



T E C H N O L O G Y S P O T L I G H T

How Technology Is Enabling Consumer Engagement

December 2015

Adapted from *IDC PlanScape: Omni-Channel Retail Execution Platforms for Now and the Future* by Leslie Hand, IDC #259196

Sponsored by Cisco

This Technology Spotlight examines the role of digital transformation in customer engagement and omni-channel retail. It also looks at the role of Cisco's enterprise networking solution portfolio, particularly Connected Mobile Experiences (CMX) and Intelligent WAN (IWAN), in the strategically important omni-channel retail market.

Introduction: The Role of Digital Experiences in Revolutionizing Omni-Channel Retail

Serving Today's Customer with Hyper-Relevant Experiences

The customer journey is no longer bounded by the physical store. Instead, it is dotted with interactions, influences, purposeful discovery, and experiences that culminate in the acquisition of goods (through purchase, lease, or borrow arrangements). If the adage, "the customer is always right!" still holds true — and most retailers think it does — then every retailer, whether it operates stores or not, must consider the impact of the omni-channel shopper on its business. After all, retailers tell us that the most profitable shoppers are those who shop across all available channels, spending on average at least 30% more than single-channel shoppers because of the added convenience and engagement of the physical-digital converged shopping experience.

Because brick-and-mortar stores continue to enable 90% of retail business in the United States, retailers with physical stores have an advantage: a prebuilt marketing and fulfillment network. When that network is combined with a digital presence and an omni-channel engagement strategy, retailers can execute and outperform single-channel competitors. The challenge, of course, is orchestrating and instrumenting the efficient movement of goods to the consumer while providing the expected service level, with all the additional overhead of an extended physical footprint.

Retailers Adapt

Retailers must create and execute strategies and tactics that engage each customer organically on a unique journey, accounting for the associated patterns that need to be understood, nurtured, and responsively engaged to succeed.

Omni-channel retail execution requires systemic change reflecting a significant shift in satisfying and engaging shoppers in "customer-centric journeys" and product data enrichment. The retailer's role in engagement changes as follows:

- The retailer becomes responsible for orchestrating omni-experiences and is seen as a *ubiquitous selling agent and relationship master*.

- Consumer loyalty and profitability are no longer a result of discounts that drain profitability but of *individualized relationships that shape engagement*.
- Enterprise inventory boundaries or constraints give way to *unbounded information regarding inventory availability*.
- Workforce budget minimization processes give way to *workforce productivity–enabling practices*.
- Product data does not always need to be enriched or duplicated internally because *product data value is amplified and enriched by external sources*.

Retailers Become Tech-Enabled Companies Responsible for Last-Mile Execution

A recurrent theme in conversations with retail leaders is that retailers are reorganizing analysis and execution at the individual customer level. To do this successfully for both the short term and the long term, retailers are driving the convergence of technology and retail business. Essentially, they are in the midst of a digital transformation, and they are designing and architecting business models and corresponding technical capabilities to continue to be successful. Acquiring an understanding of how technologies can deliver real-time insights (the right information/offer to the right person at the right time) is a great starting point. Key tenets of this transformation include:

- Retailers will win the war for wallet share by knowing and interacting with the consumer as well as engaging the consumer in hyper-relevant experiences. Engagement occurs in the physical store with human and digital interactions, on personal mobile devices, online, and through customer care centers. The interaction point informs the context and modality of the engagement, and data informs the exchange. Location analytics reveals the true story of the customer journey and product discovery processes.
- Retailers will become a ubiquitous digital agent to the consumer in both bricks and clicks touch points by applying analytics to omni-channel customer data, achieving deeper relationships, relevancy, and reciprocity. Predictive analytics leverages access to real-time information about the customer journey, historical shopping patterns, and interaction data to inform intelligent personalization and engagement.
- Retailers will build a foundation to constantly shape and grow customer relationships by implementing flexible, scalable, and sustainable infrastructure that enables real-time data capture and exchange as well as flawless digital interactions. Engagement relies heavily on mobile and cloud-based infrastructure, and it requires investments in wired and wireless infrastructure, security, and other digital interaction points such as displays, shelf talkers, price checkers, and fixed and mobile devices.

Benefits

The customer is the direct driver and beneficiary of successful omni-channel execution capabilities. Customers will spend less time researching and comparing product availability when they identify with their favorite retailer (a title earned through consistent hyper-relevant engagement) that provides added value and service.

Enabled by mobile and other in-store digital capabilities, leading retailers are arming both their consumers and their employees to find products, answer related questions, and facilitate purchases when inspiration or need strikes, significantly improving conversion and basket size and often profitability.

Functional areas within retail organizations also benefit from the actionable predictive insights. These insights make it easier to plan location-based assortments and product distribution strategies derived from a clearer understanding of what consumers are responsive to as well as what fails to drive conversion.

The customer is the direct driver and beneficiary of successful omni-channel execution capabilities.

Additionally, operational processes (work, service, and tasks) can be more efficiently orchestrated as information about available resources, products, and real-time customer needs is collected. Optimal recommendations can be digested and immediate action taken.

Digital Experiences Directly Linked to Improved Retail Performance

Retailers reported the following benefits from enabling omni-channel digital experiences:

- Hyper-relevant personalized engagement converts browsers to buyers, growing basket size and loyalty, which translates to higher sales and improved business performance.
- Increasing convenience and relevancy with contextualized engagement by employing analytics, geo-location, digital interaction, and real-time product data drives bigger customer baskets and average order value (AOV) and greater profitability.
- Digital employee-led engagement improves productivity, as well as employee and customer satisfaction, because immediate and informed interaction can lead to higher sales per square foot and sales per employee.

Trends

Retail Best Practices for Serving Today's Customer with Hyper-Relevant Experiences

Knowing the customer — and having the ability to personalize and contextualize interactions in both the digital realm and the physical realm — will enable business growth as retailers focus on building 1:1 relationships. To accomplish this feat, retailers must architect and implement omni-channel platforms that support growth across all retail outlets — brick and click — and provide the agility to determine individual consumer preferences and engage consumers with hyper-relevant content. Companies that fail to implement omni-channel congruent architectures and systems will struggle over time as consumer expectations become more rigidly aligned with best practice retail capabilities. Retailers that can sustain growth through this period of rapid transformation will constantly surprise and delight consumers by doing the following:

- **Listening.** Seek to learn from and engage consumers as they step through shopping journeys that have no physical or digital boundaries. Create an environment where listening is possible. Enable participation, interaction, and flexible adaptation to consumer needs.
 - **Example:** Retailers use historical data to inform planning and have become sophisticated in listening to Web-enabled clickstreams. Leading retailers have added capabilities to listen to "brick streams" — using video as well as indoor and outdoor geospatial location analytics enabled by wired and wireless devices.
- **Assessing.** Engage in an iterative process of constantly refining an understanding of contextualized customer needs by gathering data from all touch points that include bricks and clicks.
 - **Example:** Retailers gather, organize, and analyze data increasingly through touch points that include mobile devices, interactive digital screens, video cameras, shelf talkers, robotics, and virtual reality. An omni-channel view of the customer journey is necessary to maximize value, as is access to accurate data gathered in real time.
- **Acting.** Apply actionable predictive insights to each consumer touch point about place, context, product interests, and interaction response to inform a refined engagement strategy that responds to shifting or journey-specific patterns.
 - **Example:** Retailers create the right hyper-relevant action based on the individualized consumer shopping journey. Retailers that leverage location-based analytics to personalize interactions drive increased basket size and sales; profitability is often improved as well.

- **Engaging.** Persistently apply new consumer-facing engagement strategies that span touch points and enable inspiration, discovery, and conversion, building loyal relationships along the way. Address each of the steps along the customer journey to fully operationalize and optimize consumer conversion, frequency, AOV, long-term value (LTV), and relationship building.
 - **Example:** Retailers find that it is imperative to build and architect an environment where various engagement strategies can be tested and evaluated; easily deployed and supported; and then replaced as consumer needs shift. Minimizing complexity and maximizing value is a critical mantra. Some retailers get enough consumer location accuracy with WLAN systems, implementing more access points to improve the level of accuracy. Beacons add pinpoint accuracy but may not always be the starting point. Because of expense and consumer WiFi preferences, beacons are best suited to provide location augmentation rather than function as the primary location technology.
- **Learning and adapting.** Constantly refine strategies and apply technologies that bring the customer closer and drive stronger relationships.
 - **Example:** Retailers learn not only from what works but also, more importantly, from what doesn't work. They constantly evaluate and implement the appropriate technologies to engage and grow customer loyalty. Retailers report that the value is self-evident in improved customer metrics and business performance.

The digital transformation affecting retail is enabled by what IDC terms the "3rd Platform" of IT (mobility, cloud, Big Data, and social business applications). One of the major paradigm shifts currently playing out is the alignment of IT and line-of-business (LOB) priorities. IT and the network were once viewed as back-end support for critical operations (i.e., "keeping the lights on"). This is an important role but certainly not a transformation catalyst for marketing, customer engagement, and competitive innovation.

In the 3rd Platform era, the network not only keeps the lights on for retailers but also serves as an enabler of strategic initiatives to attract and retain customers as well as revolutionize how retail employees do their jobs. Additionally, IT has greater ability than before to tap into network intelligence to engage customers, improve security, and deploy the network more efficiently. Thus it is critical that IT and LOB stay aligned in preventing redundant parallel projects and inefficient shadow IT actions.

Considering Cisco

Cisco's ability to enable, secure, and manage store networks is a draw for retailers. Retailers are investing heavily in in-store WAN wired and wireless networks, and Cisco offers a viable portfolio of converged network solutions for retailers.

Cisco Connected Mobile Experiences (CMX)

Network location-based services (LBS) are among the most powerful tools for the network's elevated role in the retail sphere. These services use wireless network access (generally WLAN combined with Bluetooth, ZigBee, or LTE) to pinpoint a user's location and provide context-based communications and navigation, among other capabilities. In addition to providing for increased customer engagement, LBS applications collect valuable analytics to tailor future engagements and increase the return on investment (ROI) of the network. To this end, Cisco offers CMX for location insights and in-venue customer engagement. CMX, which leverages both WLAN and Bluetooth LE (BLE) beacons, is a platform that can help retailers maximize their enterprise mobility strategies through the following:

- Location-based services through WiFi and BLE
- Presence analytics to detect users to hyper-location with one-meter accuracy
- Seamless WiFi connectivity and engagement through a customizable captive portal

- Well-defined migration path from location analytics with increased accuracy
- Mobilization of mission-critical applications: CRM, POS, others

Each of these attributes alone adds value to the customer's and retailer's omni-channel experience. Together, they form a virtuous circle of benefits to both venue and consumer. However, the underlying network infrastructure needs routing capabilities to granularly prioritize the application traffic that delivers the most value to the business.

Cisco Intelligent WAN (IWAN)

Location-based services are just one example of a network application that assists retailers in their digital transformations. The growth of these applications can put tremendous pressure on the WAN. Thus, today's retailer needs routing optimized for 3rd Platform applications to allow for an omni-channel experience that is seamlessly connected in terms of security, voice, video, and wireless. The routing solution also must be highly scalable. Cisco's IWAN solution is a hybrid WAN architecture designed for application visibility and traffic optimization, and it includes intelligent content caching from Akamai.

CMX and IWAN are just two networking solutions that can help retailers thrive in the 3rd Platform era. Depending on a retailer's business objectives, other infrastructure solutions may be needed. In any case, retailers should consider the following attributes in any solution:

- Scalability with investment protection
- Cloud/virtualization-based infrastructure for greater business agility
- Lean branch convergence: Integrated compute and storage for ROI and total cost of ownership (TCO) benefits
- Application visibility and optimization to deliver a superior user experience
- Transport independent connectivity for greater flexibility
- Automated and simplified network management for reduced opex

As with any evaluation of network infrastructure, security merits serious consideration. The retail industry has many unique security concerns arising from the vast amounts of data organizations hold about themselves, their vendors, and their customers, including payment data and other sensitive personal and business information. Network security functionalities must be deeply embedded from core to edge. Moreover, network infrastructure solutions must be up to date with the latest PCI DSS compliance standards. This is another reason to consider a vendor such as Cisco, which offers an array of security tools for every part of the network and offers best-of-breed security standards for PCI compliance.

Challenges

The network carries rich data that needs to be extracted and analyzed to drive actionable insights. LOB should partner with IT to understand the potential and develop a road map that progresses to more granular customer insights and greater value. Given the benefits described, retail business can grow anxious to implement these solutions, and various challenges can emerge around the following:

- **LOB and IT alignment/partnership.** The challenge often is making sure that IT is involved in the selection and testing of potential solutions. Shadow IT projects emerge when IT isn't fully engaged. The business often moves forward because vendors tout pilot situations that run side by side with existing systems. The low overhead and reduction in internal resource constraints can be appealing but can be dangerous from a security and operations perspective. IT should be an integral partner on these initiatives.

- **ROI calculations.** Retailers often report challenges in getting buy-in to ROI estimates, but those that successfully drive these initiatives typically do one of two things:
 - Boldly go forward with the pilot without an ROI estimate, benchmarking savings, and improved sales metrics.
 - Estimate ROI by forecasting improved engagement and its impact on sales and productivity, followed by validation via pilots.
- **Ensuring scalable infrastructure.** Retailers must evaluate how solutions scale, compare references, and test systems with maximum loads.
- **Adaptive capabilities.** Retailers should not limit their thinking and requirements to what they want to deploy today. With the current pace of change, the network will likely be extended or leveraged in new ways in the future. LBS within one meter — what's next?
- **Connection to CRM and other applications.** Wireless LAN capabilities enable myriad applications in the distributed retail environment, but integration with loyalty, CRM, and commerce applications, as well as a variety of mobile applications, can be a challenge instead of being seamless and plug and play.
- **Security.** Both security and privacy will be critical technology investment areas in the coming years, and mobility and network security across the enterprise are critical customer touch points.

Conclusion

In our connected world, consumers have the upper hand because they have access to goods from anywhere, all the time. Purchase decisions are now predicated on factors such as digital access to product data and responsive, well-timed interactions. Any retailer that intends to improve the long-term value of individual customer relationships must hyper-personalize interactions with greater relevance, contextualizing engagement based on an understanding of customer behavior and real-time information. Retailers that engage consumers well will be rewarded with more loyal customers who spend more each time they shop and shop more often, thereby growing average order value and lifetime customer value. The ability to deliver these consumer engagement initiatives, however, depends on a network infrastructure equipped to accommodate the devices and applications through which customers interact with the business. To this end, retailers should consider solutions such as Cisco CMX and IWAN that provide both the infrastructure and the engagement tools to connect with today's omni-channel consumer.

ABOUT THIS PUBLICATION

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC Retail Insights, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC Retail Insights content available in a wide range of formats for distribution by various companies. A license to distribute IDC Retail Insights content does not imply endorsement of or opinion about the licensee.

COPYRIGHT AND RESTRICTIONS

Any IDC Retail Insights information or reference to IDC Retail Insights that is to be used in advertising, press releases, or promotional materials requires prior written approval from IDC Retail Insights. For permission requests, contact the IDC Custom Solutions information line at 508-988-7610 or gms@idc.com. Translation and/or localization of this document requires an additional license from IDC Retail Insights.

For more information on IDC Retail Insights, an IDC company, visit <http://www.idc-ri.com/>. For more information on IDC, visit www.idc.com, or for more information on IDC Custom Solutions, visit http://www.idc.com/prodserv/custom_solutions/index.jsp.

Global Headquarters: 5 Speen Street Framingham, MA 01701 USA P.508.872.8200 F.508.935.4015 www.idc-ri.com