

20th Annual
Survey



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2019
POS/Customer Engagement
Survey

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Key Findings

Consumers expect a personalized, secure, channel-agnostic experience in real-time. To successfully meet customer expectations retailers must take a holistic approach to define their customer's journey and understand that change is needed at almost every point in the enterprise.

With these doctrines in mind, the 2019 POS/Customer Engagement Survey identifies how retailers are faring in the quest to ensure that the four key pillars defining the required customer experience – personal, mobile, seamless and secure – are in place to deliver unified commerce.



PERSONAL

ENGAGING THE CUSTOMER WITH PERSONALIZED AND RELEVANT MESSAGING IS THE KEY TO CUSTOMER LOYALTY.

79% of consumers said personalized service from a sales associate is an important factor in determining at which store they choose to shop

53% of retailers indicate that personalization is one of their top customer engagement priorities



MOBILE

THE PERVASIVENESS AND EASE-OF-USE OF MOBILE DEVICES OFFERS TREMENDOUS OPPORTUNITIES FOR RETAILERS.

63% of consumers use their mobile phone while shopping in store to compare prices, look for offers/coupons, check inventory availability, etc.

49% of retailers indicate that the customer mobile experience is one of their top customer engagement priorities



SEAMLESS

TODAY'S CUSTOMER JOURNEY CRISSCROSSES CHANNELS, REQUIRING THE RETAILER TO PROVIDE A SEAMLESS, PERSONALIZED EXPERIENCE.

56% of consumers indicate they are more likely to shop at a retailer that allows them to have a shared cart across channels

94% of retailers have or plan to implement a single unified commerce platform within three years, up from 81% last year



SECURE

TODAY'S RETAIL ENVIRONMENT REQUIRES SECURITY BEYOND RETAILERS' CURRENT FOCUS ON PAYMENTS AND NETWORKS.

50% of consumers are likely to allow retailers to save purchase history, personal preferences and personal details if it eases the checkout process and allows for more personalized offers

61% of retailers have implemented end-to-end encryption to offer customers greater security of their personal and payment data

In this 20th year of the POS/Customer Engagement Survey, we are introducing a new and critical aspect to the survey report. We conducted the BRP Consumer Study to understand current and future customer expectations and contrast retailer capabilities with consumer expectations. This provides a valuable tool for retailers as you plan for today and the store of the future. Happy reading!

“It is time to reimagine the customer engagement model as yesterday’s model is dead, and agility is paramount as retail continues to rapidly evolve. Victory belongs to the agile.”

Brian Brunk, principal, BRP

The New Customer Engagement Model

Agility is paramount to today’s retail customer engagement model as consumer behavior and retail stores continue to rapidly evolve.

Disruption and adaptation are changing the retail model and blurring the lines among retailers, brands and wholesalers. Online pure-plays are opening brick-and-mortar stores and traditional retailers are experimenting with new store models and in some cases, expanded experiential brand strategies that include new revenue sources, such as services or food and beverage options. Retail is theatre and with technologies like AR and VR, the retail store is no longer the only stage where the theatre of retail can take place. New technology will further empower customers as they can dictate their own personal stage and experience.

Stores still represent the majority of retail purchases, but the definition of what a store is continues to change. This, coupled with digital experiences that are increasingly personal and mobile, has blurred the lines between channels and created the expectation of anywhere, anytime, anyhow shopping. This fundamentally redefines the retail store experience, requiring a balanced blend of physical and digital working seamlessly with any customer touch point, creating a complete brand experience.

However, the legacy applications, organizational structures, processes, and infrastructure in place at many retail organizations are not properly equipped to support this continuously evolving retail model. To enable the new customer experience and support its rapid evolution requires a different technology approach. Retail’s legacy technology of channel silos does not support this new retail paradigm.

And while it’s critical to focus on transformation, retailers need to keep in mind that retail models, customer expectations and technology will continue to be moving targets for some time. The key to future scalability and flexibility is focusing on agility, with cloud-based unified commerce.

Cloud-based unified commerce is imperative to enable real-time visibility and integration across every customer touch point. No longer can retailers afford to think about a transaction or an order as occurring at one point in time or in one channel. True unified commerce requires holistic experiences, transactions and orders that move seamlessly with the customer.

Consumers expect a personalized, secure, channel-agnostic experience in real-time. Retailers who successfully meet these rapidly evolving customer expectations take a holistic approach to defining their customer’s journey. They also need to embrace change to constantly adapt their systems and processes to meet changing customer expectations. That is why agility is paramount in retailers’

future plans as they look to implement customer experiences for today and tomorrow.

In order to deliver the necessary modifications at a more rapid pace than ever before, leading retailers are changing their technology approach, organizational structure, skill set and guiding principles to align with a much more agile development and delivery process.

With these principles in mind, the 2019 POS/Customer Engagement Survey compares current and future customer expectations with how retailers are faring in their quest to ensure that the four key pillars defining the required customer experience – personal, mobile, seamless and secure – are in place to deliver unified commerce now and in the future.

Customer Experience is the Foundation

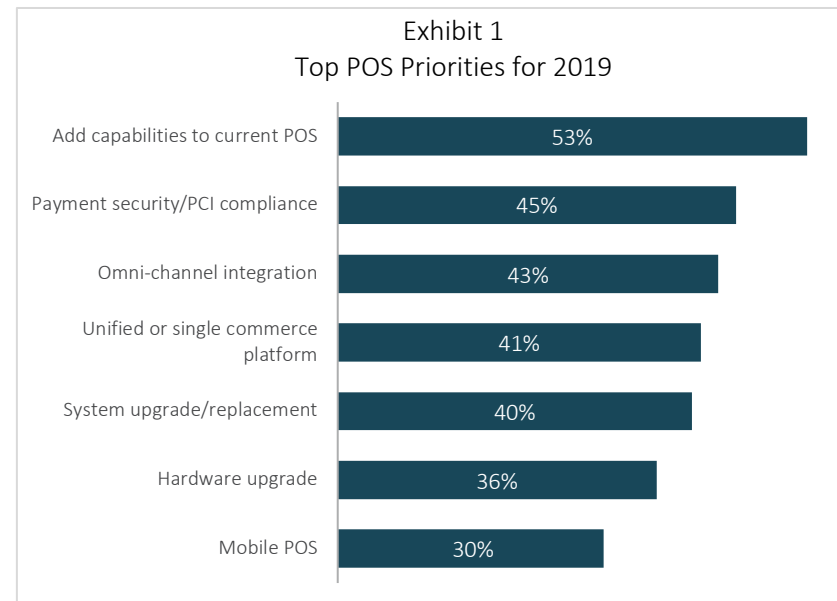
Retailers must seamlessly meld the growing overlap of the digital and physical experience in the store environment to exceed customer expectations, compete more effectively and offer a complete shopping experience.

It's no surprise that 79% of consumers prioritize personalized service and that personalization of the customer experience remains the number one priority for retailers. Fundamentally, retail has always been based on some version of a one to one relationship. However, outside of hiring and retaining great sales associates, this remains a large opportunity for many retailers. Once digital and mobile transformation and the options to personalize experiences are added in, the opportunities increase greatly. Ultimately, nirvana is the customer able to create their own personalized experience, with associates similarly empowered to engage customers with the

desired level of service. The key is retailers adopting the right technology platform, especially around mobile capabilities to support this nirvana.

Retailers have the opportunity to personalize the experience based on analytics and "customer context" to create a unique, personalized experience for each customer. However, this requires real-time visibility that reacts and flexes with the customer to understand where product is at all times and flows seamlessly to the final purchase across every channel. Achieving this requires the right applications and infrastructure coupled with a single commerce platform and a rock-solid network to provide the necessary availability and response.

With today's technology, consumers have the ability to quickly search and compare products, promotions, rewards and prices; they also read customer reviews and get instant feedback from their circle of friends via social media – all from their handheld device. This



transparency makes the retailer's job more difficult as they can no longer differentiate on just product or price, the customer experience is the key differentiator and it's what drives customer loyalty.

Ever increasing customer expectations, retail transparency and today's anywhere, anytime, anyhow shopping have put the customer experience center stage for most retailers. There is no longer "online only" or "store only," shopping is now the convergence of the digital experience with the physical environment and it requires a new customer engagement model to support it.

Retailers' POS priorities this year mirror the last few years with omni-channel integration and adding capabilities to current POS as top priorities (Exhibit 1). We're encouraged to see a growing number of retailers, 94%, who have or are planning to implement a single unified commerce platform.

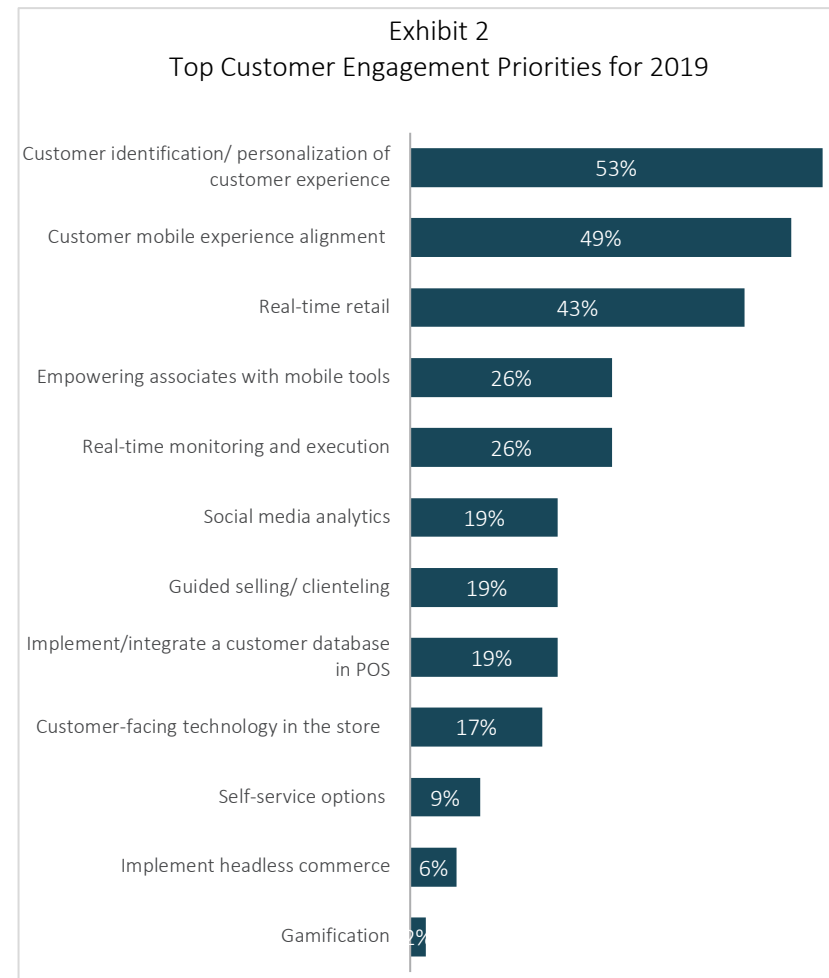
It is interesting that payment security has made a rise towards the top of the list after falling slightly over the last few years, likely due to increased concern about personal data after recent breaches and a renewed focus on building a single payment platform, with a single omni-channel token to support in-store, mobile, digital and traditional payments.

As customer expectations have been reshaped by the digital retail experience, retailers have shifted their focus in the physical store environment. Customers receive personalized offers and recommendations when shopping online or via mobile that they don't tend to receive when they shop in a store.

Therefore, it is imperative to identify the customer early in the shopping process and at every touch point. This initiates the dialog and sets the foundation for relationship building. Identifying the customer as they enter the store – via their smartphone, beacon or

other technology – affords the retailer the opportunity to personalize the customer's shopping experience.

Understanding the importance of personalization, 53% of retailers indicate customer identification is their top customer engagement priority, which is consistent with the top priority for the past three years (Exhibit 2).



Creating the necessary customer experience also relies on well-informed and available sales associates. Today's information-savvy consumers are not satisfied with just a 'warm body' or 'one size fits all' experience – they expect retailers to put time and effort into establishing and offering a personalized experience, although that doesn't always require human contact.

Extending a consistent and robust customer experience to the mobile platform remains a high priority for almost half of the retailers (49%). Retailers continue to expand the shopping experience to mobile platforms by including product information, wish lists, self-scanning, and self-payments. Delivering a mobile experience that has near real-time data and that is aligned with other channels remains an opportunity for many retailers.

Other top priorities are focused on providing associates with the information they need to personalize the shopping experience. Empowering associates with mobile tools to access customer information based on their previous purchases and/or preferences is important to engage the customer. To effectively provide guided selling services, the sales associate needs up-to-date and readily available customer and product information.

today's crowded and highly competitive market, personalization is a critical component for optimizing the customer's shopping experience. As consumers browse and buy across channels, 40% of the consumers in the BRP Consumer Study indicated a personalized and consistent experience across channels is important. And in the store, 79% of consumers said personalized service from a sales associate was an important factor in determining at which store they choose to shop.

As consumers "check-in" on retailers' e-commerce and mobile sites, they automatically receive personalized offers and recommendations based on their purchase and browsing history. However, most shoppers are still anonymous when shopping in a physical store so they don't get the same level of personalized service. This is an area of opportunity for retailers as 68% of consumers would be likely to shop at a store that offers personalized rewards based on customer loyalty and personalized promotions and discounts.

Consumers understand that receiving personalized and relevant promotions requires retailers to identify them. While this has been the normal standard online or via mobile, identifying the customer in the store is a little more difficult and not as common. Most retailers who identify customers in the store use the customers' mobile phone as the identification tool paired with a combination of beacons, WiFi, MAC address, etc. According to the BRP Consumer Study, 64% of consumers are comfortable with retailers identifying them via their mobile phone when they enter a store, as long as it means they are offered a personalized experience.

Personal



Engaging the customer with personalized and relevant messaging is the key to customer loyalty.

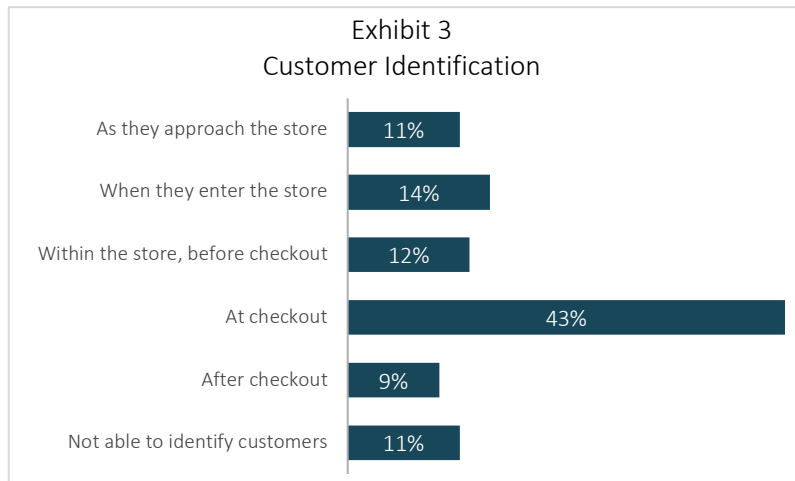
Customer expectations

Consumers want to be recognized and offered relevant product recommendations and promotions.

Customers want to shop wherever and whenever they want with the benefits of both the digital and physical retail environments. And in

Retailer capabilities

Retailers that identify customers when they enter the store and equip their associates with the proper mobile tools can personalize the shopping experience based on customer context.



With 79% of consumers wanting personalized services, there is a big opportunity for retailers to meet these expectations since only 30% of retailers have mobile POS and 17% have customer-facing technology as a priority.

Retailers need to know whom the customer is to create a meaningful experience based on what they want and when they want it. Each step along the customer journey offers retailers opportunities to engage with the customer and strengthen the personal relationship to drive sales and customer loyalty.

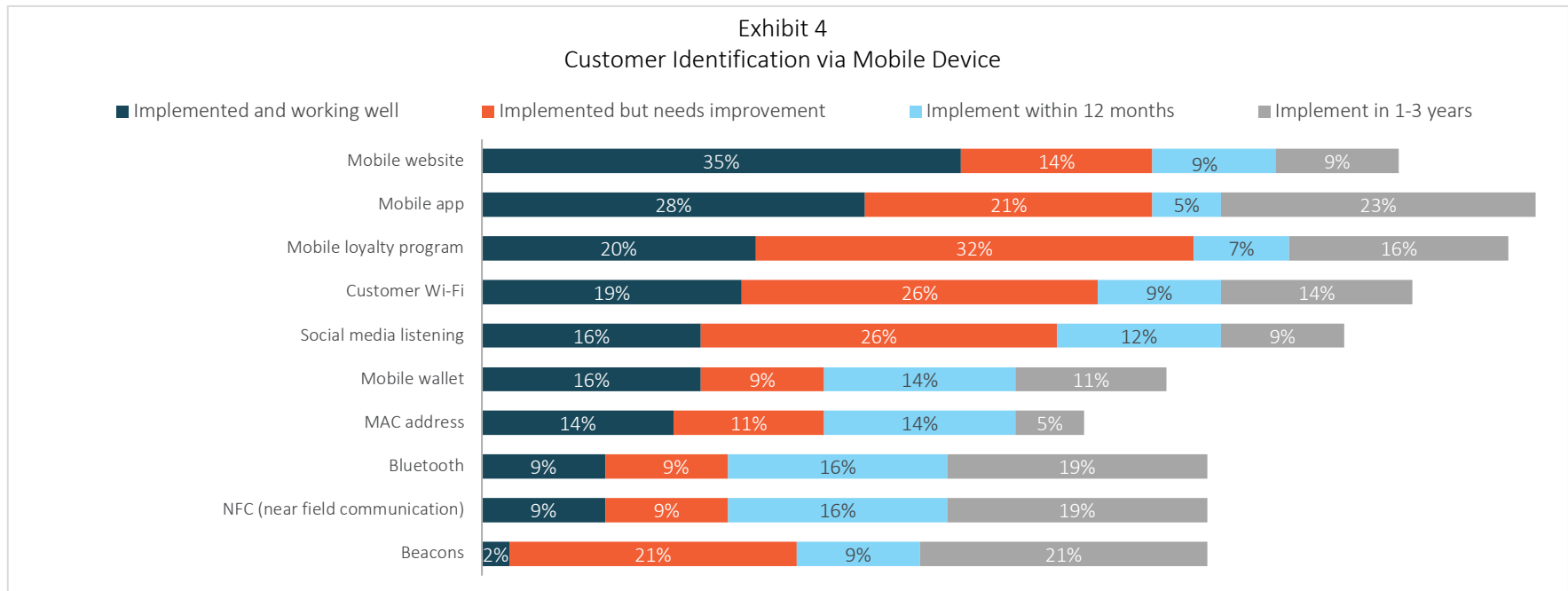
Customer identification is critical, however, 63% of retailers can't identify their customers prior to checkout (and 20% can't identify them until after checkout or not at all!), which is too late to empower the associate to influence the current purchase decision (Exhibit 3). Without early identification of the customer, retailers miss critical engagement opportunities to deliver a personalized customer experience and increase sales.

This year, we see significant progress and interest in newer technology methods utilized in tandem with the customer's mobile

phone to identify customers when they enter the store. The most prevalent technologies that retailers are currently using to identify customers are mobile loyalty programs (52%, up significantly from 32% last year), mobile website/app (both at 49%) however many retailers using these technologies indicate that they need improvement (Exhibit 4). Retailers are shifting their customer identification tools, as the use of social media listening increased significantly from 25% last year to 42% this year, and beacons increased from 19% last year to 23% this year.

The big trend in customer identification lies in retailers' future plans. Within three years, 75% of retailers plan to use mobile loyalty programs and 77% plan to use mobile apps to identify customers in their stores. Another interesting point is that there does not seem to be one technology choice that is 'winning' – retailers are embracing a number of different technologies to cast a wide net and identify and track as many customers as possible as soon as they enter the store. Introducing the right digital capabilities via mobile to customers as they enter the store, possibly even AR capabilities, is probably the final answer to achieving much higher customer identification.

Once customers have been identified, retailers can use clienteling and guided selling to enhance the shopping experience. Clienteling empowers store associates to leverage customer data (purchase history, personal information, preferences, etc.) and deliver highly personalized customer engagement, provide exceptional in-store shopping experiences, and timely follow-up communication with customers. To be effective, guided selling and any other customer engagement tactics can't operate with yesterday's information – they need real-time data, context and analytics.



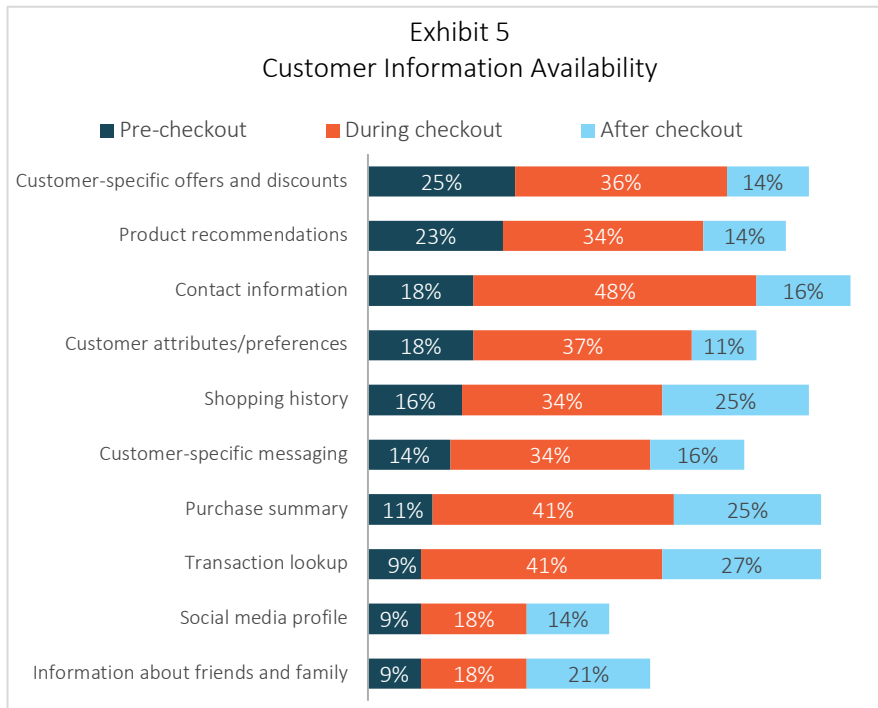
Customer context is the interrelated factors of customer insights and environmental conditions that make the shopping experience relevant. It enables retailers to personalize the shopping experience based on preferences, purchase history, their closet, their most recent online browsing history, time of day, weather and their physical location – all based on real-time information.

However, while retailers realize the need to arm their associates with the right training and better information, it is still a game of catch-up to the abundance of information and technology that customers possess.

Overall, retailers still struggle with the ability to access customer information prior to checkout (Exhibit 5). The ability to look up customer information is very limited with only 25% of retailers

offering the ability to access any customer-specific information pre-checkout.

This suggests that retailers are missing opportunities to increase sales because associates can't access customer data until the customer is at the checkout (or in a number of cases, after the customer has checked out), which is too late. With customer data available pre-checkout, associates can influence the transaction with personalized promotions and relevant product suggestions to customers. Over the past few years, retailers have said they are working on identifying customers prior to the checkout, however, in-store identification continues to lag behind the online shopping experience. Unfortunately, the vast majority of retailers are currently not providing customer attributes/preferences and product



recommendations to associates pre-checkout which means the missed sales opportunities are significant!

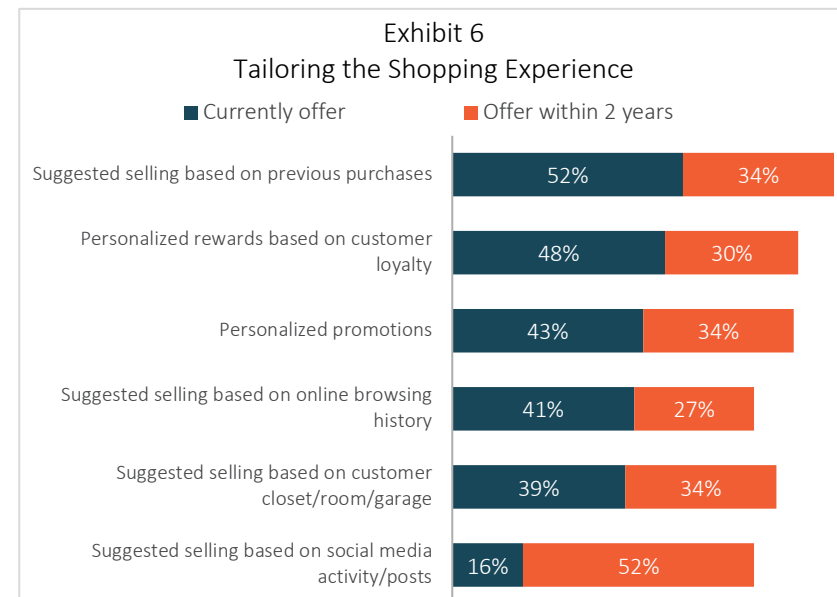
Delving deeper into how associates can tailor the customer's shopping experience based on available information uncovers capabilities that are limited but increasing (Exhibit 6). This is good news as it represents significant progress and engagement opportunities for retailers to meet customer needs. The most prevalent customer personalization capabilities involve offering personalized rewards based on customer loyalty and suggested selling based on previous purchases. We are now seeing approximately half of retailers offering these capabilities which is up significantly from last year when 23% of retailers offered both. There are also expansive plans to drive further utilization of customer information to tailor the shopping experience. Within two

years, 86% of retailers plan to provide suggested selling based on previous purchases and 78% plan to offer personalized rewards based on customer loyalty.

Opportunities

The ability to offer messaging and promotions based on customer context is a key differentiator in today's marketplace.

Some retailers are expanding the personalization aspect of retail into a "make shopping fun and engaging" experience. This includes gamification – where game-like interactions, rewards and incentives are offered for visiting a web site and finding a great deal, shopping early or late or on an "off day," or providing additional personal information like family size or zip code. The key to this personalization aspect is to tailor the interaction based on the customer's habits and preferences. While this type of personalization may not be for every customer, it changes the way retailers need to think about the shopping experience.



Mobile



The pervasiveness and ease-of-use of mobile devices offers tremendous opportunities for retailers as the customer takes control of their own retail experience across channels.

Customer expectations

Consumers use their phones to research products, compare prices, complete purchases online and increasingly, to pay for in-store purchases.

There is no denying the power of mobile technology as a disruptor in the retail industry. The proliferation and convenience of mobile devices has changed shopping behaviors and elevated expectations. Mobile shopping (browsing or buying) will continue to grow as 41% of consumers in the Consumer Study indicate they plan to increase their shopping frequency on their phone or tablet in the next 24 months.

However, shopping via a phone is just one way that mobile devices are becoming more pervasive. Mobile devices also offer further opportunities to enhance the customer experience in the store. Customers utilize their phones while they are shopping in the store as 34% indicate they compare prices and 28% look for offers/coupons.

Retailer capabilities

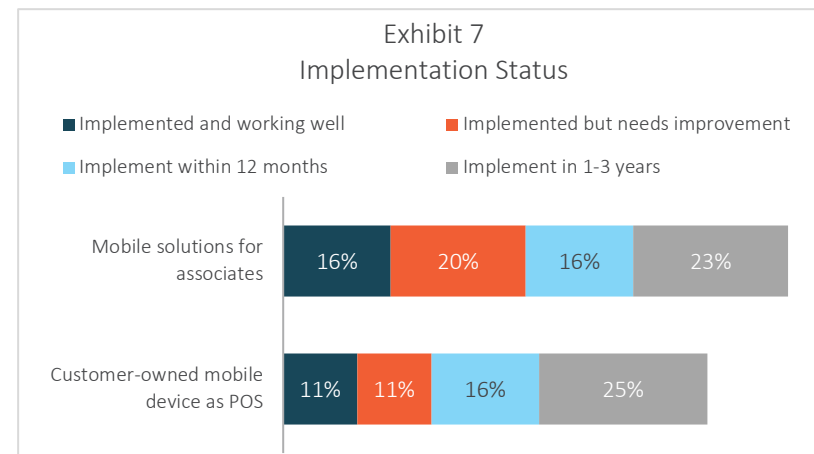
The proliferation of tablets and mobile phones also offers new opportunities for retailers to enhance customer service.

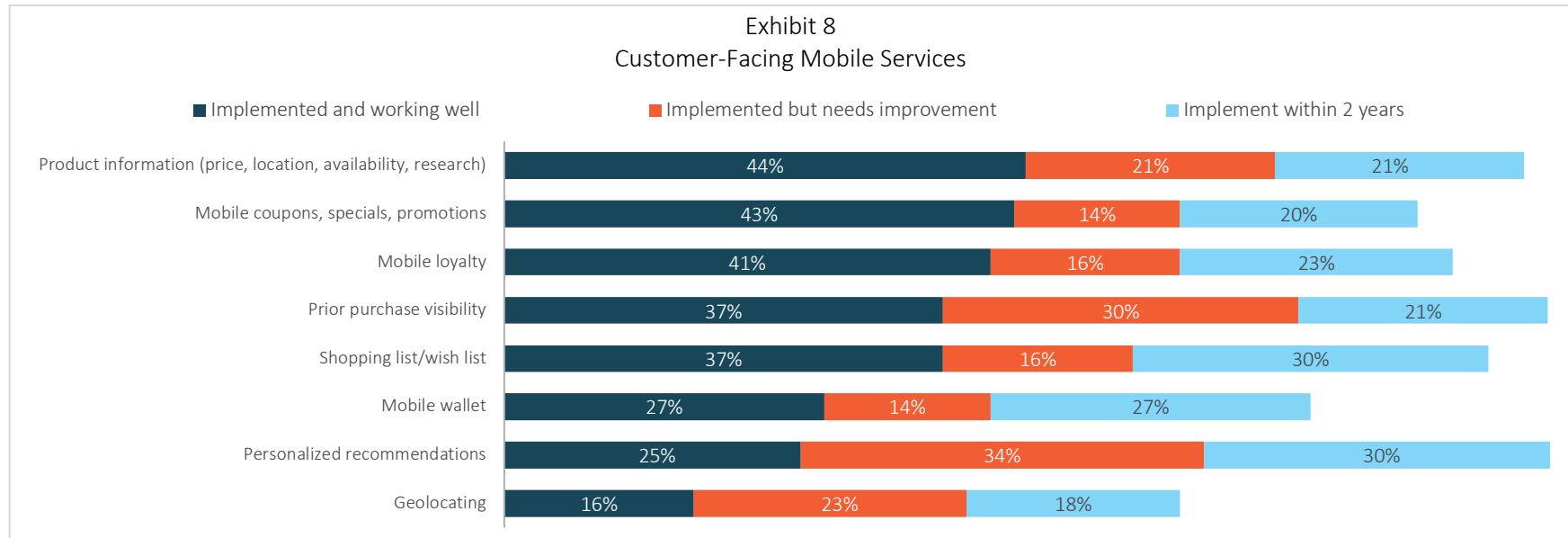
As the focus within the store shifts to incorporate digital technologies, mobile devices play a larger role in personalization.

Mobile point of sale (POS) enables associates to complete a customer's purchase on the sales floor at the moment the buying decision is made. It also frees the associate from the checkout area to allow for more personal interactions on the sales floor and simplifies the checkout process by eliminating the need to wait in line. This reduces the probability of a customer changing their mind as the purchase can be made as soon as the customer makes the decision instead of having time to reconsider the purchase as they move to the checkout.

Over the next year, the use of mobile devices and tablets – both in the hands of associates and customers – will continue to increase (Exhibit 7). Three-quarters of retailers plan to provide mobile solutions to their associates to enhance customer service within three years. Interestingly, we saw a significant increase in the number of retailers enabling customer-owned devices as POS with 8% offering it last year (and all needing improvement), while this year 22% offer it (although half still need improvement). This is consistent with the trends we are seeing in the industry.

Retailers need to continue to improve mobile capabilities through refined processes, better technology or enhanced training for





associates. Powerful associate tools are only helpful if associates are trained to use them effectively, especially when associates are dealing with sensitive customer information.

Unfortunately, retailers are continually playing catch-up as the proliferation of tablets and mobile phones is only the beginning. The growing popularity of Internet-powered personal devices – ‘wearables’ – will strengthen the case for utilizing customer-owned mobile devices as POS over the next few years.

Utilizing customer-facing technology is a natural outcome from the proliferation of mobile devices and is a big part of the overall customer experience. As customers become more comfortable and proficient with utilizing mobile technology and researching information on their own, retailers need to offer expanded customer-facing mobile services to enhance the shopping experience.

The good news is that retailers are increasingly implementing customer-facing mobile services such as product information, shopping list capabilities, and personalized recommendations via mobile devices (Exhibit 8). In the past year, retailers have increased all areas of customer-facing mobile services. However, there are still missed opportunities to tailor the shopping experience by offering personalized recommendations on customers’ mobile devices.

We still see issues with how well these processes are working as the ‘implemented but needs improvement’ category is still large for most mobile services, which likely indicates that the processes currently in place have been rushed to production before they were fully tested and perfected.

Opportunities

Mobile technology in the hands of consumers and retail associates is driving a transformation of the customer engagement model.

The abundance of mobile devices is only the beginning. Wearables are now available to the masses, with an estimated 46 million Apple Watch purchases made since its introduction in 2015. As wearables become more pervasive, the shopping and checkout experience will change further as shoppers may simultaneously browse online while shopping within the store, and then simply wave their watch to purchase items. The future will likely see new and exciting ways that customers use 'wearables,' which will shape their expectations and experience.

Mobile is driving retailers to upgrade and replace technology to stay ahead of their competitors' customer experience offerings and to keep up with their very informed and technology-savvy customers. While the shift to mobile tools can dramatically enhance the shopping experience and reduce retailers' total technology costs, it brings its share of challenges. As with any new technology, these innovative mobile approaches require a fundamental change in processes and corresponding training to educate sales associates and customers to convince them to try and use the new processes.

The expanded use of mobile devices in the store has also resulted in retailers taking a much different approach to budgeting and executing lifecycle management. These devices have a much shorter useful life than the legacy POS they are augmenting; often needing to be replaced every 3-4 years. Additionally, the need to plan for batteries that will not last an entire shift and docking stations in the stores are all new challenges for retailers.

To make the best use of these mobile technologies, retailers need to have highly available and redundant in-store networks as well as a holistic approach to real-time retail data. Having a mobile device and engaging with the customer anywhere at any time during their shopping journey will deliver an experience that is as good as the data shared with the customer.

This area is clearly transforming retailers' customer engagement model, operational budgets, in-store procedures and layouts. Mobile capabilities and expectations continue to evolve rapidly and need to be a significant part of a retailer's customer engagement strategy.

Seamless



Today's customer journey crisscrosses channels, requiring the retailer to provide a seamless, personalized experience.

Customer expectations

Customer expectations for a personalized and seamless experience requires retailers to follow customers' journeys across channels as they research, shop and purchase.

Customers want access to a single cart to shop across channels and be able to reach their cart via phone, computer, or even in the store – they want to “start anywhere and finish anywhere.” In fact, in the Consumer Study, 56% indicated that they were likely to shop at a retailer that allowed them to have a shared cart across channels. That's not surprising considering 67% of consumers have shopped and reviewed products online and then purchased in a store (webrooming) and 47% have shopped in a store and purchased online or via mobile (showrooming).

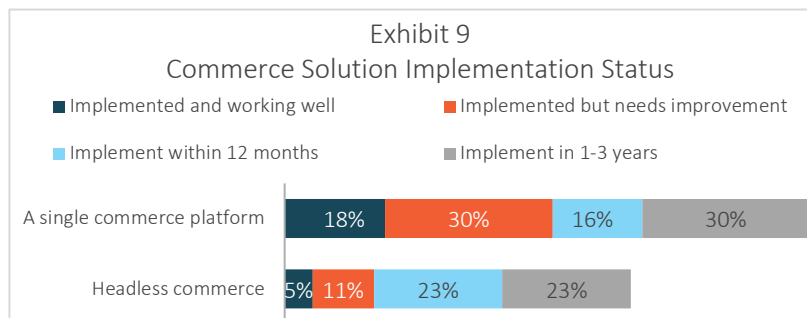
Three-quarters of consumers also indicate a strong preference for shopping at retailers that offer consistent pricing/promotions and product assortment across all channels. So, it isn't enough to just have a presence in multiple channels, it needs to be one cohesive brand so the customer has a consistent experience wherever they choose to shop.

Retailer capabilities

Retailers are increasingly turning to a common unified platform to deliver consistent, relevant shopping experiences across all channels.

A single commerce platform centralizes data storage and application integration and allows easier real-time access to information across the ecosystem (stores, distribution centers, suppliers, etc.). Retailers' implementations, and plans for implementations, of unified commerce has increased significantly in the past year, with 94% of retailers indicating they have implemented or plan to implement a single unified commerce platform within three years. There has been a considerable amount of trial and error with early adopters indicating their implementations need improvement (Exhibit 9).

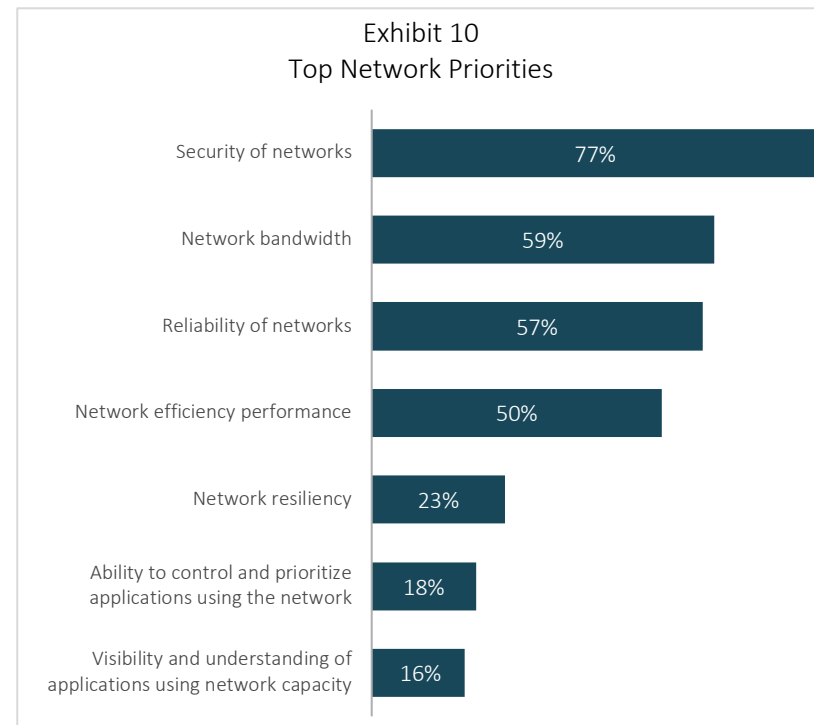
Headless commerce, a common practice for e-commerce, is the concept of leveraging the same commerce application or platform for all commerce touch points. All commerce channels leverage the same platform and set of services, which leaves the user interface (UI) as the point of customization. A headless commerce architecture reduces overall development time, increases consistency of implementation, streamlines integration and simplifies software maintenance. Currently, 16% of retailers are utilizing a headless commerce model, but adoption looks to increase dramatically with more than 60% of retailers indicating they plan to adopt headless commerce as part of their unified commerce strategy (Exhibit 9).



Real-time retail, through unified commerce, enables retailers to identify the customer and gather, analyze and disseminate customer, product, pricing, and inventory data across all channels – instantly. Since consumers expect a seamless experience in the store, on the web and via their mobile device, real-time retail is an imperative.

As retailers and solution providers continue down the path to unified commerce, more and more capabilities are being centralized or offered as cloud-based services. Retailers are embracing this move to the cloud as it is key to enabling unified commerce real-time capabilities and integration that are scalable and agile enough to support evolving business needs.

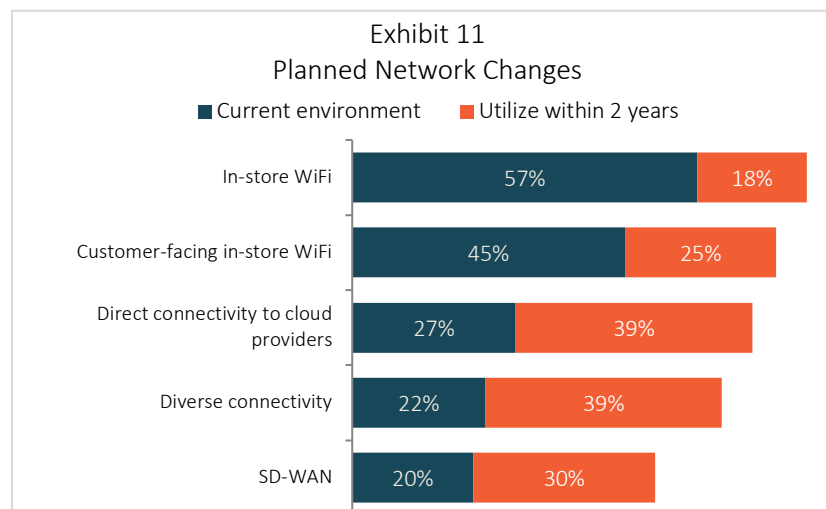
Leveraging cloud computing and IT outsourcing makes a lot of sense for many retailers. IT is not a core competency or differentiator for



most retailers — it is just a necessity. A cloud approach enables retailers to significantly reduce infrastructure, improve security and increase operational effectiveness by centralizing management of data and processes. Retailers are embracing this move as they realize cloud-based unified commerce is key to accelerating their path to a single version of the truth.

Further bolstering the move to the cloud is the availability of much more sophisticated network technology, such as SD-WAN and 5G. With today's network technology, retailers can truly achieve 100% uptime – removing the last perceived hurdle in moving towards cloud-based commerce solutions and moving away from the decentralized store environment that has been the foundation of the traditional retail model for decades.

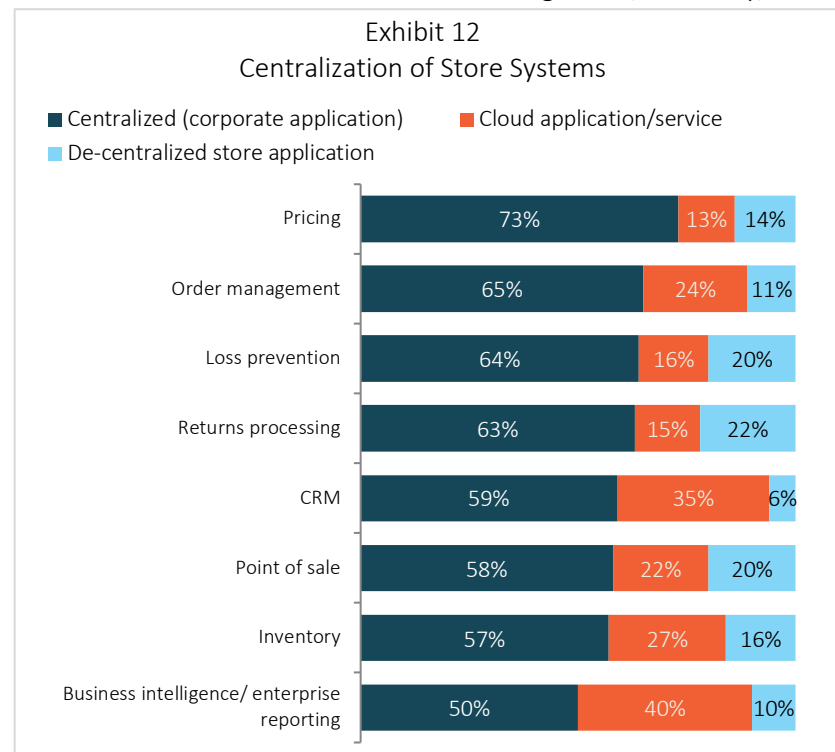
The network is a critical element of the technology platform – providing availability, security and reliability. Today's networks are robust, fast, reliable and resilient, which is key to supporting a cloud-based common commerce platform across channels. A robust, well-



architected and properly managed network solution is imperative for unified commerce success in the cloud.

Security, bandwidth and reliability are the top network priorities for more than 55% of retailers (Exhibit 10). Today's always connected customer puts additional pressure on retailers to ensure that they can provide a secure, reliable high-speed network to support the shopping environment. Unfortunately, many existing store networks do not have the capability to support current and future store infrastructures; therefore, it is not surprising that this is a main focus.

Cloud computing, either public or private, offers the quickest and surest path to seamlessly connect all e-commerce, mobile commerce and in-store POS transactions to order management, inventory,



CLOUD COMPUTING DEFINITIONS

Public cloud: Applications and/or data are stored on shared servers at third-party providers that supply cloud solutions to many clients.

Private cloud: A cloud infrastructure operated solely for an individual organization. It can be managed by the organization or by a third party and may exist on or off premises.

Hybrid cloud: A cloud infrastructure composed of more than one cloud (private or public) that are bound together by standardized technology to enable data and application portability.

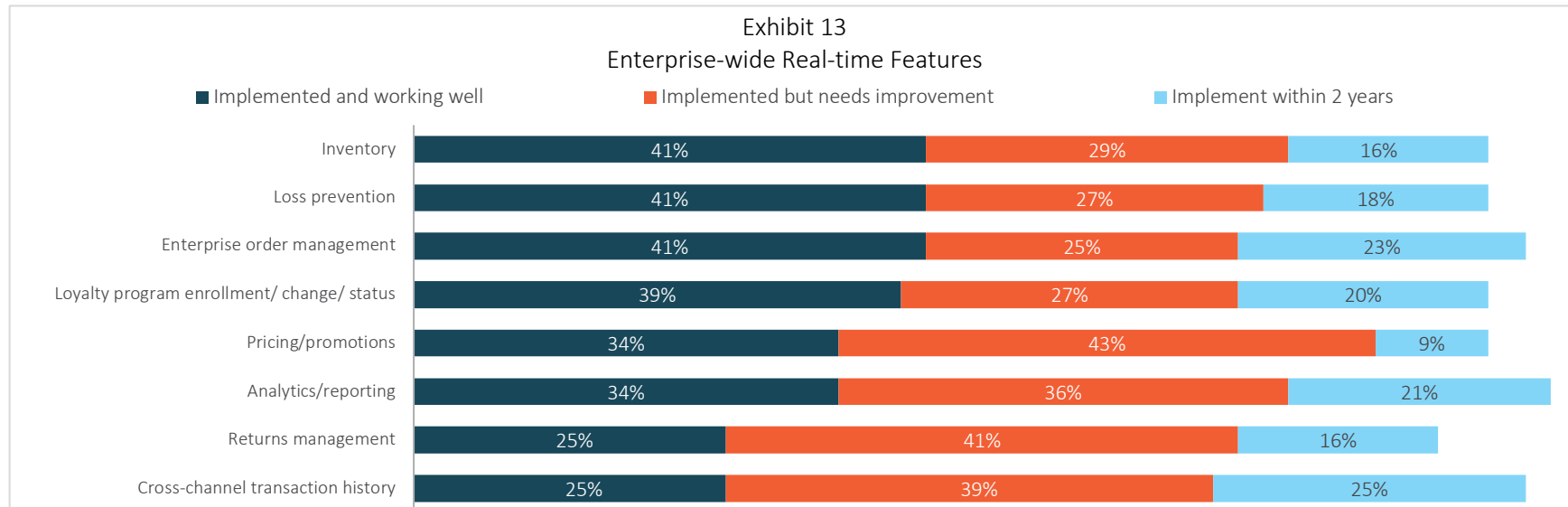
marketing, financials, supply chain and customer service. One of the best models to adopt is a hybrid cloud where private and public clouds are bound together by standardized technology to enable data and application portability. 27% of retailers currently offer direct connectivity to cloud providers and another 39% plan to offer within two years (Exhibit 11).

Many retailers have made the shift to the cloud over the past few years as a means of centralizing their store systems, although we are still seeing some retailers hesitate which may prove to be their

downfall as the shift to the cloud enables an agility necessary in today's environment (Exhibit 12).

In today's disruptive and competitive retail environment, real-time retail is quickly becoming table stakes and retailers that don't have the right capabilities will struggle. Without real-time data, information provided internally and externally is out-of-date and, therefore, risks being inaccurate and out of context.

It is still very challenging for retailers to effectively execute real-time retail. More than two-thirds of retailers say they can access inventory, pricing/promotions and analytics in real-time but most of the processes still need improvement (Exhibit 13). In our experience, many retailers can check inventory in real-time but the inventory data they are actually accessing is from yesterday as the data is not really available in real-time. As retailers move to unified commerce, full access to enterprise-wide data in real-time will become more common.



Opportunities

The importance of real-time visibility and access to product and customer information has grown exponentially over the past few years as consumers have become more demanding.

Retailers are realizing that the process of offering customers the ability to shop anywhere, ship anywhere is complex and the goal line seems to keep moving as new technology and consumer behaviors constantly change. The key to winning is to map out a comprehensive customer-centric strategy, understanding that a new model is necessary to succeed, and the new model requires an agility that has not traditionally been a part of this environment. The road will not be smooth and will likely require partners to help create the required seamless experience.

Secure



Today's retail environment requires security beyond retailers' current focus on payments and networks.

Customer expectations

Consumers expect that retailers will protect their data to ensure a safe and personalized experience.

While consumers in the BRP Customer Study indicated they would allow a retailer to save personal information if it helped ease the checkout process and offer personalized offers and recommendations, there are limits to what they want to share. Half of consumers are likely to allow retailers to save purchase history, personal preferences and personal details but they are less likely to allow retailers to save credit card details (33%).

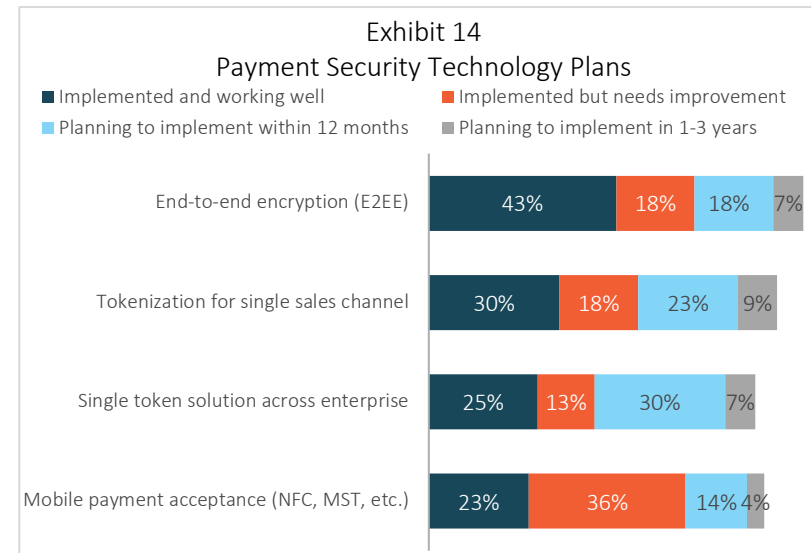
Retailer capabilities

Retailers need to strike a balance with consumers between gathering information and maintaining trust.

It is imperative that retailers have a strong information security team to maintain a multi-layered security approach that includes the use of tools and proactive log monitoring analytics.

Many retailers are still struggling to gain back functionality and/or stability they had prior to implementing EMV. With the implementation of EMV stabilized for most retailers, many are now turning their attention to other areas.

The first major line of defense in securing customer data is end-to-end encryption (E2EE). E2EE has increased significantly over the past few years with a reported 61% of retailers utilizing it (Exhibit 14). E2EE prevents third parties from accessing data throughout the system because only the authorizing parties have access to the encryption keys.



The next protective layer involves tokenization, which enables retailers to remove sensitive information from the network by substituting payment card data with a token which is used as an identifier but has no exploitable value or meaning. 38% of the respondents have implemented a single token solution across the enterprise, with an additional 37% planning to implement within the next three years. This technology is critical to offering customers a single unified commerce experience for returns, customer profiles and saved shopping carts retrieved across channels.

Payment security remains a concern for retailers for the foreseeable future. Most of the retailers involved in our survey reported moving towards a security plan with multiple layers to protect sensitive customer and organization data. Moving store applications to the cloud makes security easier – customer and associate information will reside at a data center or home office instead of at the store-level, which means it's easier to secure. If retailers utilize encryption and tokenization there is no critical information residing at the store.

Mobile payments offer further opportunities for customers and retailers, as it enables customers to make purchases without their wallet (but with their ever-ubiquitous smartphone) and provides an additional level of security that isn't available with credit cards, even EMV-enabled cards.

Mobile payments in stores use tokenization so that the retailer never actually has the customer's payment card number, which significantly reduces the security risk and speeds up the transaction.

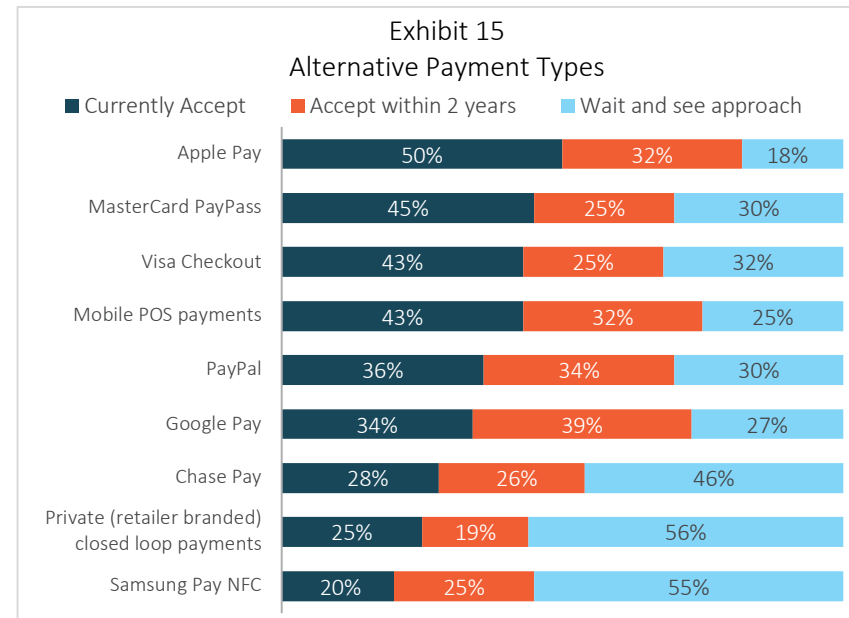
There are a multitude of mobile wallets and payment apps in the market today. In addition, many retailers are offering their own mobile payment options. In the store environment, many retailers continue to focus on private label credit cards to reduce interchange fees and processing time at checkout.

PayPal and Apple Pay continue to be the most widely alternative accepted payment types in this survey (Exhibit 15). This year fewer retailers are adopting a wait and see approach across the board – likely because of the growing support from the payment software ecosystem (including payment switch providers and card processors), and the acceptance for these mobile payments by the public.

Opportunities

One of the critical factors for mobile payment success in the next few years is education and training.

We have found repeatedly that not only are most consumers unsure of how, when and if mobile payments can be used, but even more telling, associates are unsure. For mobile payments – or mobile wallets – to succeed, there must be further education at the point of sale to ensure that a transaction using a mobile device is no longer or



more complicated than traditional payment methods for either the customer or associate.

While the pros and cons of each of these payment types – and future payment types – can be debated, what is most apparent is the adoption across the industry as customers and associates become more comfortable utilizing these emerging payment platforms.

As retailers seek new ways to gather relevant information to provide personalization, they must address how to protect their customer's data. There is a fine line between clever personalization and concern over personal data. Consumers want retailers to understand them as individuals – not put their personal information at risk.

While more information offers a more customized experience, it also provides a greater opportunity for data theft and fraud. Retailers need to establish security policies that ensure the data privacy of their customers' information.

Purchase and payment touch point options continue to expand with voice-assisted and virtual reality payment-enablement possibilities in the works. With technological capabilities rapidly expanding, keeping up with advancements and ensuring a frictionless experience, while also guaranteeing the security of data will remain a challenging feat for retailers.

Current State of Store Technology

The right technology foundation is essential to support the customer experience across channels.

Customer expectations

The store is still a primary focal point of the customer journey so the technology necessary to provide customers the best service is critical.

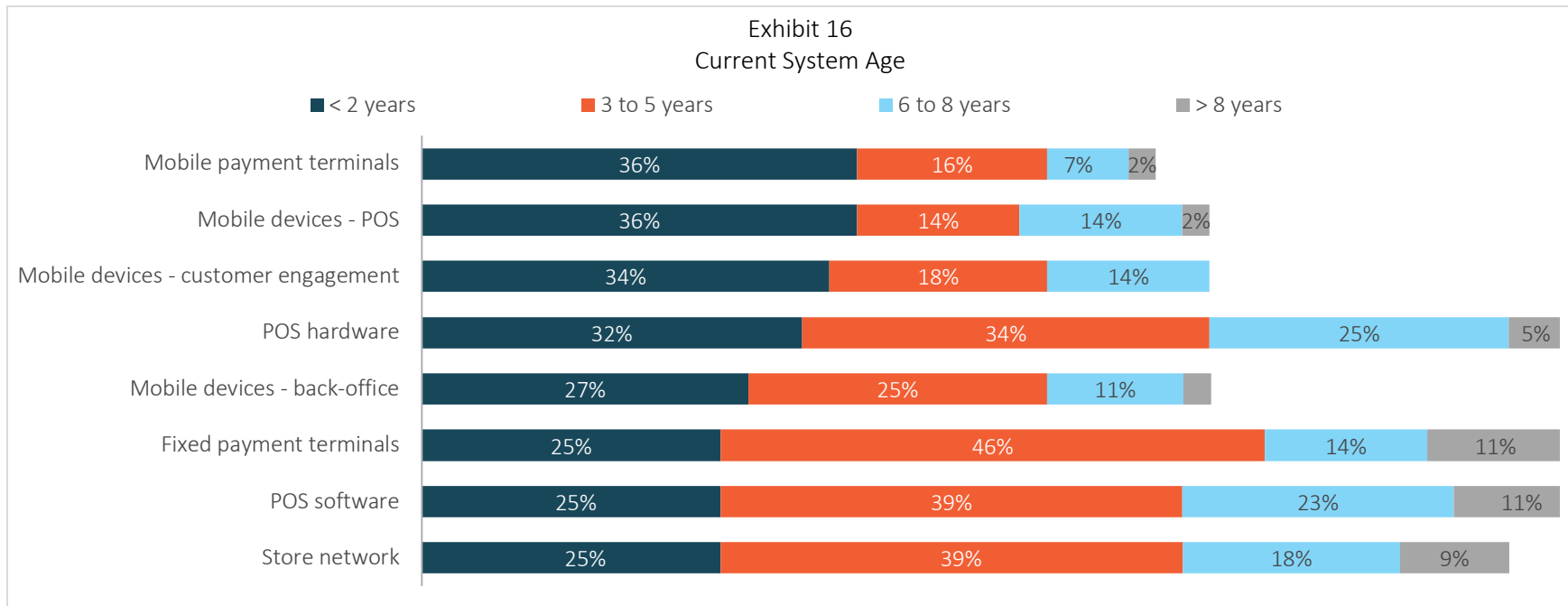
With an increased focus on customer engagement and a convergence of the physical and digital retail worlds, POS and its supporting technology play a critical role in shaping the customer shopping experience. The store is still a major part of the customer journey with 79% of consumers indicating they purchase merchandise in a store frequently.

The checkout process in stores is often the most frustrating aspect of a shopping experience. In fact, 82% of consumers feel that the ease of checkout and payment is an important factor in choosing where they shop.

Retailer capabilities

The technology necessary to provide a fast and easy sales transaction is critical to keeping customers happy.

Retailers are looking to refresh their hardware with the latest offerings to take advantage of faster processor chips and larger storage needed to efficiently run more advanced software. Over the past two years, many retailers have upgraded or added mobile devices and half the mobile POS devices are less than six years old (Exhibit 16). Mobile device usage continues to grow, but at a slower rate than projected in prior surveys. It appears to be tied to the trend of retailers replacing a portion of their current POS hardware with mobile devices when they perform a hardware refresh. It is also partially driven by retailers realizing the shorter life cycle for mobile devices compared to traditional stationary POS terminals.



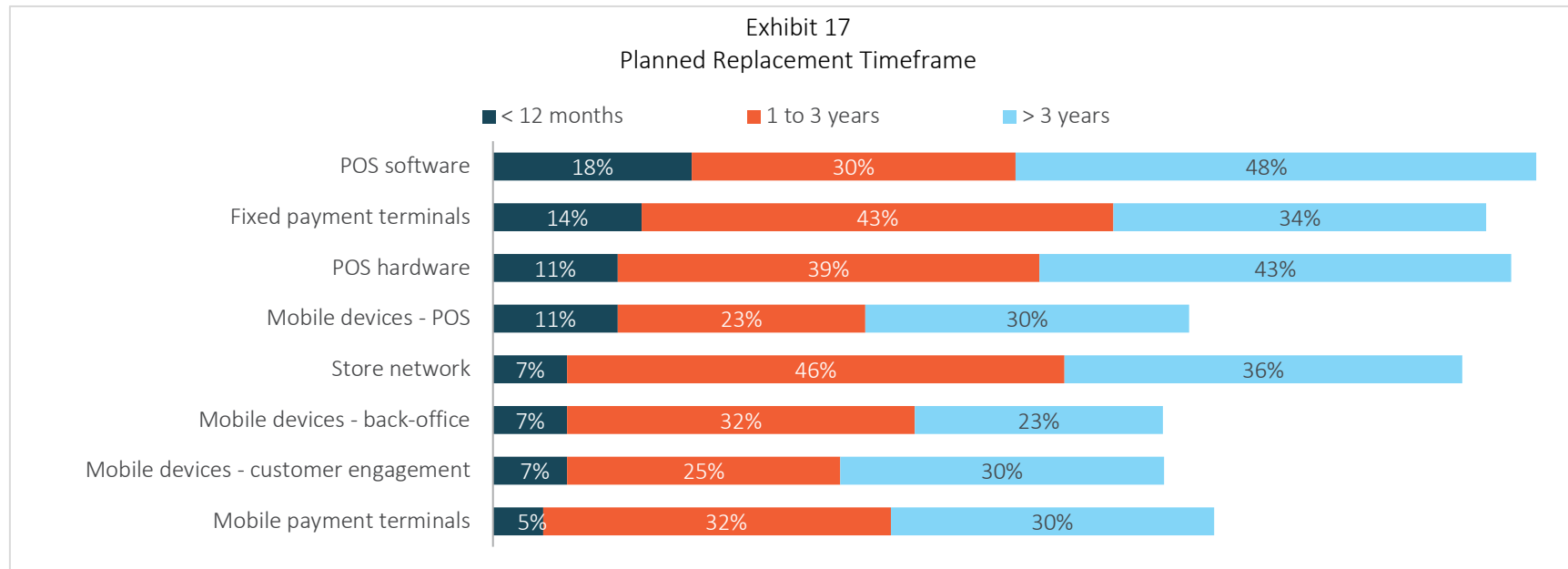
According to this year's survey, 30% of retailers are planning to keep their current mobile POS devices in use for an additional three or more years. This seems a little unrealistic, considering the speed of technology change and the wear and tear on mobile devices is much greater than on stationary devices (Exhibit 17).

Retailers realize that POS software should be replaced regularly to take advantage of better, faster and more reliable technology. However, 30% of them continue to operate with POS hardware that is at least six years old (Exhibit 16). Budgetary constraints and the complexity of a POS replacement project drive the age up, with 73% of retailers reporting POS software that is more than two years old. Approximately half of the retailers surveyed are planning to replace their current POS software and hardware within three years.

Opportunities

Mobile devices will continue to make inroads in the store environment.

For most retailers, mobile POS has not become a substitute for a traditional fixed station POS. The majority of retailers continue to use traditional POS stations as their basic POS, adding mobile options and additional PCs or tablets as supplements. The transition from fixed station POS to a hybrid environment and more mobile solutions is underway but it is a slow process.



The Future Store

The physical store remains the foundation of retail; however, a significant and fundamental transformation of retail is underway.

Customer expectations

Stores must now encompass both worlds as customer expect a personalized experience in any channel.

The physical and digital worlds will be forever intertwined as we look to the future. Customers want the sensory experience generally available in the physical world, such as touching and feeling merchandise and personally interacting with a knowledgeable associate, married with the unique and personalized shopping experience common in the digital world.

The store is not dead and focusing on the customer experience has never been more important. Consumers love the theater of shopping, which is why we are seeing many pure-play online retailers starting to open brick and mortar stores and store concepts continue to change. The in-store experience is paramount for apparel and other products that consumers want to touch, feel, demo or try on. Customers want a multi-dimensional or multi-sense purchase which leverages all their senses. For retailers selling commodity products, you could argue that the experience is the best way to differentiate their brand.

Customers are willing to try new technologies if it improves their in-store shopping experience. According to the BRP Consumer Study, 32% of consumers are likely to shop at a store offering an augmented reality experience and 29% would like a virtual reality experience as part of their shopping environment. Consumers are also very interested in relying on technology instead of human

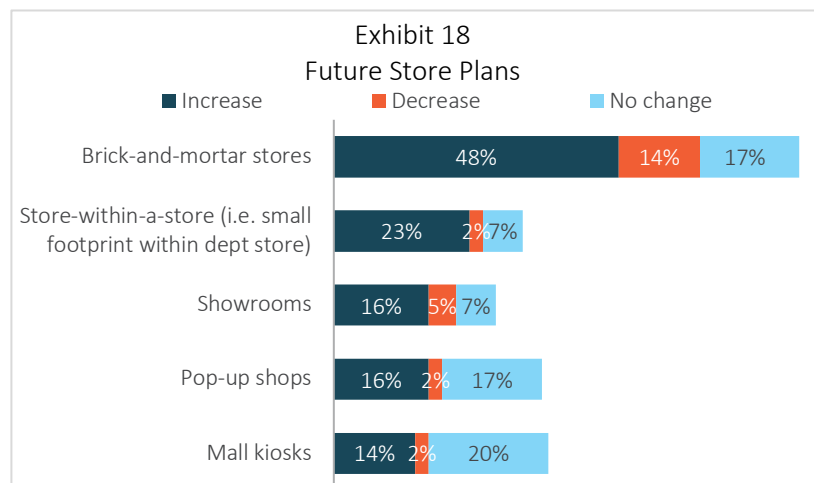
interaction if it means that the process will go quicker and easier. For example, 55% are more likely to shop at a store with self-checkout vs. a store without and 57% will choose a store offering automated returns to avoid human interaction.

Retailer capabilities

While e-commerce and mobile continue to grow and garner attention, the store remains a key component of the customer's brand experience.

The physical store is still the central point of the shopping journey. However, the role of the store continues to change. The advent of the digital world offers consumers new ways and 'places' to research and shop. These digital possibilities, along with mobility, have modified consumer expectations and behaviors, and retailers must transform to succeed.

The concept of the store is evolving with new formats, such as pop-ups and store-within-a-store, or even stores as mini distribution centers. 23% of retailers are increasing the number of store-within-a-store concepts and 16% are planning to increase the number of showrooms and pop-up shops (Exhibit 18).

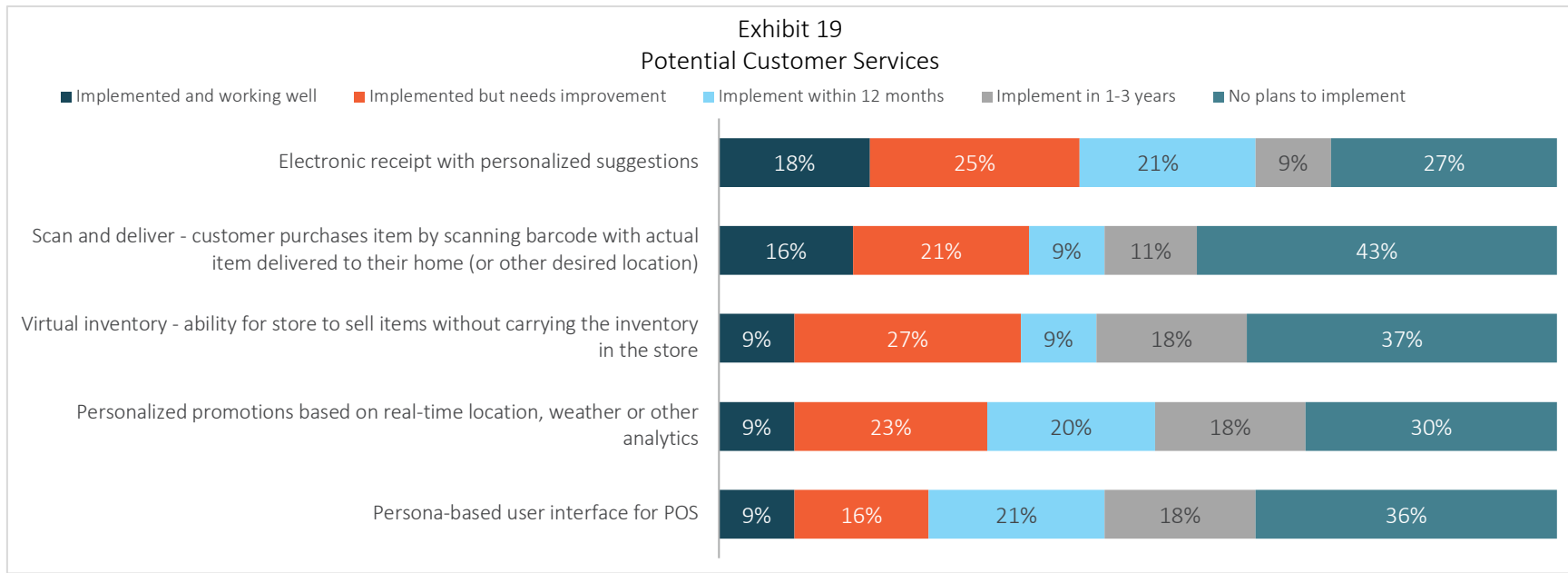


As a means of increasing inventory options for customers, retailers realize that their brick-and-mortar locations can sell products without actually carrying the inventory within the stores. 36% of retailers have implemented virtual inventory and another 27% plan to implement this within three years (Exhibit 19). Rather than sourcing and warehousing large levels of inventory for each store, they can provide stores access to virtual inventory, which offers customers a much broader assortment of product options.

A number of retailers currently offer and plan to offer electronic receipts with personalized suggestions for their customers. Within three years 73% plan to offer electronic receipts (Exhibit 19). Offering customers an electronic receipt after a purchase in a physical store gives them the peace of mind that they'll have a copy on file. In addition, retailers should use electronic receipts as a means for suggested selling by offering recommendations for potential purchases based on previous purchases, elevating the customer's current and future shopping experience.

Offering customers personalized promotions based on customer context is the future of the store environment and it is gaining traction with 32% having implemented (up from 17% last year) and another 38% planning to implement this capability in the next three years (Exhibit 19).

Younger customer segments, such as Millennials, have grown up in the digital age where they have access to everything at their fingertips with their smart phone, and they have high expectations for service. They expect everything wherever and whenever they want it. They assume they will receive the same level of personalized recommendations they receive on Amazon when they visit a store. With higher expectations for personalized experiences, they believe sales associates should cater to their needs. Although, as long as they get the information and service they expect, they don't care if it



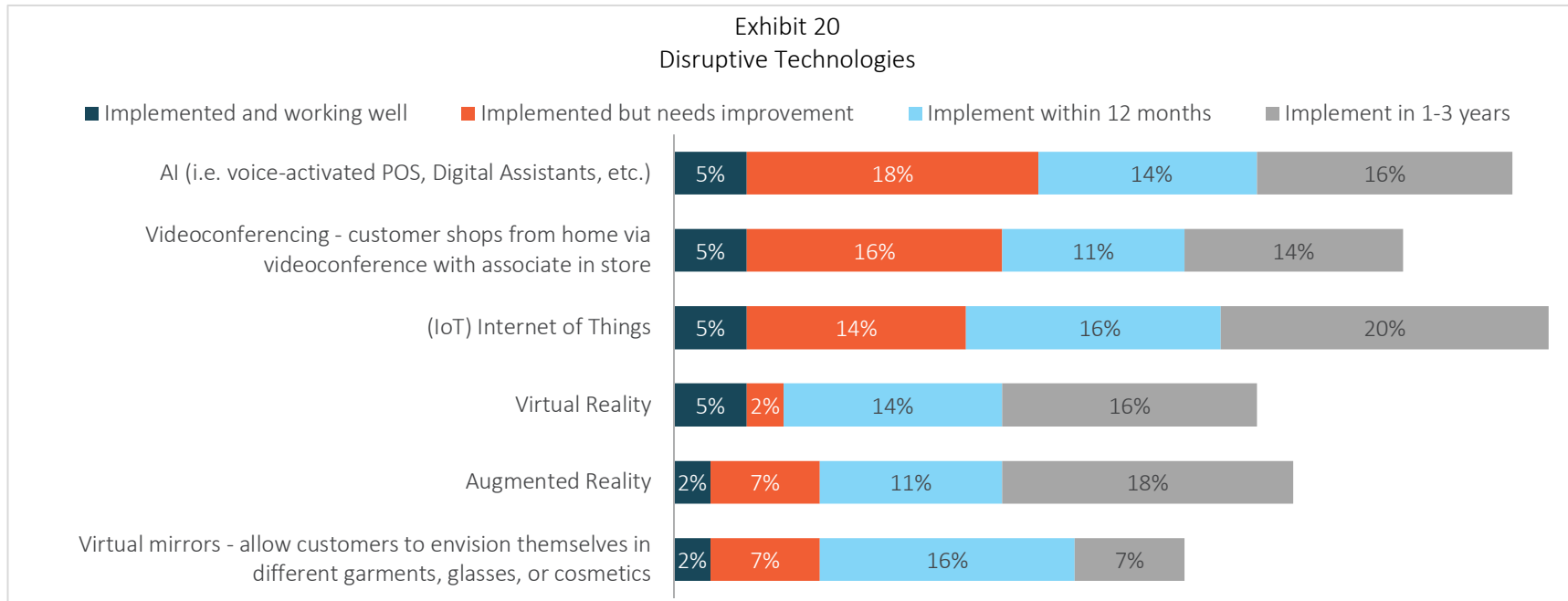
is delivered by a human or a robot. And actually, many consumers seem to enjoy the novelty of the robot, as long as it offers quality service.

While automation can be a way to cut overall costs and improve customer service options in some retail segments, some highly personal product decisions and luxury brands likely will not adopt automation to replace humans. The real-time retail trend of identifying a customer and guiding the customer through the sale via human interaction won't soon be replaced by automation. The process of customer engagement, context (time of day, how the customer is dressed, what department they are shopping, if they are wearing a wedding ring, etc.) as well as cross-selling and up-selling require a finesse that robotics will likely not completely replace.

Disruptive technologies such as artificial intelligence, virtual reality and the Internet of Things (IoT), offer further possibilities for the convergence of physical and digital environments (Exhibit 20).

Artificial Intelligence (AI) offers the ability to pair the vast amounts of data gathered on customers and their preferences and synthesize this information to help personalize the customer experience. Some retailers are experimenting with AI to offer purchasing suggestions based on answers to a series of questions.

The disruptive technology that is of most interest to retailers is the IoT, with 55% of retailers planning to have this capability within three years. IoT describes an environment where the Internet is connected to physical objects embedded with sensors that can then communicate. The IoT is not just about gathering data but also about the analysis and usage of that data. It has the potential to change the way the customer shops and will also change the checkout



experience and transform the point of sale. We see IoT and similar technology as great examples of how unified commerce will continue to evolve into the future and further shape the customer's experience and their associated expectations.

Virtual reality (VR) and augmented reality (AR) are hot topics again this year with more options in the marketplace putting the technology in everyone's hands. Currently, 9% of retailers offer AR and another 29% plan to add it in the next three years. We are beginning to see further use of these technologies with retailers adding AR features to let customers see how furniture will look in their homes.

'Smart' fitting rooms utilize virtual mirrors or motion sensors to interact with customers to offer product information, suggest complementary products or notify an associate that a different size is needed. Currently, 9% of the retailers surveyed offer virtual

mirrors to their customers and another 23% plan to add it within three years. Virtual mirrors allow shoppers to easily envision themselves in different garments, glasses or cosmetics. These technologies coupled with a personal digital assistant can make recommendations based on customer information, purchase history and current promotions within the store. Smart fitting rooms can further encourage store visits as an effective means to touch and feel the product plus understand sizing.

Customer engagement in the future may allow a customer to videoconference with their favorite store associate – from home. The customer could request to see different products and even get a better understanding of size and color options based on interaction with an associate. 21% of the retailers surveyed already offer this service to their customers and another 25% plan to add it within three years.

Opportunities

The next year will bring further transformation driving fundamental changes in the customer engagement model as we reimagine retail.

While retail is definitely going through challenging times, the transformation is exciting with new technologies and opportunities arising to enhance the customer journey. For retailers to survive, the key is a ubiquitous real-time retail customer journey powered by a single commerce platform.

The time is now to innovate the customer experience by reimagining your retail operations for the new customer journey. The key to future scalability and flexibility is focusing on agility, with cloud-based unified commerce.

Victory belongs to the agile.

Survey Methodology

Through an online survey system, BRP conducted the 20th Annual POS/Customer Engagement Benchmarking Survey in November and December of 2018. The goal was to gain understanding of retailers' planned initiatives, priorities and future trends by contacting the top North American retailers.

This report summarizes the results and key findings of the survey, offers insights based on our client engagements and overall retail experience, and identifies current and future trends in the industry. These insights are intended to help retailers compare their customer-facing operations and technology and identify opportunities to enhance their customers' experience.

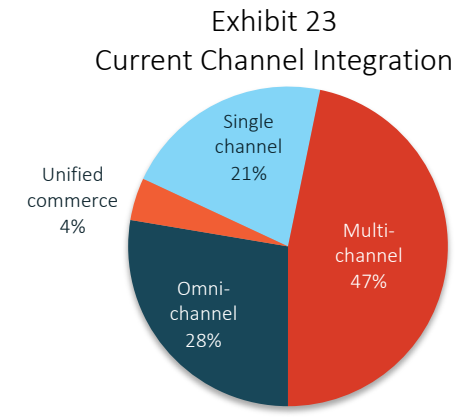
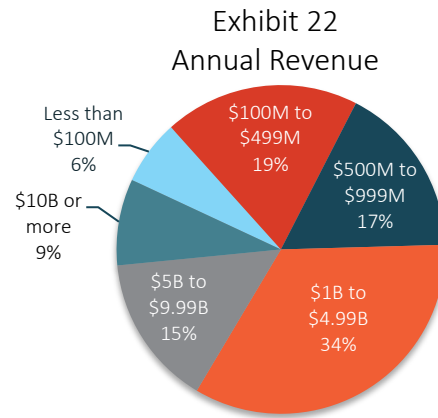
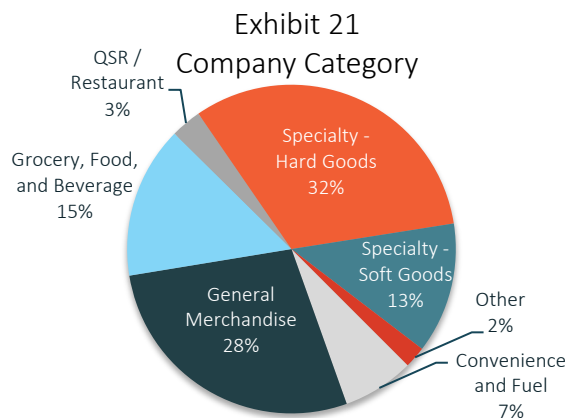
The primary retail segments of the survey respondents were specialty hard goods with 32% of respondents and general merchandise with 28% of respondents (Exhibit 21). The remainder fell into various other categories such as specialty – soft goods and grocery, food and beverage. The focus on the specialty retail segment remains consistent with 45% of the overall retailer responses, although there was a slight shift as

general merchandise is higher this year with 28% vs. 18% last year and specialty – soft goods is lower this year with 13% vs. 28% last year. Last year's survey also focused on the specialty retail segment with 54% of the total responses.

Of the retailers surveyed, the breakdown in size based on gross annual revenue included a broad selection of Tier 1, 2 and 3 retailers, with 58% of the retailers having more than \$1B in sales (Exhibit 22).

This year's survey also recognizes the challenges that retailers continue to face as they shift from a single channel environment to a unified commerce environment. While only 4% of the respondents indicate a true unified commerce environment, there is definitely movement from multi-channel to omni-channel to unified commerce as retailers look to offer a seamless experience to their customers. (Exhibit 23).

The specific respondents for each company were primarily vice presidents and directors of store systems or IT, and C-level executives.



About BRP

BRP is an innovative retail management consulting firm dedicated to providing superior service and enduring value to our clients. BRP combines its consultants' deep retail business knowledge and cross-functional capabilities to deliver superior design and implementation of strategy, technology, and process solutions. The firm's unique combination of industry focus, knowledge-based approach, and rapid, end-to-end solution deployment helps clients to achieve their business potential.

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E-Commerce
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Merchandise Management
Private Equity

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