer, Retail Systems Research revealed that over 80% of retailers believe that consistent experience across multiple channels was “very important.” According to Google, 71% of shoppers who visit retail locations say that their mobile device has become more important to their in-store experience. A lot of money is at stake. Forrester estimates that $1.8 trillion in US retail sales will be “web influenced in-store sales.”
The Role of the Network in your Retail Transformation

The omnichannel retailing transformation affects virtually every aspect of retail operations, including IT and the network. The network is essential to creating new in-store experiences for customers, delivering on new connectivity needs for store personnel, simplifying the process of moving or opening new locations and cutting costs.

Implementing an omnichannel operational model requires you to have more agile networking infrastructure. You need this capability to do things like streaming video into store locations, running customer-facing mobile technologies and in-store tracking software. Other network-related features of omnichannel retail include innovations like virtual dressing rooms and video kiosks. You also need their networks to be more dynamic, efficient and secure so they can increase capacity without increasing costs.

Omnichannel Fulfillment
Consumers today want seamless purchase, shipping, delivery and returns. They may want to buy a product via a kiosk in the store and then take delivery at home. Most retailers can improve in this regard. Research shows that customers pick up in store and pick up in store spend a frustrating 58% of their time in the store waiting in a checkout line.

Omnichannel fulfillment requirements depend on flexible, high-performing networks on both the consumer and store operations sides of the transaction. The consumer expects a high-quality digital shopping experience, even when they’re inside the store. Store personnel need fast, reliable access to applications, some of which are likely cloud-based.

With Omnichannel, stores have also had to invest more in the supply chain. Opening or moving locations, as well as augmenting interactions with supply chain systems both benefit from more flexible and more easily managed networks.

Integration of Online and Instore Experiences
Omnichannel retailing requires launching new instore and online technologies, including things like Beacon, which enables mobile apps to detect signals in retail spaces. Retailers are looking to install virtual fitting rooms, self-service kiosks and video product demos. From the perspective of store operations, omnichannel could mean deploying new intelligent automation tools, such as tablet-based apps that enable store personnel to check stock or get information for upselling and cross-selling. All of these need robust network capacity. And having a secure network to support these new customer touchpoints is also paramount to protect customer information and transactions.

Delivery of Personalized Shopping Experiences
Delivering personalized shopping experiences is a good point of differentiation for omnichannel retailers. Making it happen requires sophisticated data analytics. For instance, if you can understand a consumer’s personal tastes and purchasing history, you can direct the consumer to attractive promotions and so forth in the store. Or, you can entice the consumer with special offers online that lead to an online purchase and instore pickup with personalized instore upsell, and so forth. Data analytics drives these capabilities, perhaps even in real time. And again, strong, flexible network connectivity is a key enabling factor.

Maintaining Security
Omnichannel retailers face a challenging cyber security scenario. They have multiple sites, each of which is a potential point of vulnerability for malicious access. A large number of employees, also widely dispersed and reporting to local managers, add to the risk of security policy violations. Then, with the addition of new channels and related application integration, the security picture becomes even more complex. For example, if employees can use personal mobile devices for work, hackers would have thousands of new, unmonitored points of entry into the retailer’s network. Any network solution for omnichannel retailer needs to provide robust security controls to mitigate these types of risks. And, it has to enable simple, pervasive definition, enforcement and monitoring of security policies.

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Networking for the Store of the Future

The digitization of the in-store experience introduces new complexities for IT departments to manage. IT teams must determine how to support more applications across the often large-scale store footprint. Infrastructure must be scalable to allow for future growth and secured against ever-growing cybersecurity risks. These pressures to transform are challenged further by demands to improve operating efficiencies across all areas of the organization.

Many enterprises have implemented hybrid wide area networks to augment bandwidth and reduce operating costs. While addressing capacity demands, this approach has also created new issues for IT teams because it requires not only managing a large number of end points, but also managing multiple vendors which can slow down response times when network issues occur or when deploying new technologies or locations.

Implementing an omnichannel strategy at your stores demands a more agile approach to network operations, with the ability to easily bring new stores online quickly and adjust bandwidth as new technology is introduced. SD-WAN now offers you a more efficient networking model that dynamically routes traffic across your hybrid network based on policies you set. This allows for better utilization of your network capacity and improved application performance for an optimal customer experience.

SD-WAN makes possible the kind of agility and efficient network management that omnichannel retailing requires.

- **Optimized bandwidth** – Combine your different network connections, regardless of type or provider, into a seamless, easy-to-manage network that can be tailored to each of your store location requirements. You can now support new application demands and adapt easily and cost-effectively as capacity needs change.

- **Simpler, faster changes to the network** – With software, not hardware, driving network functions, it’s easier to make changes based on business requirements. This gives stores the flexibility they need to move locations and modify connectivity based on analysis of omnichannel sales data.

- **Multiple carriers, one network type** – Managing network vendors gets easier with an SD-WAN. SD-WAN mitigates uneven service levels through flexibility in carrier choice and its ability to scale services using network virtualization. There’s also less reliance on restrictive carrier contracts.

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Achieve a Better Omnichannel Experience with CenturyLink SD-WAN

CenturyLink can fast-track your SD-WAN deployment by providing the hardware, software and expertise that you need to realize the benefits of SD-WAN immediately. Our solution makes it easy for you to get started by providing zero-touch provisioning, automated configuration and centralized management.

You have the option to take advantage of a managed or co-managed model. Figure 1 shows how CenturyLink deploys its Managed Services and equipment for SD-WAN. Both models eliminate the need for resourcing at the branch level, but a managed service can further streamline costs if you don’t currently have, or are unable to hire, expertise in house to monitor and manage your network.

CenturyLink SD-WAN delivers the following capabilities:

- **Turn up new locations and new services faster.** The centralized administration portal lets you turn up new services, new locations and adjust polices remotely for immediate results.

- **Dynamically route traffic across the best connection depending on real-time availability, performance or other custom policies.** This enables high bandwidth and rich interactivity in the store, which helps realize omni-channel strategy.

- **Proactively shape application transport policies** and network routes to cope with data spikes instead of having to upgrade circuits and bandwidth reactively which translates into greater agility for network operations.

- **Strengthen overall security, including network security.** The introduction of more instore customer touchpoints can increase security risks, but CenturyLink SD-WAN provides Next Generation Firewall services that are integrated with the SD-WAN solution, not bolted on. Couple this with traditional SD-WAN features such as encryption and tunneling, and your security solution becomes more robust and easier to manage.

- **Streamline costs.** With a monthly subscription service model, you can avoid capital expenditures and manage shifting capacity demands with ease. The ability to manage centrally also gives you greater visibility and control of your network with lower administrative costs.

Figure 1 - CenturyLink SD-WAN, fully-managed, showing CenturyLink Managed Services and equipment.
Conclusion

SD-WAN allows you to establish the agile network foundation that is needed to support your omnichannel strategy implementation at all store locations. The centralized control features let you turn up new stores quickly and launch new services at your stores, while maintaining optimal performance across the network. As a managed service offering, CenturyLink SD-WAN can streamline set-up, reduce management overhead and eliminate the need for capital expenditures so retailers can deploy faster and realize the benefits at their stores sooner. In an environment of increasing cybersecurity threats, the security features that are built into CenturyLink SD-WAN will also help retailers keep data secure at their most vulnerable locations.

Achieving a seamless omnichannel experience is a journey for retailers. Take the first step with a network that will help you deliver immediate enhancements and prepare you for whatever the future of omnichannel retailing may hold.

Learn more about SD-WAN and how it will benefit your retail transformation. Request a consultation with CenturyLink network experts today.

About CenturyLink Business

CenturyLink, Inc. is the third largest telecommunications company in the United States. Headquartered in Monroe, LA, CenturyLink is an S&P 500 company and is included among the Fortune 500 list of America’s largest corporations. CenturyLink Business delivers innovative private and public networking and managed services for global businesses on virtual, dedicated and colocation platforms. It is a global leader in data and voice networks, cloud infrastructure and hosted IT solutions for enterprise business customers.

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