Retail TouchPoints

Technology Preview

Exclusive Predictions From 21 Retail Executives



Petail Executives Share Technology Predictions For 2016

For the fourth year, *Retail TouchPoints* has asked a number of key executives from leading solution provider companies to share their insights on what to expect with new technologies and technology trends in the coming year. This year we have collected input from 21 executives who possess many years of experience in business and retail specifically.

Each executive was asked to answer the following question:

Which technology trend will impact the retail industry most significantly in 2016 (and why)?

For the 2016 report, we have separated the predictions into 10 different categories:

- Big Data/Analytics
- Customer Experience
- Digital Innovation
- Inventory Management
- IT Infrastructure
- Mobile and Social
- Omnichannel
- Payment/POS/Security
- Personalization
- Workforce Management

Let us know if you agree with these executives. Happy Reading!

Debbie Hauss Moham Slow

Debbie Hauss Editor-in-Chief

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Retail TouchPoints 2016 Technology Preview

Table of Contents

Big Data/Analytics

Cisco Consulting Services, Shaun Kirby, Chief Technology Officer

ThoughtWorks, Robin Copland, VP of Retail for the Americas

Customer Experience

Akamai Technologies, Caley Iandiorio, Commerce Industry Marketing Manager

Zendesk, Adrian McDermott, SVP Product Development

Digital Innovation

SAP, Lori Mitchell-Keller, Global General Manager, Consumer Industries

SAS, Alan Lipson, Global Retail Industry Strategist

ShopperTrak, Chetan Ghai, Chief Product Officer

Symantec, Anthea Louie, Sr. Director, Digital Business Leader

Inventory Management

NetSuite, Chad Goldsmith, Industry Principal — Retail Solutions

IT Infrastructure

EarthLink, Greg Griffiths, VP of Product Marketing

Mobile & Social

RetailMeNot, Marissa Tarleton, Chief Marketing Officer, North America

RetailNext, Bridget Johns, Head of Marketing & Customer Experience

TouchCommerce, Bernard Louvat, President and CEO

Omnichannel

Aptos, Noel Goggin, CEO and Culture Leader

Oracle, Jeff Warren, Vice President of Retail Strategy and Solutions Management

Salesforce, Shelley Bransten, Senior Vice President, Salesforce Industries Retail

Payment/POS/Security

Distil Networks, Orion Cassetto, Director of Rroduct Marketing

iQmetrix, Christopher Krywulak, President and CEO

Personalization

CitiXsys, Tim Barton, iVend Retail Technology Evangelist

Demandware, Rama Ramakrishnan, Chief Data Scientist

Workforce Management

Manhattan Associates, Kevin Swanwick, Senior Director, Product Management

Big Data/Analytics

Shaun Kirby

Chief Technology Officer, Cisco Consulting Services



THE NEXT STEP IN YOUR STORE ANALYTICS STRATEGY: SENSOR FUSION

Retail has entered an era of unprecedented competition and accelerated evolution worldwide. Stores in every category, brick-and-mortar and online, face larger and more unpredictable challenges than ever before: from digitization of goods and distributed manufacturing to autonomous delivery, service robots, and more realistic experiences, as disruptors such as virtual reality, 3D printing, drones and wearables take root.

While e-Commerce growth is outstripping physical store expansion, the in-store experience is still a powerful part of the shopping journey. The Internet of Everything (IoE) offers new opportunities to make physical shopping more engaging for the consumer and more lucrative for the retailer. By lighting up "dark assets," retailers gain new insights into shopper behavior and operations, impacting every part of the value chain from merchandising and sales to workforce optimization, shopper experience and service.

Dark assets are lit by instrumenting stores with sensors and actuators such as WiFi access points and shopping cart tags, beacons, video cameras, and even devices such as weight sensing shelves or humidity sensors. While these sensors provide valuable new insights, often the greatest advantage is derived from combining multiple types of sensors and data through "sensor fusion."

For example, where shoppers linger but don't purchase, pairing WiFi shopping path data with point-of-sale data can highlight opportunities to improve conversion. Likewise, combining video analytics of traffic entering the store with shelf sensing of the rate at which refrigerated goods are being picked up provides a more accurate forecast of staffing needs.

Real-World Savings

The business value of sensor fusion can be staggering — Cisco's studies show that a 1,500-store big box chain could save up to \$100 million per year in cashier cost, while reducing checkout wait times by up to half. In fact, we predict that IoE could end up eliminating the checkout line. IoE also helps solve the stubborn problem of on-shelf availability, where the largest retailers can lose more than \$1 billion annually.

In addition, sensor fusion is already being used to evaluate campaign effectiveness, optimize merchandising, and help suppliers and partners become leaders in their categories, as well as to reduce shrink and improve shopper and employee safety.

Product Data Affecting Consumer Choice

Merchandise provenance is an emerging driver of differentiation for retailers and can be a deciding factor for shoppers, especially the Millennial generation.

Sensor fusion is already being used to evaluate campaign effectiveness, optimize merchandising, and help suppliers and partners become leaders in their categories.

- Shaun Kirby, Cisco @CiscoRetail



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With IoE, even the minute details of products can be tracked from source to shelf.

For example, pasta brand Barilla has placed QR codes on selected boxes of pasta and sauces, which reveal a wealth of information captured through instrumentation along the supply chain. Shoppers learn about farms where wheat was grown, where it was processed, how much water and carbon dioxide were used in production and nutritional information.

The IoE is opening up vast new horizons for retailers to gain insights into their business and to transform operations and the shopper experience. Sensor fusion is leading the way toward exciting new applications that bring significant advantage to early adopters.

Big Data/Analytics

Robin Copland

VP of Retail for the Americas, ThoughtWorks



POWER TO THE PEOPLE! TECH GETS TOUCHY IN 2016

Like all trends, the pendulum swings wide before finding balance. For the past few years, technology has given us instant automation, real-time analytics, an app for anything and algorithms that do the thinking for us — saving time, money and resources. But what's missing? People. Although slow, costly and dependent on coffee for survival, humanity is suddenly hot again. Why? We the people remain at the very nuanced core of what it takes to drive retail inspiration, impulse and ultimately, loyalty.

In 2016, people and machines will work together to create more relevant, intimate and memorable customer experiences for deeper brand connections. We believe retailers that focus on blending the human touch with technology will stand apart from the rest.

Artificial Intelligence

Data-powered recommendations drive success across industries: 75% of Netflix views, 35% of Amazon sales and 50% of LinkedIn connections can all be attributed to a pretty simple "if...then" algorithm.

The "people who bought that also like this" suggestive selling scenario has been around for a while, but this doesn't take into account contextual needs and more nuanced personal preferences. Smart retailers will up their machine-learning game by ushering in a new wave of data-driven talent. Forward-thinking retailers are already making the shift:

- <u>StitchFix</u> has a 'Chief Algorithms Officer' plus a 50-person data strategist team
- <u>Lyst</u> revealed that half of its workforce are data scientists
- Warby Parker has a 'Director of Data Science'

How might this second generation of recommendations look? I believe a context-dependent view of the customer will trump the 360-degree view that has dominated retail media. This next generation of smart recommendations will consider immediate customer needs, constraints, preferences, lifestyle interests and stages in the path to purchase as well as current cultural influences. Recommendations of the future will consider upcoming event invitations, returns, color preferences, body measurements and more.

Technology To Augment Human Performance

Multichannel retailers are under pressure to create compelling reasons for customers to visit their physical stores. Technology will help elevate store interactions, reduce friction and help sales associates create enjoyable moments. Doug Stephens, also known as the Retail Prophet, observed that the future of retail would be defined by "less people, but more performance" and

In 2016, people and machines will work together to create more relevant, intimate and memorable customer experiences for deeper brand connections.

- Robin Copland, ThoughtWorks
@ThoughtWorks

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this rings true. Retailers will continue to automate mundane tasks to reduce overhead, but the people that remain will be expected to offer a much higher level of service. Unmotivated sales associates will disappear in favor of passionate brand ambassadors armed with technology to provide uniquely tailored experiences and build enduring relationships that translate to loyalty.

Technology will be a key ally — consider how an associate-facing app could be used to supplement that associate's customer and product knowledge, curate recommendations based on a customer's individual needs and improve store operations. Tools like clienteling apps will gain prominence, especially in luxury retail, so that associates can better serve customers and continue the brand relationship beyond the store.

Customer Experience

Caley Iandiorio

Commerce Industry Marketing Manager, Akamai Technologies



2016: THE DIGITAL IMPACT IN PHYSICAL STORES

A lot of has been said about the impact of digital in brick-and-mortar stores. Though shoppers are using their mobile devices everywhere and all the time, they're still visiting physical stores — with those devices in-hand. Innovative brands are capitalizing on these technologies by using them to **improve and personalize in-store experiences.**

One example of a brick-and-mortar company that is leading the in-store technology movement is the Hointer Beta Store based in Seattle, Wash. The cutting-edge store has developed technology that allows its shoppers to make a list of items to try on via its personal mobile app. It works by having shoppers place items in a virtual shopping cart, which are then delivered by robots to the fitting room within seconds.

The clothes that don't fit are simultaneously removed from the shoppers' virtual shopping cart, and shoppers can request a different size or piece of clothing via the app. The apparel can be purchased while the shopper is still in the fitting room via the store's tablet kiosk, and buyers can rate apparel by accessing the store's app.

The Hointer Beta Store is phenomenal in that it's really pushing the limits of what retail technology and robots can do. However, many brands are working hard to implement more streamlined apps that balance the personal touch of human interaction and the value of access to better information online. This can come in the form of better online site/in-store integration, stronger in-store networks, and more online tools to be used by both store agents and customers.

To stay ahead of the trends and minimize the risk of falling behind in the market, retailers must constantly innovate and improve their digital and mobile strategies.

The Hointer Beta Store is really pushing the limits of what retail technology and robots can do.

- Caley Iandiorio, Akamai Technologies @CaleyMI





Customer Experience

Adrian McDermott

SVP Product Development, Zendesk



MACHINE LEARNING MOVES CUSTOMER SUPPORT TO THE NEXT LEVEL

Recent improvements across the tech landscape are changing the way retailers think about their customers, whether the business is online, offline, or both. Heading into 2016, the most influential of these improvements, machine learning, is poised to change the way retailers support and address their customers' needs.

Machine learning has the potential to improve nearly every aspect of the customer experience — from start to finish. For retailers, the technology will fundamentally change the way they provide customer support by reducing effort for customers and businesses alike, creating a seamless, personalized experience for shoppers.

Through machine learning, retailers can use data-driven insights to build better long-term relationships with their customers. For example, machine learning will help retailers digest consumer behaviors to better understand their intent to buy and potential product fit. With this insight, retailers can make quicker business decisions to move product faster and drive sales. In addition, machine learning directly impacts customer engagement by creating the right experience at every point along the customer

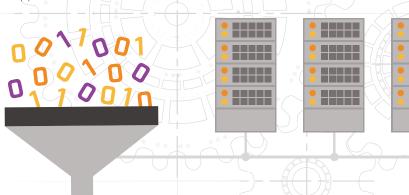
journey. Because customers are more interconnected than ever, their online shopping behaviors, clicks, and store visits provide a wealth of untapped data relating to their shopping experience. With machine learning, retailers can now quickly analyze this data and create a customer journey that better fits consumers' personalized needs.

From a support standpoint, machine learning will allow retailers to anticipate the quality and outcome of a customer support interaction, revealing best practices to reduce customer effort and increase engagement. This year, Zendesk announced Satisfaction Prediction, the first machine learning and predictive analytics feature for customer satisfaction. The feature uses historical satisfaction survey results to predict which conversations are at risk of a negative outcome before they occur, allowing organizations to take a datadriven approach to customer service.

Machine Learning will fundamentally change the way retailers provide customer support by creating a seamless, personalized experience for shoppers.

- Adrian McDermott, Zendesk @AMcDermo





Lori Mitchell-Keller

Global General Manager, Consumer Industries, SAP



CREATING A DIGITAL CORE TO BRIDGE THE CONNECTIVITY GAP

2015 was undoubtedly "The Year of the Customer." Thought leaders were asked to contribute their ideas about the retail trends we would see in 2015. All efforts were focused on understanding the customer — their behaviors, their demands and even how they acted on social media channels. Our goal was to create some kind of certainty and gather concrete insights from the terabytes of data piling up.

But, like the proverbial iceberg, there is so much more below the surface. Our view of the customer is still limited by technologies and systems that aren't truly connected. The SAP Retail Index survey by Oxford Economics found that "only 37% of survey respondents currently utilize internal and external data, such as social media, to achieve a 360-degree view of their customers." And without a timely, full view, we can't deliver a true omnichannel brand experience.

This year, retailers will begin to address this breakdown in connectivity through advanced digital solutions in order to work toward true real-time customer visibility. Embracing a digital core in order to gain a full view of the customer will define 2016 and the years to come.

First, retailers need to be committed to change. Unless the whole organization (from the top down) is committed to digital initiatives, chances of success are

low. Second, most retailers still lack the right technology infrastructure to make digitization a reality. And to become a digital enterprise, you need a digital core.

So What's A Digital Core?

The digital core is the foundation of a retailer's digital value network. It connects every aspect of internal operations in real time, including key areas of the value chain: customers, workforce, suppliers and even Internet-of-Things connection points.

Creating a digital core allows companies to avoid developing complex procedures to get around technology limitations. Instead, advanced ERP solutions can enable real-time data and business processes to help streamline workflow, expedite decision-making and better predict business outcomes — key for integrating collective data sets, digging deeper into the customer persona and delivering a true omnichannel experience.

Predicting business outcomes based on operational data and a broad set of customer behaviors also gives retailers the level of insight needed to have more confidence to enter new markets, onboard new brands or capabilities, or launch new campaigns in a fraction of the time required previously.

Additionally, applying predictive analytics and simplifying processes helps empower the workforce and offers support for

Embracing a digital core in order to gain a full view of the customer will define 2016 and the years to come.

- Lori Mitchell-Keller, SAP @LoriMitchellKel



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delivering a better user experience for employees – allowing them to make onthe-spot decisions, exceed expectations, and gain productivity and agility.

Harnessing the power of data is also crucial for improving collaboration with suppliers. Through a transition to a digital business model, retailers can mitigate supply risks and shifts in demographics to address previously unmet consumer needs. Integration into the network ensures companies tap into the vast data system connecting millions of partners throughout the supply chain, accelerating their ability to meet customer needs as they shift along their omnichannel path.

Through real-time data collection, companies can finally get the 360-degree view of customers that they need to track the shopper's omnichannel path to purchase and respond to experiences while shoppers are in the moment. This can help retailers sustain business.

Alan Lipson

Global Retail Industry Strategist, SAS



IOT REPRESENTS BENEFITS FOR RETAILERS AND CONSUMERS ALIKE

We talk about the Internet of Things (IoT) as though it's a new technology. In truth, the IoT is a collection of many different technologies that have been around for years. Those technologies working together, though, is new, and that's where the benefits for retailers and consumers begin.

We live in a smart world today. Smart phones. Smart homes. Smart cars. Smart watches. The list seems endless. We put sensors on everything. Sensors in the retail environment have been around for years. But the ability of those sensors to communicate data in a way that retailers can act upon it, even while the data is still in motion, is game-changing.

Sensors represent the heart of the IoT, and they create an endless and immediate data conversation. Until action is taken on those conversations, though, retailers gain nothing. Seeing value from IoT data means involving analytics.

Analytics are the brain of the IoT allowing retailers to process data while it's streaming toward them. Analytics gives retailers the ability to make sense of data, gain insights, make decisions and take action.

Two areas of retail businesses are primarily affected by sensors and the IoT today: consumer interactions that allow retailers to engage with timely support and promotions, and operational interactions that allow retailers to manage inventory, achieve better service levels and maintain product quality.

Consumer interactions are getting most of the IoT attention right now. Smart phones and beacon technologies allow retailers to engage the consumer in the store presenting multiple layers of value. But there are additional opportunities waiting for the retailer to see IoT value. Behind the scenes, the IoT also can help a retailer manage inventory, understand traffic flow through the store, help staff identify where and when to interact with consumers, assist with managing store equipment, etc.

Operational IoT is where much of the low-hanging-fruit lives for retailers now. But, like any other game-changing technology, the IoT and the data it produces is of no value unless it's analyzed and interpreted. Retailers with analytical fluency will know how to interpret and act upon IoT data to run the business more efficiently and realize breakthroughs in consumer engagement.

Analytics are the brain of the IoT allowing retailers to process data while it's streaming toward them.

- Alan Lipson, SAS @SAS_Retail



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Chetan Ghai

Chief Product Officer, ShopperTrak



INDOOR LOCATION TECHNOLOGY **MOTIVATES SHOPPER ENGAGEMENT**

The retail landscape is changing rapidly, driven by consumers' shifting expectations and a growing penchant for technology. Today's shopper is no longer just purchasing a product, but demanding an experience. They are also increasingly leveraging mobile technology to inform their shopping and spending habits. As a result, retailers need to thoughtfully integrate digital into their operations.

One key piece of the digital puzzle, which will play a meaningful role for retail in 2016, is the use of locationbased technologies to engage with a shopper throughout their journey allowing a retailer to directly connect with a shopper via their mobile device based on time and proximity.

There are several stages during the path-to-purchase where the use of location-based technologies to deliver personalized content enables a retailer to earn loyalty, convert behaviors into revenue, and grow market share. Here are three:

1.At home: While a shopper is browsing on their mobile device, retailers can use push notifications to deliver product information. The purpose of this message is to inform and to put the retailer top of mind when the individual goes shopping.

- 2.On-the-go: When a customer is driving near a specific store, a retailer can share a message about a sale on products that the shopper has previously purchased. This incentive is relevant on many levels, including location and past purchasing habits, and helps to influence a store visit.
- 3.In-store: As a shopper enters a specific aisle, they are alerted to relevant product reviews that help to best determine the ideal item and simultaneously motivate a purchase.

Beyond the ability to drive shopper engagement, location-based technologies provide retailers with the capacity to gather a variety of meaningful analytics - including draw rate, dwell time, zone performance, and customer loyalty — which all make a lasting impact on the bottom line.

By pushing a notification to a shopper and monitoring the outcome, a retailer can now understand the relevancy of their messaging, the effectiveness of their promotional efforts, as well as how their store is being shopped. Did it drive a shopper in-store? Did they visit the specific aisle? Was the featured item purchased? Each of these questions can be answered — unlike ever before

Location-based technologies provide retailers with the capacity to gather a variety of meaningful analytics including draw rate, dwell time, zone performance, and customer loyalty.

> - Chetan Ghai, ShopperTrak @ShopperTrak



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Ultimately, retailers should select technology and determine its level of pervasiveness based on a few factors that include: their relationship with core shoppers, demographic information, diversity of product mix, complexity of the physical environment, and their established infrastructure. The key is finding a solution that optimizes some, or all of those aspects.

Anthea Louie

Sr. Director, Digital Business Leader, Symantec



LEVERAGING B2C LEARNINGS FOR B2B SUCCESS

Today's consumers are experiencing an increasing convergence of their business and personal lives, especially when it comes to their purchasing patterns. As a result, business decision makers have higher B2B customer experience expectations based on their online experiences as consumers. Best-in-class online retailers are successful because they do three things particularly well: Their web site design is clean with a cohesive brand experience; their audience is welldefined and targeted, allowing for an optimized customer experience; and they have a history of established trust with their customers. As we head into 2016, it is critical that B2B businesses incorporate these B2C learnings and parlay that knowledge into their own businesses.

Online retailers understand that design and user experience counts, and this applies to B2B businesses as well. Web site design dictates the buyer's journey and shopping experience. It's the first impression of your brand and sets the tone for what a customer can expect from your business. A convoluted web site with a messy customer experience doesn't make consumers confident that the experience will improve post-purchase. Your web site's design and experience is your opportunity to establish your brand and set expectations for the relationship customers can expect from you.

Understanding your audience is also integral to building a successful B2B customer experience. U.S. consumers will spend an estimated \$327 billion online in 2016¹, an important figure for B2B online retailers to consider. After all, their decision makers are people, not corporations, and their personal online shopping experiences influence how they shop for their business.

Understanding the trends that influence how your customers shop with online retailers and what is important to them is critical in making sure your web site meets, and even surpasses, their expectations. For example, Norton Shopping Guarantee was designed with this issue in mind and the understanding that creating a customer-centric shopping experience both before and after purchase is not only a best practice, but good for business and for instilling trust with your customers. Norton Shopping Guarantee merchants have seen higher conversion rates (+7%), repeat purchases (+5%) and customer satisfaction after implementing this product on their web sites.

A 2014 eConsultancy study found that 50% of consumers abandon a purchase because they do not trust the web site or have security concerns. Ensuring that your web site institutes best practices like utilizing Extended Validation (EV) SSL certificates, making your security and privacy practices easy to find and

It is critical that B2B businesses incorporate B2C learnings and parlay that knowledge into their own businesses.

- Anthea Louie, Symantec @Symantec



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understand, and utilizing appropriate trust seals are critical signals to impart trust with your customers. In fact, these indicators are integral to making sure your business assuages any consumer fears about their data's privacy or security being an issue on your web site.

I believe that 2016 will find a significant increase in both consumers' expectations for their online shopping experience as well as business decision makers' expectations when evaluating potential B2B solutions. By ensuring that your web site takes all of these factors into consideration, fully addresses your customers' needs, and establishes trust—you're well on your way to making 2016 a successful and profitable year.

Inventory Management

Chad Goldsmith

Industry Principal – Retail Solutions, NetSuite



THE DEATH OF THE INVENTORY SILO AND THE REBIRTH OF OMNICHANNEL SALES AND SERVICE

The use of the term "omnichannel" has reached an all-time high in retail. This level of buzzword status has also induced some confusion, and to some extent discussions in the industry as to whether the term is relevant at all anymore.

Some of the confusion stems from the term "omnichannel" being primarily used by industry experts to describe customerfacing personalization online and in the store. But retailers are struggling with the fact that no level of personalized service will matter much to a customer if she can't reliably find out whether what she wants is available, and whether she'll receive it when she needs it.

In order to compete, some retailers have been convinced to deploy quick-fix solutions to give the appearance of a unified omnichannel business. This approach is rarely successful. This is because, at its core, a successful omnichannel strategy requires first, attaining a single view of inventory in order to drive a seamless shopping experience for the customer.

Retailers are finally realizing that their customer-facing issues are born of back-office ones. Those who have experienced a stock-out in one channel, but have

underutilized inventory in another, understand that the solution is not to actually unify channels, but erase them in the customer's eye.

Retailers need to abandon quick-fix solutions that don't address the real issue of a lack of a single view of enterprise-wide inventory, and instead try to take the fast track to success by gluing disparate systems together in an attempt to replicate a seamless customer experience. If the back end is fragmented, there's no way to deliver reliable data on the front end. To execute a seamless experience, retailers need to harmonize customer, order and inventory data on one platform to be utilized by customers and employees.

A unified system blurs channel distinctions — and also the dated practice of attributing sales separately to individual channels and departments. This is in the omnichannel retailer's best interest. Competition between channels only inhibits a successful omnichannel strategy: one that allows the customer to buy anywhere and return anywhere. Not only are customers increasingly demanding this option, it's a better method for retailers to present cross-sell and upsell offers.

Competition between channels only inhibits a successful omnichannel strategy: one that allows the customer to buy anywhere and return anywhere.

- Chad Goldsmith, NetSuite
@NetSuiteRetail



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Back-office enhancements also position retailers for quick-win projects that deliver strong ROI, such as advanced order management. Better orchestrating order fulfillment — for example, by shipping from the location closest to the customer — can provide huge cost savings for the retailer and drive better customer service and loyalty.

Whatever the new buzzword ends up being, the move away from inventory silos toward omnichannel principles will be the biggest technology trend impacting retailers in 2016

IT Infrastructure

Greg Griffiths

VP of Product Marketing, EarthLink



DEPLOYING HYBRID NETWORKS WITH SOFTWARE-DEFINED APPLICATION PERFORMANCE

Over the last several years, retailers have focused on protecting their brand by staying ahead of PCI requirements, deploying technology in the store that allows them to engage their customers, and shifting resources within the IT department from day-to-day maintenance to innovation. This has led to a full application roadmap designed to execute their strategy for enhancing the customer experience via multiple, integrated channels.

Yet there is one big problem. When I ask the simple question, "Is your network ready?", the overwhelming majority of responses fall into just two categories: No, and I don't know. In fact, if I follow up with the question, "Does the cost of upgrading your wide area network (WAN) sometimes limit the ROI and delay approval of key projects?", there is only one answer — yes.

This storm has been building for a long time and it is easy to understand its impact when you look at the data. First, retailers (especially small box) are bandwidth constrained, and the demand for bandwidth is doubling every 18 months.

Second, the move to cloud-based, best-in-breed applications is accelerating,

which exponentially increases the need for high performance on the network. And yet, the vast majority of CIOs can't provide service level objectives to their internal customers at the application level. They can't "dial in" performance of critical applications, and most don't even have visibility into application performance. That's a perfect storm when you consider all the hard work and resources that have been spent transforming IT into a strategic business driver.

In short, we have a good roadmap for where we want to go, but traditional network designs prevent us from doing so in a cost-effective (show me the return) manner.

So it's time to re-think the WAN, and fortunately new hybrid designs coupled with new software technology are now available. They solve the challenge by allowing multiple broadband circuits to work together, using Dynamic Path Selection while improving performance levels on a broadband Internet circuit to levels that are on par with traditional MPLS designs. And they give you visibility and control over application performance. It's affordable and you don't have to tear down your skinny MPLS T1 network to get started.

When I ask the simple question, 'Is your network ready?', the overwhelming majority of responses fall into just two categories:

No, and I don't know.

- Greg Griffiths, EarthLink @EarthLink

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At a conference I recently attended, a speaker suggested that one equation for business success was how quickly a company can leverage new technology choices, multiplied by the impact those choices have on the customer experience. Hybrid networking with software-defined application performance will have a huge impact in 2016 because it lays the foundation for this equation.

Mobile and Social

Marissa Tarleton

Chief Marketing Officer, North America, RetailMeNot



2016: YEAR OF THE MOBILE-FIRST MINDSET

Mobile is the single largest disruptor in retail since e-Commerce, and it became the consumer's first screen in 2015. It is dominating influence across all channels of retail (desktop, in-store and mobile commerce) and the trend will only increase. I often hear fellow marketers say that they are not investing in mobile because it doesn't convert. We know that mobile influences conversion instore, on desktop and on mobile, and I've seen the data to help make this investment decision clear. With more than 70% of consumers starting their shopping journey on mobile, it's critical for marketers to reach consumers on their preferred device.

Mobile Marketing Mix

Mary Meeker of Kleiner Perkins Caufield & Byers released a data point in 2015 that is just astounding: there's a \$25 billion mismatch in the amount of time consumers spent in mobile media versus a significant underinvestment in mobile advertising. Retailers should increase their mobile marketing budgets to close this gap. Across all digital marketing spend, roughly 50% should be focused on mobile channels.

Targeted Mobile Marketing

Investing in the right customer segmentation, retention infrastructure and content to enable personalization is critical to having a premier customer experience on mobile. Honing in on the

actionable data is the cornerstone of personalization. Serving up the right content, at the right time and in the right place results in a positive experience for consumers and is powerful for marketers to cut through the clutter.

Leveraging Mobile Partnerships

There's no doubt that retailers should have a mobile optimized web site. However, there's a great debate about whether retailers should build a mobile app or borrow mobile moments. Consumers are selective about how many retailer apps they will download and use. As many as 60% of consumers who use a smartphone to shop online have fewer than two retailer-specific apps on their phone. The retailers who don't build an app or are struggling with app downloads can still reach mobile consumers by establishing relationships with third party marketing partners. Objectives include driving sales generation and repeat-customers revenue, increasing average order value (AOV), acquiring new customers and reengaging lapsed consumers.

Cross-Channel Tracking

Effective cross-channel tracking is critical for analyzing mobile marketing spend. Employing mobile coupons, especially with unique codes, is one of the simplest tactics for tracking mobile's influence on in-store sales and in other channels. When leveraging partners

We know that mobile influences conversion in-store, on desktop and on mobile, and I've seen the data to help make this investment decision clear.

- Marissa Tarleton, RetailMeNot @MBTarleton



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to extend mobile reach, attribution vendors are a great resource for connecting customers across platforms and in-store. Lastly, look to the benefits of attribution consultants like Adometry, Placed or C3 Metrics to help you better understand how much more powerful mobile can be over other traditional forms of advertising.

Retailers who embrace this era of mobile will be better positioned for future success. Here's to the Year of Mobile!

Mobile and Social

Bridget Johns

Head of Marketing & Customer Experience, RetailNext



INTEGRATING MOBILE WITH CRM TO IMPROVE THE SHOPPER EXPERIENCE

There's no denying that 2016 is shaping up to be the 'year of shopper experience,' led in many ways by the maturation of mobile in retail worldwide. Mobile devices are an increasingly important shopping tool for both shoppers and retailers, and in reality mobile has become the new front door for the store. Most in-store purchases are pre-researched and retailers must meet the increasing expectations of the shopper every time she enters their stores.

Effective mobile engagement will become a competitive differentiator for brands, as shoppers are using mobile devices as 'tour guides' when they pursue their shopping journeys, and shoppers are inviting retailers to come along for the ride.

Cutting edge in-store retail analytics platforms now integrate full suites of mobile engagement solutions, and by drawing in video analytics data and data streams from beacons and other sensors, they produce real-time, actionable insights into shoppers and their shopping behavior. Synching with CRM and other systems, these mobile engagement solutions deliver targeted, relevant communications tailored and personalized to each shopper.

With stores merchandising thousands to hundreds of thousands of SKUs, it's important to highlight the critical few that are most relevant to the shopper, understanding that a) each and every shopper is different, and b) even the same shopper has different needs and expectations at different times. Those retailers who recognize and capture those opportunities will be the retailers rising to the top.

When a retailer can integrate their mobile engagement strategies with CRM and in-store analytics, it can deliver more timely, more relevant and increasingly personal communications and offers, and that allows it to better engage the shopper on her terms. All of this leads to that euphoric shopper experience — getting her what she wants, when she wants it and at the price she is willing to pay.

Mobile has become the new front door for the store.

Bridget Johns, RetailNext
 @BridgetJohns



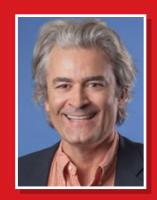
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Mobile and Social

Bernard Louvat

President and CEO, TouchCommerce



HITCH YOUR WAGON TO A TECHNOLOGY STAR

"The greater danger for most of us isn't that our aim is too high and we miss it, but that it is too low and we reach it." ~ Michelangelo

The future of customer conversation technology involves smartphones, instant messaging, and social platforms. Certainly, those channels are reality right now, but a large portion of the population still has a finger curled around the familiar — waiting on hold to speak to a representative, even while staring at the "click-to-chat" button on the brand's web site. My belief is that in the coming year, these customers will finally let go of the status quo and turn their preferences to newer technology when they want to interact with a brand.

Although customers are still clinging to voice calls to contact brands, they've pretty much abandoned the traditional phone call in other areas for tiny type pads and social media communities. That's why some businesses are leveraging messaging apps or SMS native technology to have more relevant customer conversations. As texting and instant messaging becomes the communication of choice, more and more brands will see their need to move into the future and welcome their customers as they arrive — instead of following behind their customers and arriving too late.

Most brands have social media presence and listen to consumer sentiments. But there is more to social engagement than just having a Facebook page or Twitter handle; brands are starting to conduct business through social — from selling products to resolving customer service issues.

However, there are many times in which a brand may need to tactfully move a conversation into a more private venue. Yet, how do they do that without taking away from the customer's initial desire to make contact via social platform? Part of the reasoning for using social media to interact with a brand is the texting style of communicating and the fact that the customer is most likely already on a social site, so making contact with a brand that's on the site is easy and convenient. Some companies disregard the customer's rationale for being in a social media platform and will escalate their conversation to a phone line, instead.

New technology should leverage the power of social media in making personalized, real-time customer experiences. Our TouchSocial solution uses innovative APIs to seamlessly make this contextual connection from the social site to a more personalized, targeted environment such as live chat on the brand's web site, in which the customer is still communicating in the same fashion and receiving immediate assistance.

As texting and instant messaging becomes the communication of choice, more brands will realize the need to move into the future and welcome their customers as they arrive.

Bernard Louvat,
 TouchCommerce
 TouchCommerce



Updated technology solutions should allow retailers to connect their customer service agents with their customers via SMS chat, in which a chat can be conducted through short messages on mobile, without having to go to the brand's web site to open a chat window. Additionally intelligent virtual assistants (IVA) will blend live and automated interactions to improve engagement KPIs. And live video chat combines the digital experience customers crave and visual contact they may need.

Omnichannel

Noel Goggin

CEO and Culture Leader, Aptos



THE TOP-LINE CLOUD CONVERSATION

Over the past year we've seen a shift (or pivot) in the retail cloud conversation to its role as an enabler of top-line growth and business innovation.

Just a few years ago the cloud dialogue was focused on time and cost savings. While no one will ever complain about the cloud enabling them to save time and money, the cloud conversation becomes infinitely more strategic when focused on how it enables retailers to both engage customers differently and fuel growth.

For retailers, growth and customer experience top the business agenda; failure in either area can have devastating consequences. While it might be overkill to state cloud is a "do or die" imperative for retailers, we are definitely at a point where cloud is separating the retailers that "try to do" from those that "get things done."

There are significant benefits to be gained by retailers living in the cloud; what's more, these benefits can all be achieved in a timely and minimally disruptive fashion:

Speeding Deployment: Retailers leveraging the cloud see tremendous technology project speed-to-value — achieving ROI in months, not years. This deployment speed is vital against the backdrop of a rapidly changing retail technology landscape and escalating consumer expectations.

Upping The Strategic Value-Add Of IT:

Cloud reduces the need for IT teams to maintain infrastructure, giving resources

more time to focus on strategic, innovative "break-through" technology projects supporting revenue and market share growth.

Addressing The Omnichannel Experience Imperative: The vast majority of retailers have underdeveloped capabilities to support true end-to-end cross-channel shopping experiences. The cloud can help break down the walls between channels to create a seamless, engaging shopping experience for customers and an open-channel business for retailers.

Gaining Competitive Advantage: In a recent Harvard Business Review survey, 74% of respondents said that cloud computing has provided their organization with competitive advantage, Retailers that are "in the cloud" gain an agility and time-to-value advantage on the competition that cannot be underestimated in today's fast-paced and challenging retail environment.

Accommodating Peak Demands With Intuitive Scaling: The cloud gives retailers the ability to optimize and consolidate architecture to scale efficiently and cost-effectively, as well as add computing capacity on-demand. This provides unparalleled responsiveness and elasticity to effortlessly accommodate transaction spikes during peak periods.

Markets: IT configuration and deployment has traditionally been taxing for retailers wanting to expand into new markets.

We are definitely at a point where cloud is separating the retailers that 'try to do' from those that 'get things done.'

Noel Goggin, Aptos
 @Aptos_Retail, @NoelGoggin



With the cloud information is readily available and updatable across countries, streamlining IT overhead to expand into new markets while supporting updates seamlessly.

Providing Agility And Adaptability To Accommodate 'What's Next': As

the Internet of Things and other new technologies and trends shape the retail landscape, the cloud enables retailers to move and respond rapidly without heavy up-front investment — reducing opportunity cost and risk — and "future-proof" technology infrastructure to position themselves to tackle what's next.

By embracing the cloud, retailers can become more nimble, more agile, more scalable, more adaptable and more connected. Moreover, the cloud offers retailers a powerful means to support growth and the seamless omnichannel experiences consumers demand — translating into significant top-line benefits.

Omnichannel

Jeff Warren

Vice President of Retail Strategy and Solutions Management, Oracle



RETAIL-SPECIFIC CLOUD SERVICES GAIN MOMENTUM IN 2016

The technology trend now on course to impact retailers the most in 2016 is the growing adoption of retail-specific cloud services. Cloud services in and of themselves are not new. Analysts say 90% of retailers have SaaS applications but most of them are horizontal applications like collaboration, workforce management, and financials. These are must-have solutions and companies have recognized the value in offloading the care and feeding of these systems to experienced vendors.

This year we will see a sharp increase in the rate at which retailers are moving to industry-specific applications. A lot of retailers have already moved critical processes like price and promotion optimization, e-Commerce management, order management, brand compliance and loss prevention to the cloud. Following this, and this is what to watch with interest in 2016, is the growing number of retailers using a wider array of core applications in the cloud — meaning merchandising, planning, supply chain and analytics.

The impact will be greater agility as cloud services give CIOs the tools to keep up with today's dizzying speed of change. Retailers can no longer wait one to two years to implement the next big thing; IT departments need to deliver meaningful value to the business in time frames that are measured in months. By outsourcing key day-to-day operational duties to cloud providers, retailers are better able to free

up IT resources for more strategic projects, and they also allow technology vendors to deliver innovation to retail users more quickly and with more frequent updates. In short, by outsourcing many elements of IT management, maintenance and upgrades, cloud services help to address retailers' hunger for business agility.

But cloud is not just about gaining faster access to new capabilities and freeing up IT resources, it also is about improving performance, scalability and security. Retail CIOs are particularly interested in the security opportunities of cloud. Heightened security requirements are certainly driving retailers' move to cloudbased services, where they benefit from vendors dedicated to monitoring trends and updating systems accordingly. Specific security features packaged in modern cloud solutions are transparent data encryption at the column level, allowing Personally Identifiable Information to be encrypted using keys that are held in a separate "wallet."

Backups should be automatically encrypted, and keys easily changed on an as-needed basis. Cloud services providers should also leverage identity management solutions to enforce authentication and authorization for applications, and all elements should be PCI-DSS certified. This is a big change from trying to stay abreast of ever-changing security requirements from inside a retail organization. By using

As retailers move key operations to industryspecific cloud services offerings, they speed innovation, better manage costs and increase security.

> - Jeff Warren, Oracle @OracleRetail



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well established service providers, retailers will gain access to staff with topnotch expertise in the cloud, security and networking.

Next to agility and security, the impact on performance will be significant as retailers benefit from large-scale, well-equipped and sophisticated data center operations. Leading offerings classified as Tier 4, the highest level of sophistication, provide 99.995% of uptime. This translates to less than 30 minutes of downtime during an entire calendar year — performance that very few (if any) retailers could match. Access to core retail applications housed within the large-scale data center appeals to the highly seasonal nature of retail, enabling companies to access additional processing power on an as-needed basis.

Omnichannel

Shelley Bransten

Senior Vice President, Salesforce Industries Retail, Salesforce



WHY RETAIL MUST DELIVER AN INTERCONNECTED SHOPPING EXPERIENCE

This year, retailers experienced what the *New York Times* dubbed an "unremarkable" Black Friday, as sales both in-store and online decreased by 11% compared to last year. Unfortunately, these lagging sales are not exclusive to the holiday season and reflect a larger trend in how shoppers have evolved. To stay competitive, retailers now must tailor their efforts to shoppers who will no longer tolerate outdated technology.

This sentiment aligns with Salesforce's 2015 Connected Shoppers Report, where we found that more than 80% of consumers said they plan to avoid physical stores during 2015's holiday season because of poor shopping experiences. Retailers must deliver a consistent, omnichannel shopping experience that connected shoppers crave.

How To Win Over The Independent, Connected Shopper

Winning over today's connected shopper is as much about data as it is about consistency across channels. Unlike many industries, such as financial services and health, retail customers are more than willing to share their personal data, with 61% saying they would disclose it to retailers if it meant better service.

The increasing availability of product information and reviews through digital channels has empowered the connected

shopper to be an expert on any particular product. Our survey found that 48% of shoppers believe they know more about a store's products than associates do, and 81% research a product before making a purchase.

So, as consumers continue to use digital and social channels before making a purchase, the retail industry must learn to leverage this information. This means obtaining a complete view of every customer interaction and using these insights to guide the customer through their path to purchase — or risk losing shoppers early on in their journeys.

Leverage Associates To Exceed The Connected Shopper's Expectations

As shopper pessimism toward the brickand-mortar shopping experience grows and purchase options increase, retail stores must give customers a reason to make the trip in-store.

This means arming store associates with the past customer interactions and customer data, as well as creating an easy way for them to view and act upon a shopper's complete customer profile. Ideally, this would be through a store associate's hand-held device.

Take for instance a customer who has extensively researched a dress online, put the dress in her shopping cart, and goes in-store to try on the dress first. This

To stay competitive, retailers now must tailor their efforts to shoppers who will no longer tolerate outdated technology and fractured customer experiences.

- Shelley Bransten, Salesforce @ShelleyBransten



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creates the opportunity for a store to provide a memorable experience, giving the shopper a reason to return. Now, imagine if when that customer enters the store, the associate already has the dress in-hand, in the customer's size, and with a few items to match.

This is the type of omnichannel, personalized experience global retailer Shoes of Prey delivers to its shoppers by engaging with them through channels including chat, email, phone, social media and in-store. The company provides employees with a 360-degree view of its customers by giving them access to data like purchase and payment information, so they can provide personalized service.

Payment/POS/Security

Orion Cassetto

Director of Product Marketing, Distil Networks



COMPETITIVE AUTOMATION: A GROWING THREAT TO E-COMMERCE BUSINESS

While online retailers have spent years and millions of dollars establishing their brand presence online and garnering a loyal following of customers, online competitors, criminals and other bad actors have been looking toward automation to help them permanently steal this business away.

How? Bots — the key force of automation in an online struggle for competitive advantage.

What Is A Bot?

Bots are small, automated programs that come in "good" and "bad" forms. Good bots are deployed by web indexers like Google and Bing, and are an essential component of online business. Bad bots, on the other hand, are designed to seek out and steal specific content by "scraping" it from sites and transmitting it to a third party.

When web scraping manifests itself in the e-Commerce world, it usually does so in the form of price and product scraping. Bots are employed to regularly crawl by your e-Commerce web site, gathering data on your site's product listings, prices, product descriptions, vendors and inventory availability. All of this information can then be used to cheaply reconstruct your business elsewhere on the Internet.

The Role Of Bots In Online Reconnaissance

Leading retailers are constantly looking for ways to innovate, sourcing the best

products from new and interesting vendors and then promoting these new products and categories on their sites. This innovation requires an investment of resources with the goal of returning that investment in the form of revenue. Price scraping, on the other hand, allows copycat retailers to cheaply piggy-back on this innovation without the need to invest in it directly.

Scraping yields perpetrators another distinct advantage, the ability to dynamically adjust their pricing in reaction to yours. Competitors undercutting a retailer in real time is a tactic that would not be possible without the aid of bots.

Developing An Adequate Bot Defense

To date, most online retailers have attempted to fend off price scrapers and other bad bots with a variety of security technologies that were never designed for this purpose. Standard firewalls and web application firewalls (WAF) both fail to keep pace with the fast-changing nature of bots and cannot register the real threat. As a result, bots bypass these security solutions unnoticed, to the demise of the retailer.

Some retail sites have developed their own home grown solutions to identify and block bots, but they quickly realize that the ever-changing nature of bot attacks requires a larger set of resources and dedication to full-time bot detection than anticipated.

Most online retailers have attempted to fend off price scrapers and other bad bots with a variety of security technologies that were never designed for this purpose.

Orion Cassetto,Distil Networks@OrionEvolution



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To protect their investment in online commerce, e-Tailers should consider implementing an automated, purpose-built bot mitigation appliance or service to help them analyze web site traffic in real time. Dedicated client classification engines such as those found in leading bot mitigation solutions take into account dozens of criteria to differentiate human users from automated visitors, and then to sort them by visiting purpose. This ensures that humans are never impacted and that bad bots are blocked, while legitimate bots like Google or Alexa can proceed unhindered to protected web sites.

Payment/POS/Security

Christopher Krywulak

President and CEO, iQmetrix



SWIPE, CHIP AND TAP: THE STRUGGLE TO ADOPT NEW PAYMENT TECHNOLOGIES

Retailers and consumers in the U.S. are in the midst of a rocky transition of adopting future (or arguably, current) payment technologies. Despite all the excitement and publicity around Apple Pay and Google Pay, there's one large barrier preventing widespread adoption — those three dreaded letters: E...M...V.

EMV, or chip-and-PIN, has been the payment standard in Europe, Australia and other regions for over a decade, but it wasn't required in the U.S. until October 1, 2015. With the EMV deadline having come and gone, there are still many retailers who have yet to upgrade their hardware, and just as many consumers who have yet to use or even receive a chip-and-PIN credit or debit card.

The argument against EMV for consumers is that chip-and-PIN cards simply take too much time. Rather than just swiping your card and being on your way, you now have to insert your card and enter your PIN. It may not seem like much, but **those extra five seconds have proven to be a real deterrent** despite the better security EMV provides.

EMV frames the use of tap-to-pay technologies used by Apple Pay, Google Pay and others. With the adoption of EMV pegged at 50% or lower in the U.S., it's clear there's a long way to go before mobile pay technology can really

get off the ground. In Canada, a market that shares similar types of stores and shopping behaviors, retailers adopted EMV in 2008 after expressing many of the same reservations U.S. retailers and consumers have now. The complete rollout took several years but is now widely accepted by consumers despite the extra time chip-and-PIN requires.

Additionally, according to the <u>Canadian</u> <u>Bankers Association</u>, fraud losses have fallen nearly 55% from 2008 to 2013. It's just a matter of time before U.S. retailers and consumers catch up to the rest of the world. Once the infrastructure is in place, **2016** is poised to be the year mobile payments take off.

Ultimately, the goal will be for your phone, or even your smart watch, to be able to completely replace your wallet. With speed turning consumers off chipand-PIN, mobile's convenience factor will definitely prove to be appealing.

Consumer categories that bring up the convenience factor or add additional value will increase the awareness around mobile payments.

There's a 'mass adoption follows the herd mentality' at play. If people can pay with their phone for quick service, it will become the norm.

At iQmetrix, we're taking the same concept to restaurants with the app ReadyToPay. When a customer is ready

Once the infrastructure is in place, 2016 is poised to be the year mobile payments take off.

 Christopher Krywulak, iQmetrix @iQmetrix



to pay their bill, they simply open the app, put in the table number, their bill is displayed and they can pay right within the app; eliminating the need to get a server's attention when you're ready to go. The app will alert the restaurant's system and mark it as paid. Technology like this is another opportunity for consumers to eliminate their need to carry a physical wallet. We see mobile technology impacting the way we go about everyday transactions in a really big way; so much so that we're not only predicting 2016 will be a big year for mobile, (excuse the pun) we're banking on it.

Personalization

Tim Barton

iVend Retail Technology Evangelist, CitiXsys



2016: THE YEAR RETAILERS INVEST IN INTEGRATED OMNICHANNEL SOLUTIONS THAT INCREASE PERSONALIZATION

iVend Retail's recent retail market report titled *Great Omnichannel Expectations* revealed that the physical store is falling short of meeting consumer expectations for personalization. Consumer expectations have been reshaped by their shopping experiences online. They get personalized offers when shopping online that they don't tend to receive when they shop in a store.

Technology tools that can help create a seamless, cohesive omnichannel experience don't require that retailers break their inventory budgets. A solid omnichannel strategy begins with a mindset that loyal shoppers offer significant long-term return on investment.

Here are technology tools that will deliver a true omnichannel experience that values customer relationships:

- Analytics tools can provide insights
 on sales trends and customer behavior
 across channels, allowing for more
 educated inventory planning decisions.
 Some retailers have had success
 implementing solutions that can crunch
 transactional data across the business
 and tell which SKUs are top-performing
 and which are underperforming.
 This allows retailers to optimize
 inventory accordingly.
- Mobile point-of-sale (POS) technologies enable retailers to interact

with shoppers, provide inventory checks and process sales, while busting checkout lines and giving shoppers the best in-store experience.

- E-Commerce solutions can help retailers launch sales channels online and expand globally. The most effective e-Commerce solutions integrate seamlessly with retailers' merchandise management or ERP system. This ensures that the shopper's experience of the brand is the same no matter what channels they choose to shop. Some of these solutions offer intelligent fulfillment, which enables customer orders to be fulfilled as economically as possible.
- Digital passes allow retailers to offer more personalized shopping experiences by providing digital coupons, loyalty cards and gift cards. Many shoppers forget to use their paper-based coupons or loyalty offers before they expire, which is a missed opportunity for retailers. With a digital passes application, retailers can send loyal shoppers push notifications when their coupons are about to expire, and shoppers can more easily manage their rewards through a digital wallet.

Increasing Personalization Without Crossing Customer Boundaries

It's also important to implement these omnichannel solutions that increase

The key to creating greater loyalty is to give shoppers something of value.

- Tim Barton, CitiXsys @iVendRetail_NA



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personalization without crossing customer boundaries. Many shoppers want the personalized attention from retailers and brands, as long as marketing messages aren't too intrusive.

The key to creating greater loyalty is to give shoppers something of value. Many shoppers would appreciate receiving a digital personalized offer sent directly to their phone from a retailer when they walk into their store. Or, the shopper could receive that same personalized offer from a retailer when they are driving in the area, enticing that shopper to visit the store. A digital passes application integrated with near-field communication (NFC) technology allows retailers to deliver higher levels of engagement, without being too pushy.

The retailers that are most successful in building loyalty will be those that offer unique, valuable experiences that make the shopper feel welcome, and not overwhelmed.

Personalization

Rama Ramakrishnan

Chief Data Scientist, Demandware



MACHINE LEARNING DRIVES DEEPLY EMBEDDED PERSONALIZATION

Over the last year, retailers have strived to meet consumers when and where they want to shop, all while delivering a seamless experience across in-store and digital retail properties. As we move into 2016, moving one step beyond the seamless experience to the personalized experience will become the new retail imperative.

Retailers are going to take their data to the next level with machine learning. Personalization will be woven so deeply into the fabric of the shopping experience that consumers won't know they're being personalized to. When personalization fades into the woodwork of the shopping experience, retailers will see a tremendous level of benefit.

Personalization, Not Segmentation

At each step of the shopping journey, customers leave behind breadcrumbs that give retailers clues into their habits and preferences. Through machine learning and leveraging analytics, organizations can now gather that data to develop a unique picture of each customer, their product preferences, purchase history, and other details on when and where they like to shop.

Armed with this data, an individual customer is no longer a demographic or segment of the population — identified by their age, gender, income and other impersonal characteristics. Instead, each shopper is a unique customer that retailers can engage with in a unique way.

Whether it's through the retailer's web site or a brick-and-mortar store, retailers can elevate the shopping experience with boutique-like customer service, product recommendations and personalized promotions.

Just imagine an in-store associate armed with a mobile device who can suggest specific complementary products based on the customer's unique profile. Perhaps a necklace that matches both a sweater they're purchasing today and a dress they purchased last month? That level of customer service will thrill and delight customers, keeping them coming back for more.

The Intelligent Assistant For Retail Managers

Machine learning will expand beyond shopper personalization to positively impact merchants and marketers.

When personalization fades into the woodwork of the shopping experience, retailers will see a tremendous level of benefit.

- Rama Ramakrishnan, Demandware @Rama100, @Demandware



Siri-like intelligence assistants powered by machine learning algorithms will constantly trawl the data for insights and profitable patterns. They will pop up at the right time with actionable recommendations, such as recommending that you run a buyone-get-one sale on women's sandals to clear out excess inventory, and even suggest the optimum time of day to run the sale.

Workforce Management

Kevin Swanwick

Senior Director, Product Management, Manhattan Associates



THE RISE OF THE NEW STORE ASSOCIATE

Retailing continues to change rapidly and the rise of the digital store has upped the ante for hard-working store associates. Today, shoppers are more empowered than ever and can instantly access product availability, recommendations and their order status directly from their phones. If store associates don't have these same insights from their legacy in-store technology, they cannot hope to keep up.

The fact is, store associates now carry a list of responsibilities we couldn't imagine only one generation ago. Their role has evolved from being the face of only one branch to being the face of the entire brand and its dispersed enterprise.

Retailers must prepare to embrace 2016 as the year of the enterprise store associate. Some of this associate's new responsibilities include:

• Enterprise Salesperson: Previously, the sales role was focused on selling what was in the store.

Today, associates need insight into customers' transaction histories and preferences, as well as knowledge of what's available across the brand's entire network. Consumers expect nothing less. When given this kind of insight, associates effectively become enterprise salespeople, equipped with the ability to sell shoppers any product, anywhere in the network, even if it isn't physically in-store.

Moreover, the ability to access this information on a tablet or mobile device means associates can mingle on the floor with shoppers, essentially bringing the network directly to the customer for a more personalized experience.

- Omnichannel Customer Service **Agent:** Imagine the responsibilities of a call center representative, navigating queries and assisting callers with numerous questions that can bridge several channels of interaction. Today's associates must essentially do the same thing, facilitating cross-channel orders and returns and striving to address the complex omnichannel questions that shoppers throw their way. This scenario commonly plays out in today's retail environment: "I bought this item online, but want to return it and exchange it for an item I see that you have in another store, and I'd like to have it shipped to my home." Associates need complete visibility into the network in order to provide a high-level, seamless customer experience.
- Fulfillment Specialist: With shipfrom-store, in-store pickup, same-day delivery and numerous other options now available, stores have evolved to function like fulfillment centers in many respects. This demands a whole new set of technologies on site, as well as new selling, service and

Associates need complete visibility into the network in order to provide a high-level, seamless customer experience.

Kevin Swanwick,
 Manhattan Associates
 @KevinSwanwick,
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inventory and fulfillment management skills for today's associates. Picking, packing and shipping can be the business of the day for some associates, and this can vary from store to store.

In order to effectively operate as enterprise store associates, employees need real-time access to an enterprise's data and customer information. Indeed, more is expected of this new breed of store associate, but when armed with the right technology they do have the ability to sell and service "from the network," while being the helpful and effective face of an enterprise.



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