



I D C A N A L Y S T C O N N E C T I O N



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The "No Compromise" Distributed Network: Enabling the Digital Transformation of Physical Retail Spaces

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As the retail industry digitally transforms to create better experiences for customers, network needs skyrocket. With an eye on ensuring great experiences, how do retailers implement "no compromise" networks — networks that perform well among all of the distributed connected spaces? Give customers and employees what they want: secure, stable, reliable, fast, and easy-to-use platforms that support business needs. High-performing networks form the backbone of the fabric of distributed retail enterprises, ensuring that customers and employees can, and want to, continually engage.

The following questions were posed by Comcast Business to Leslie Hand, vice president at IDC Retail Insights, on behalf of Comcast Business' customers.

- Q. The retail industry is digitally transforming to create better experiences for customers. How can retailers prepare the distributed enterprise for this revolution in consumer engagement strategies?**
- A. Underpinning the success of consumer engagement strategies are retail networks that ensure optimized performance of all distributed locations. Retail customers, as well as most retail employees, interact and engage in stores, and it simply is not acceptable to neglect or allow underperformance in stores. Poor-quality connectivity is bad for your brand, and it impacts the loyalty, frequency, and basket size of customers. Connectivity issues also affect employee satisfaction. Retailers need to make no compromises in all of the networked locations, essentially enabling equal performance in stores as in other enterprise office or warehouse locations.
- Q. What are the critical elements of a "no compromises" optimized network that enables a digital transformation of engagement strategies?**
- A. Consider, in your own experience, what constitutes a great connected experience; you likely responded with points that include seamless and frictionless interactions that are convenient and work perfectly every time. Consumers and employees have similar expectations. Components include:
- **Guest WiFi.** According to the 2017 IDC and RIS News *Customer Engagement Tech Trends Study*, 51% of retailers have already installed guest WiFi, 11% are upgrading, and 20% are installing within 24 months. Requirements include seamless connections, security, and management.

- **A network that is high speed, reliable and resilient.** Networks need to perform well so that the experience of doing "the job to be done" is seamless. This needs to happen regardless of whether a customer is shopping for competitive prices or an employee is helping a customer find the perfect complement to goods already purchased through a personalized mobile app.
- **Centralized management.** Remote management and monitoring of multiple sites is critical. Ideally, this management and monitoring occurs via a single-pane-of-glass user interface, which delivers centralized analytics, easy setup of customized/branded guest networks capable of professional enterprise-class capabilities, complete security, policy changes, and provisioning activities.
- **Secure connectivity.** Consumers and employees are very cognizant of security risks; they expect that their privacy and security will be guarded. Consumers will penalize an organization that does not provide secure connectivity with lost business. Employees will respond by leaving their jobs. In both cases, the organization will lose trust.

Q. Are there specific technologies with proven distributed performance advantages?

A. Retailers are evaluating cost-effective technologies that provide the foundation for communications/networks across the distributed enterprise. SD-WAN, cloud-managed networks, and managed services are providing a dynamic and secure WAN fabric for distributed enterprises. Best practices include:

- **Cloud-managed networks.** Cloud, as a delivery method, enables businesses to focus on business strategy. A cloud-managed network enables the most flexible and configurable platform possible to support business needs as they change.
- **SD-WAN technology.** SD-WAN uniquely enables enterprises to cost effectively optimize the utilization of cloud/SaaS applications providing a dynamic and secure WAN fabric for distributed enterprises. A special study from IDC highlights results from an extensive worldwide SD-WAN survey and finds that "bandwidth optimization," "consistent application security," "integration with existing WANs," and "improved automation and self-provisioning" are the top 4 motivators among respondents considering SD-WAN adoption (36%, 31%, 28%, and 28%, respectively).
- **Managed services for WiFi solutions.** Retail operators can offload network security, business continuity, voice, and connectivity into the hands of an experienced and highly skilled specialist. Retailers should look for partners that offer the following:
 - Reliable, secure, and flexible WiFi and voice communications
 - Remote management and monitoring of multiple sites (security, policy changes, and provisioning)
 - Automatic feature and security updates
 - Mobile app-based management and analytics
 - Easy setup of customized/branded guest networks and voice communications

Q. What challenges do retailers face as they architect the enterprise for high performance, scalability, and flexibility?

A. The greatest challenges facing retailers today when considering network and communications needs and technologies are as follows:

- **Keeping pace with the rapidly changing landscape.** Constantly changing business and technical requirements are making it harder to pin down network needs.
- **Project prioritization and coordination.** Retailers have a long list of projects that they would like to complete and not nearly enough resources in terms of both people and funding. Communications and networking needs should be evaluated in the context of multiple initiatives that require a new foundation in order to succeed.
- **Costs/benefits justification.** Retailers have to understand how to evaluate the need for modern retail architectures so that they can evaluate current and future requirements and costs/benefits completely. Cloud-managed services and managed services more generally may help the retailer justify the project sooner.

Q. As retailers digitally transform, how should they plan for the technologies that will increasingly put demands on the network (Internet of Things [IoT], mobile operations, augmented reality/virtual reality [AR/VR], computer vision)?

A. There is much that a retailer cannot clearly know today, but careful road map planning based on all known projects, as well as those that may be more visionary, will enable acceptable estimates for network planning. Some recommendations are:

- Apply a short-term needs analysis and a long-term needs analysis.
- Consider the importance of the digital transformation of your business on thriving into the future.
- Invest in capabilities that serve your customers best (recommend specific performance network requirements).

ABOUT THIS ANALYST

As vice president for IDC Retail Insights, Leslie Hand is responsible for the research direction for IDC Retail Insights and leads research related to the digital transformation of retail omni-channel operations. Hand works with retailers and technology providers on developing best practices and strategies, aligned with where they are and where they want to go, leveraging IDC quantitative and qualitative data sets.

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