

The Future of E-commerce: The Road to 2026

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Executive summary

Introduction

The world of retail is undergoing an unprecedented wave of innovation. Technology, of course, plays a major role, but it is not the only force at work. New business models are appearing that will have a profound influence across the e-commerce and wider retail value chain. At the same time, consumer behaviors and expectations are evolving.

In this report, we identify and examine those trends that will shape the retail landscape over the next five to 10 years. For example, what technologies will have a transformative influence, and what technologies are just hype? How will the e-commerce value chain evolve, and what impact will this have on online and physical retail?

To provide answers to these questions and build a vision of the future, we interviewed thought leaders across the e-commerce ecosystems, including leading retail brands from a spread of market sectors.

Welcome to the consumer of the future

“The word is convenience – the word is anywhere, anytime, however the consumer wants it.”

Colgate-Palmolive

Instant gratification will mean more than a quick fix

Consumer e-commerce today is largely driven by price and convenience: a good deal on products that are delivered quickly. A smaller but growing number of consumers are starting to want more from e-commerce, for example, wanting the ability to discover unique goods they will not find in big-box retail chains. By 2026, these fundamental desires will still exist, but consumer expectations of the e-commerce experience will have changed drastically, along with the shopping experience.

The desire for instant access and fast turnaround, 24/7, will be the norm by 2026, driven in particular by millennials (born approximately 1980–95) and also by Generation Z consumers (born approximately 1996–2010). Generation Z are digital natives to the power of 10, with technology use their second nature. These generations are constantly connected and inhabit an online environment where events happen in real time without them having to wait, and where social media enables them to dictate terms.

Key takeaways

However, by 2026, instant gratification will have come to mean something more sophisticated than a quick fix. It will have evolved into expectations of a seamless shopping experience across an increasing range of connected devices, in which immediacy and convenience are paramount.

Instant access and fast turnaround will still be a key part of the equation, but other expectations will have come to the fore: proactive customer service and support, and free or very low-cost delivery anytime, anywhere. Consumers will expect goods advertised online to live up to the promise in every way – with no disconnect between the “fit and feel” of what they see and what they get. This places great pressure on retailers, and those that fail to meet expectations will fall by the wayside.

The desire for shopping experiences will intensify

By 2026, many consumers will want retailers to provide an environment where shopping is an event experience in its own right. This will translate into interactive, highly engaging online and real-world retail environments where augmented reality (AR) plays a key role. The provision of distinct and tangible shopping experiences, online and real-world, will become a key means to enhance and differentiate a brand's value proposition.

There are a number of factors driving this trend. Many consumers today already treat shopping as a leisure activity in its own right. Consumers are also increasingly drawn to a new generation of lifestyle brands. Alongside this is the appetite for life-enhancing experiences in addition to material things, evidenced by the strong growth in "adventure" holidays and "experience" days.

Another driver is the seemingly insatiable need for people to showcase their participation in activities and experiences on social media. Retailers will increasingly align not only their brands but also the shopping experience itself to this consumer desire for encounters worth sharing. This can already be seen with the emerging trend for integrating social media with in-store retail, with the aim of creating socially driven shopping experiences. In 2015, Victoria's Secret encouraged shoppers to take selfies in front of displays and show them to sales assistants in return for a free gift – and hopefully share their selfies/experiences with friends.

Key takeaways

The provision of distinct and tangible shopping experiences, online and real-world, will become a key means to enhance and differentiate a brand's value proposition. But retail brands must ensure that the experience in question provides genuine delight and value; otherwise, there is a danger consumers could view it as a stunt or gimmick.

The pretzel-shaped shopping journey

The traditional notion of a universal, linear shopping journey that all consumers dutifully follow is already disintegrating, and by 2026, the concept will be completely outdated.

Due to the proliferation of wearable devices and technology, smart TVs, connected cars and household appliances, beacons, and other technologies, the consumer journey in 2026 will increasingly look like a pretzel that twists, turns and loops back on itself. Consumers can start and end their shopping experiences on a mobile platform, in store or online. It is a fluid movement that by 2026 will be even harder for retailers to keep up with or predict because it will include a growing number of devices and touchpoints.

Key takeaways

One of the key conditions for success for retailers in 2026 will be their ability not only to keep track of users across a growing number of devices and touchpoints, but also to figure out how to effectively measure which of those are most effective at driving sales. This will imply a growing level of sophistication in how sales are attributed to the different marketing touchpoints.

The sharing economy is here to stay but with a mixed impact on retail

The trend for collaborative consumption that is emerging today, whereby technology is used to facilitate the borrowing, sharing, lending, renting and swapping of goods and services, will become more pronounced by 2026. The trend is being driven partly by economics and the drive to save or make money, along with the diminishing desire to own digital content on physical media, evidenced by the strong growth of streamed music and TV services. The sharing economy is also being shaped by

a mindset that is far more attuned to environmental issues and the need to maximize existing resources.

While collaborative consumption will have a strong impact on hospitality, we expect its impact on retail to be mixed. The popularity of the Airbnb model means that others will follow, and over time this could have a negative impact on traditional hotel chains and package holidays. Retailers of infrequently used or non-personal products could also feel a hit. For example, hardware retail could be undermined by a secondary market for sharing or renting higher-value DIY tools.

Key takeaways

Smart retailers will need to learn how to exploit the sharing economy to their benefit, and there are several examples of retailers that have found innovative and creative ways to do this.

One example is the partnership between Marks & Spencer (M&S) and the charity Oxfam. For three years, M&S and Oxfam ran a program whereby consumers could donate old M&S clothes to Oxfam charity shops and, in return, receive a discount voucher against new M&S apparel. This type of program has since been copied by other retailers, such as H&M and Ikea. Ikea allows customers to return their unwanted Ikea furniture to participating stores, where it is resold or donated to charity.

On a slightly different but related note is an initiative from Hasbro, which is tapping into the growing popularity of homemade crafts, sometimes referred to as the maker movement. Hasbro has created a site called SuperFanArt.com that allows fans of My Little Pony to showcase art and sell 3-D printed designs.

Supporting the sharing economy can also become part of, and reinforce retailers' commitments to, wider sustainability and environmental issues, which sends a positive message to consumers. Some retailers, such as Ikea, H&M, M&S and the Kingfisher group, are members of the Circular Economy 100, which is driven by the Ellen MacArthur Foundation. A circular economy is one where waste is minimized through recycling, repairing, repurposing and even reinventing products and materials.

Pure play and physical retail: blurring boundaries

“Physical retail will still exist, but it will need a good reason to exist.” Dunkin’ Brands

Online moves into the real world

New entrants to retail will typically start from an online pure-play perspective, moving to test out physical retail space with pop-ups and then networks of collection/showcase stores. This is already the case in furniture, where new entrants have built brands and a design aesthetic online but added little in the way of physical showroom space. For many customers, one visit will be enough to build the trust necessary to make future purchases without needing to physically see and feel each new product.

Existing pure-play online retailers will continue to develop physical presences, mainly to enhance fulfillment and customer service for multi-brand sellers. For most, this will take the form of partnerships along the lines that are emerging today, such as the click-and-collect models adopted by UK retailers. The UK today is the most advanced market for click-and-collect models, examples of which include ASOS and Boots, and eBay and Argos, a partnership that started in the UK and has been extended to Ireland.

The Argos and eBay partnership allows all eBay buyers to pick up their items at one of Argos' 750 stores, thus opening the click-and-collect model. eBay buyers who choose Argos collection choose a store and store address, including a unique code identifier. This is given to the seller to post the item. When the item arrives at the store, the unique code is used to trigger alerts to the buyer that his or her item is ready for collection. Argos gets a small fee for handling each parcel and benefits from increased traffic. While there was some concern that eBay would cannibalize Argos' sales (it is a general merchandise retailer, selling everything from electrical devices to toys, DIY and home products), the partnership has been extended to Ireland, and more than a million eBay items a year are collected from Argos stores.

Online retailers are also establishing a physical presence to support the showcasing of brand and private-label products. It can also help them to provide the shopping experiences that many consumers crave, as discussed earlier Amazon is a high profile example here. The online giant has opened its first physical Amazon Books in Seattle in late 2015, following experiments with pop-up stores. A second is planned at a mall near the University of California, San Diego. The Seattle store sells books but also show cases Amazon's range of devices (e.g. Kindle Fire tablets, e-books) along with the Echo voice-controlled speaker. We expect Amazon to open more real world stores that will increasingly feature other "star" products besides books. In January 2016 Alibaba, China's leading e-commerce player, opened its first physical store in Tianjin (a Free Trade Zone), North China to boost sales of its imported products.

Key takeaways

The already blurred lines between physical-heritage retailers and Internet-heritage retailers will have been eradicated by 2026. The former will continue to reduce the amount of physical space they hold, switching their investment emphases online, while the latter will invest further in establishing physical presences to support the showcasing of brand and private-label products. While the large pure-play Internet retail brands will survive, the term pure play will be rendered obsolete.

Physical retail still exists but not as we know it

Manufacturer brands gain more power in retail

For many retail sectors, physical retail space will include more manufacturers and private-label retailers increasingly looking to showcase products and build brand awareness directly with consumers, with less emphasis on "take home" product transactions. These will tend to be small-format stores. Retail store leases will continue to shorten, and in some cases, more innovative models will evolve to allow manufacturers and private-label online retailers to road-show new products or their brands with event-driven pop-ups. Nespresso, which makes premium coffee capsules and machines, is a master of the pop-up boutique model. Smartphone and tablet manufacturer Samsung took a similar approach for its flagship Galaxy device, creating a network of Samsung Galaxy pop-up studios to showcase and sell the product.

While pop-ups have often been confined in the past to vacated space and therefore less-premium locations, in the future, we foresee pop-ups occupying more desirable locations to satisfy manufacturer demands. Manufacturers will want the reach of a large store network but not all year-round, and the impact-driven model means they will want to concentrate resources at a few locations at a time.

Key takeaways

Manufacturers have already demonstrated their power over retailers, especially in the electrical devices market, and will favor only those retail sites where they have control over how their products are displayed, such as department store concessions.

An increasingly fragmented physical footprint

The sale of branded products will continue to migrate to the web, as online merchants benefit from price-comparison shopping, except where superior service and customer experience can justify the higher price points, such as at premium department stores. The “pile them high, sell them cheap” model will only remain viable at the very lowest end of the market, where the urgency of attaining products and the lack of a delivery charge supersede a lower online price.

Demand for large-footprint physical retail space will continue to fall, as the need to keep complete inventories in stock at every store diminishes due to improved logistics built around online delivery and the click-and-collect model. This will increase the pressure on the existing space to be more efficient and effective, although the ability to understand and measure the impact of physical space becomes more problematic as channels merge.

Key takeaways

We will see retail move from an *online–physical* distinction to an *experience–fulfillment* distinction. Stores in premium locations will concentrate on the experience at the expense of the immediate availability of a large range of products, while less desirable locations will dedicate space to housing as large a range as possible to satisfy the significant part of the market that will still prefer to buy in store, or that will have an immediate need or impulse.

Temporary pop-up stores, with retailers and manufacturers moving around to road-show products, will be widespread, giving retail space a more dynamic, interactive feel. Pop-up stores will be integral to the retail experience rather than an opportunistic use of vacant space.

Value and discount players will continue to operate, as some protection from online competition will remain due to their price points, product availability and urgent consumer need, though more will move online as some of the larger players find ways to make money from selling low-value goods online.

Goodbye to silos

Today, all major retailers are pursuing an omnichannel strategy, but in many cases, the execution is proving better on paper than in practice. By 2026, this will no longer be the case – retailers will have truly mastered omnichannel.

From omnichannel to omnibrand

The first phase of the omnichannel evolution that we see today is often characterized by a silo approach, whereby different channels have different marketing, merchandising, accounting and supply chains. This is essentially a multichannel strategy without integration. Marketing messages, pricing and product availability can be inconsistent across channels, leading to frustration for consumers. However, by 2026, we expect retailers to have addressed these issues, and instead of thinking and executing in terms of channels, they will instead view consumer touchpoints as working together to support an integrated, consistent omnibrand experience.

Key takeaways

The retailers that will thrive will be the ones that allow customers to shop when, how and where they want to. This requires significant investment in technology and logistics and will be a struggle for smaller physical-heritage retailers, many of which will be squeezed out. Start-up retailers will come from a tech-savvy, Internet-first standpoint and will be better equipped to develop an omnibrand strategy.

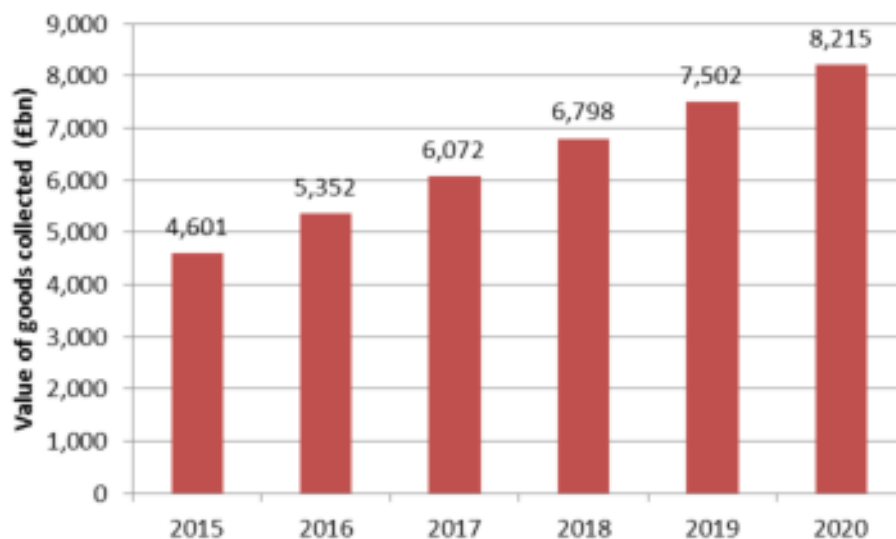
Fulfillment is a major battleground, ushering in new models

Fulfillment is becoming a major battleground that will continue to develop over the coming years as retailers experiment with different models. By 2026, deliveries will be on the same day, with even narrower time slots, as a matter of course. Amazon, ever a trailblazer, is already moving toward this scenario with its one-hour delivery service that is offered as part of its subscription-based Amazon Prime premium service.

The rise of click and collect

Today, the majority of retailers are utilizing pickup points in convenience stores, post offices and lockers, along with the more established own-store click-and-collect model. In the UK, which has the most mature click-and-collect retail market, the value of goods collected in store is expected to rise by 78 percent by 2020, as shown in Figure 1, with the value of goods being picked up from lockers, convenience stores and other locations increasing threefold.

Figure 1: UK click-and-collect market – value of goods collected



Source: Verdict

Key takeaways

We expect further partnerships to be made in order to allow Internet-based retailers to build up physical collection points. We also foresee noncompeting physical retailers collaborating to allow the collection of each other's products in each other's stores. This will allow them to maintain a virtual geographic presence despite the need to reduce their own physical store networks.

By 2026, the proportion of sales fulfilled in store that were ordered online will be such that the emphasis on how to upsell collecting customers will be of much greater importance than it is now. Store formats, layouts and in-store customer engagement will need to be adapted accordingly.

However, despite the rise in collection, home delivery will still be the dominant method of receiving online orders, and we expect to see increasing efficiencies and improvements in services from couriers over the next 10 years.

The race to find new delivery systems

Despite the reduced costs of operating online, the cost of fulfillment has made even the largest players struggle to turn a profit. The retail winners of 2026 will be those that can get goods to consumers the fastest and most cost-efficiently. The largest players will invest in their own delivery systems in order to gain differentiation, as Amazon has already done.

However, the use of drones and driverless cars for delivery will not be widespread by 2026, largely due to security and safety issues. Concerns on this front will be a catalyst for investment in other models; for example, Uber-style delivery will reach the mass market.

By 2026 though, the click-and-collect model will be well established at all the major retail chains in key markets, and the other winning methods of collection will be clear, so that delivery service is unlikely to continue to be a key differentiator at the retail level.

Toward a mobile-centric retail experience

“Mobile is the glue between our digital and physical universe.” House of Fraser

“Mobile plays a part in every single customer journey.” New Look

Mobile devices are already a key platform for digital content and communications, and the same is becoming true in the retail and commerce domain. This is being driven by the huge growth in smartphone sales volumes, which will reach 2.05 billion by 2020, as shown in Figure 2.

Key takeaways

The widespread adoption of increasingly powerful smartphones with larger screens is improving the m-commerce experience. Meanwhile, more and more retailers are optimizing their sites for mobile shopping. Together, these developments are turning the smartphone into a platform that can support the whole shopping journey, from product search and discovery, to comparisons, recommendations, and payments.

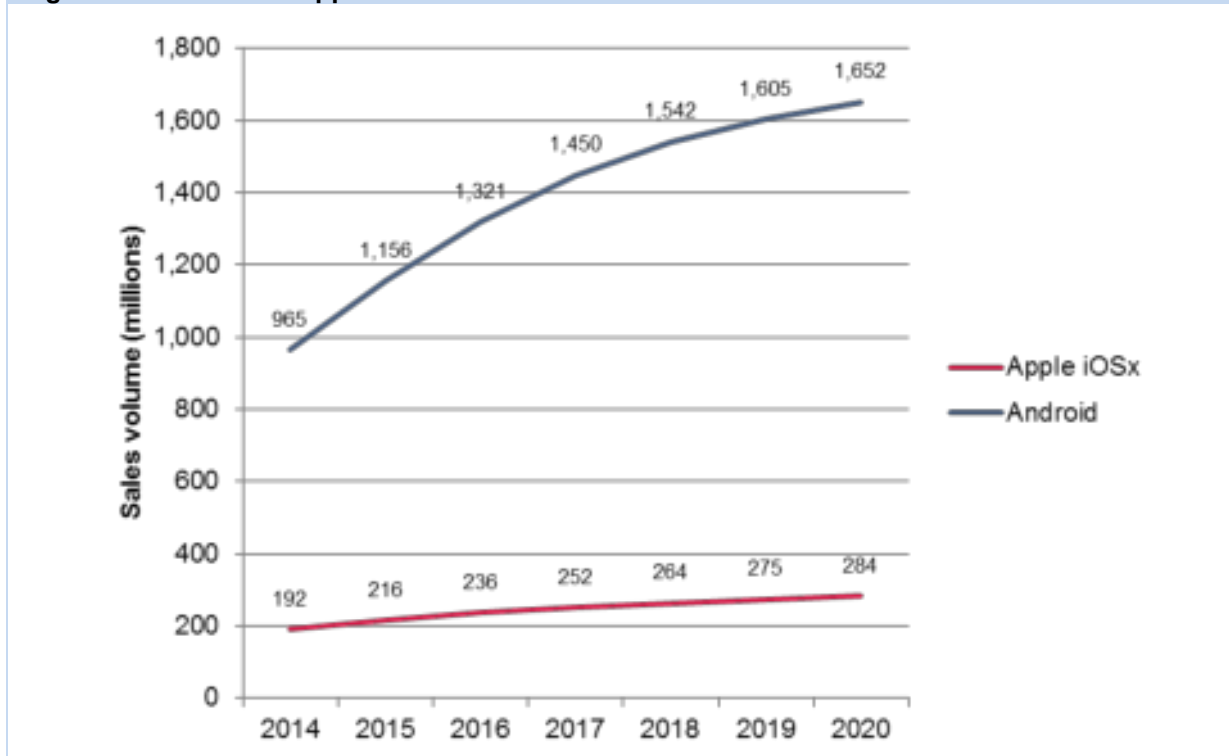
Figure 2: Global handset sales volume – by segment



Source: Ovum

At the global level, Android-based smartphones will continue to dominate the market going forward and eclipse Apple iOS devices, as shown in Figure 3. This has far-reaching implications for mobile payments, indicating that Android-based m-payment apps like Android Pay (Google), Samsung Pay, LG G Pay and others will have a huge opportunity in terms of potential scale. We expect to see intense competition not only in terms of Apple versus Android but also among individual Android m-payment providers.

Figure 3: Android vs. Apple iOS sales volumes



Source: Ovum

Contextual location becomes a building block for retail

By 2026, contextual location will be an integral part of the retail experience, driven by mobile technology. The ability to identify a user's location and deliver targeted, timely, contextually relevant information, advertising and marketing messages is a powerful, compelling proposition. Moreover, the real-time aspect of location analytics will offer a more adaptive approach to marketing, enabling retailers to change their marketing and engagement in real time to meet an individual consumer's needs.

There is already a growing focus on hyperlocal commerce – precise targeting within a highly defined location – both outdoors and in building. Today's efforts are still largely in experimental mode, but by 2026, hyperlocal commerce applications will be more widespread, with Bluetooth Low Energy (BLE) beacons being an important enabling technology. BLE beacons are tiny units with built-in sensors that can broadcast signals to BLE-enabled devices within range, triggering corresponding beacon applications on the device. This enables retailer brands to engage with consumers through targeted, contextual, relevant marketing messages and offers. Another potential benefit to retailers from beacon applications is the ability to engage their customers after they have left a physical store. For example, if a customer has stood in an aisle looking at smart TVs for more than 15 minutes but left the store without buying one, it suggests the interest is there even though it has not led to a purchase. The retailer could follow up by sending the customer suggestions and promotions related to the product he or she showed interest in.

Key takeaways

A positive scenario for hyperlocal commerce is based on the premise that retailers, brands and other stakeholders proceed with great care. For retailers to make a return on investment for hyperlocal commerce, widespread consumer acceptance will be needed. Retailers must therefore tread carefully

in the initial period until consumers are comfortable with hyperlocal commerce applications, which will be a new experience.

Prepare for a mobile payments boom, driven by m-commerce

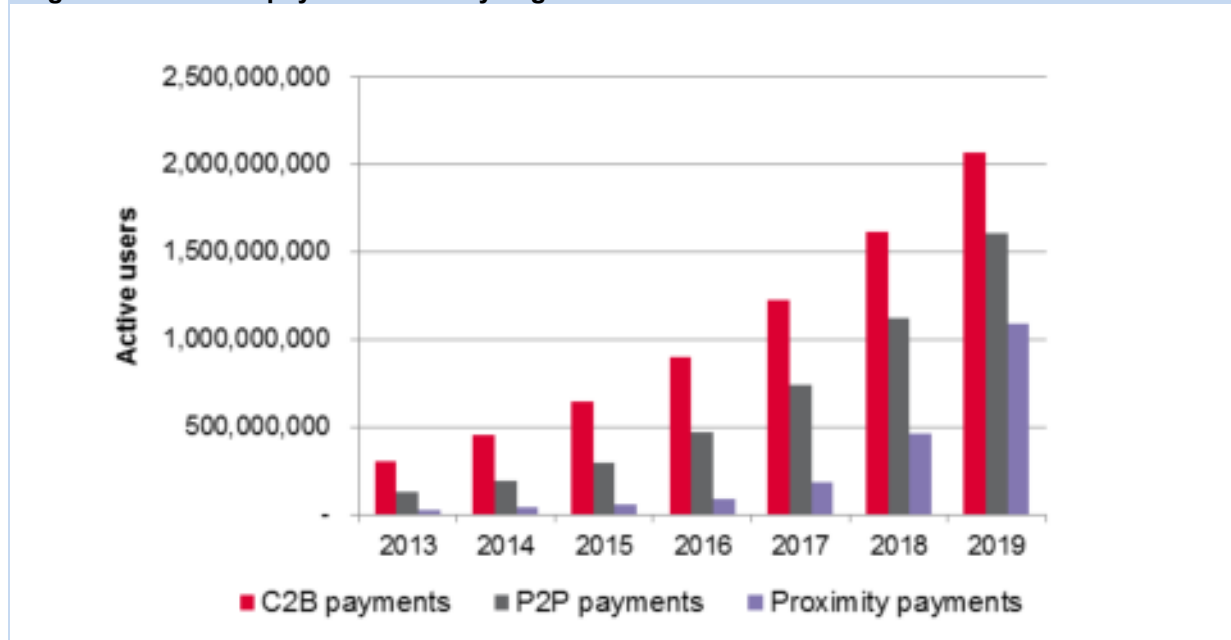
We expect to see very strong growth in mobile payments for online goods and services over the next five years and beyond, from an estimated 452.78 million global users in 2014 to 2.07 billion users in 2019, as shown in Figure 4. Please note that for forecasting purposes, we define m-commerce as remote consumer-to-business (C2B) mobile payments. Consumers are already gravitating to smartphones and now tablets for m-commerce, a trend that will accelerate going forward as the user experience continues to improve. Moreover, the number and value of m-commerce transactions are increasing, rapidly so in mature markets. M-commerce is becoming the largest m-payment segment in terms of transaction value, which we expect to grow from \$50.92 billion in 2014 to \$693.35 billion by 2019.

Mobile proximity payments initially lag – but good prospects beckon

Mobile proximity payments (i.e., in-store m-payments) ramp up far more slowly and, in the earlier years of the forecast, have only very modest traction in most markets, with an estimated 4.47 million global users in 2014. The low traction for in-store payments today is partly because Near Field Communication (NFC) still has not been universally deployed across retailer Point of Sale (POS) acceptance infrastructure. This in turn affects consumer adoption, which in the earlier years is also hindered by low awareness and/or a perception that such payments do not provide any benefits above and beyond existing payment instruments. But we expect this situation to change as both the aforementioned barriers are addressed: as support for NFC becomes more widespread among merchants while consumers appreciate the speed and convenience that in-store mobile payments can bring. NFC mobile proximity payments are being given a further boost by the widespread adoption of Host Card Emulation (HCE), which provides a more flexible way of implementing NFC that helps stimulate competition.

The result is that by 2019, the global user base for mobile proximity payments will have grown rapidly to 1.09 billion users. We expect that NFC will scale and become the dominant enabling technology for mobile proximity payments, accounting for 939.10 million global users by 2019. The user base for non-NFC mobile proximity payments (e.g., QR codes, SMS, USSD) has been higher than that of NFC, with the former having 40.08 million global users in 2014. However, although this grows to 151.78 million global users by 2019, it is substantially behind NFC mobile proximity payments.

Figure 4: Global m-payment users by segment



Source: Ovum

Key takeaways

Although mobile payments will have become mainstream in most markets by 2026 (i.e., a penetration rate of the total device base of 25-30 percent or more), they will still coexist with other payment instruments. Payments as a whole evolve slowly, with new types supplementing old ones rather than replacing them outright. This will be true of mobile payments, although the pace of technology, service development and adoption will be more rapid than it has been for previous-generation payment instruments. By 2026, m-payments will have reduced the use of physical payment cards but will not have displaced them. Mobile payments will likewise not have totally eradicated cash, although the use of cash will be radically diminished.

Mobile loyalty in the ascendant

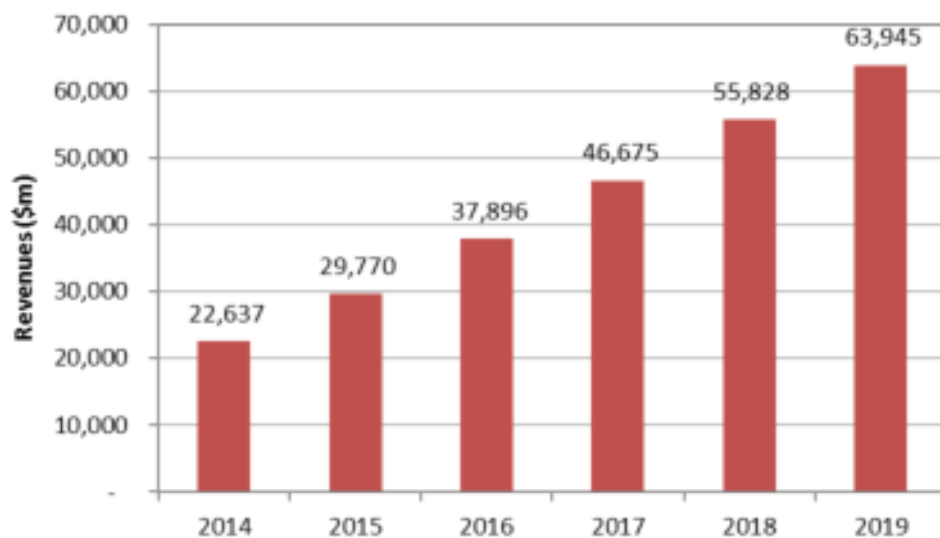
Mobile will soon become the dominant channel for loyalty programs and rewards. Mobile-enabled loyalty programs can provide levels of interactivity and engagement that traditional programs cannot match. Mobile channels, particularly when location-enabled, can provide rewards in real time. They can be further enhanced by social and gamification elements, which can help foster a sense of community around a program. There is also a practical element to mobile loyalty programs and rewards – the convenience of being able to load multiple digital reward cards into a mobile wallet. We predict that by 2026, traditional plastic loyalty cards, even smartcards, will have been absorbed into mobile wallets.

Moving toward mobile-first advertising

There is no doubt that mobile advertising is already firmly in the digital advertising mix and a significant driver of advertising dollars. By 2026, mobile will be the dominant (but not exclusive) channel for most brands, while in emerging markets, advertising will be a mobile-first experience. Ovum's mobile Internet advertising forecasts project that global revenues will increase from \$22.64 billion in 2014 to \$63.94 billion by 2019, making mobile the fastest-growing Internet advertising category, as shown in Figure 5.

Today, most mobile advertising happens on the mobile web because it's convenient and scalable. But there are other mobile channels that retailers can draw on, including application-based advertising and messaging. Consumers increasingly engage with digital content and services on mobile devices via native applications, and where consumers go, advertisers follow. Application advertising is already widespread and will become increasingly scalable and sophisticated going forward. Messaging platforms will also continue to be a key touchpoint in the future. The popularity of mobile social messaging applications is being fueled by the growing number of OTT services (such as WhatsApp), and this shows no signs of abating.

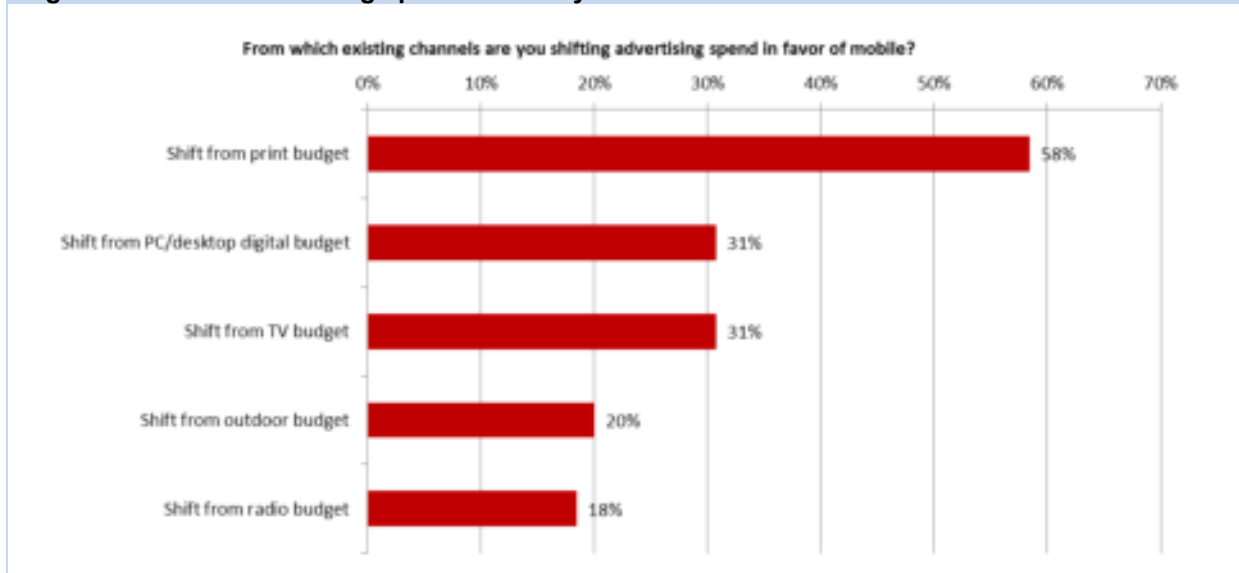
Figure 5: Global mobile Internet advertising revenue



Source: Ovum

A key trend driving the growth in mobile advertising is substitution from other channels, and we expect this to accelerate. This trend was strongly evidenced in the latest findings from Ovum's ongoing survey of U.S. advertising executives on behalf of the Interactive Advertising Bureau, as shown in Figure 6.

Figure 6: Mobile advertising spend driven by substitution from other channels



Source: Ovum

Key takeaways

We anticipate that by 2026, the current debate pitching advertising via the mobile web against native applications will have been replaced with a more intelligent approach that uses the channel most appropriate to device form factors, target audience and campaign objectives. For example, in the context of wearable devices, native applications are most likely to be a more effective advertising channel.

Context is king

Moving from a 2-D to 3-D customer perspective

The range and depth of customer data insight will proliferate over the next 10 years. There will be more digital services, platforms and devices than ever before capable of generating data insights, including social media and messaging apps, location-based services, and online and mobile payments. On the devices front, smartphones, tablets and connected TVs will be joined by wearables, medical appliances, connected cars and multiple embedded touchpoints in smart homes and cities.

Key takeaways

These multiple sources of data, combined with the ever-improving capacity to reconcile data coming from different devices, will enable an increasingly rich view of the consumer, moving from today's still largely two-dimensional view to one that is fully contextually relevant, as outlined in Figure 7. What will be even more important for retailers to understand will be how these multiple customer insights relate to touchpoints in the consumer shopping journey, such as where they viewed a product (location and device).

Figure 7: Toward a 360-degree, contextual view of consumers



Source: Ovum

The rise of predictive models and curated shopping

The ability to leverage multiple data points to provide a contextual view of consumers will drive the evolution of predictive analytics, giving retailers models that will help them determine consumers' likely future actions and needs. This will not be a perfect process by 2026, but it will certainly be instrumental in reducing the risk in R&D for new product development.

There will also be a rise in business models that leverage predictive analytics to take product recommendations to the next level by providing a fully curated shopping experience. For example, a subscription-based health and beauty service could use predictive analytics to create a customized package for a person that anticipates his or her individual needs. Such a service could provide genuine convenience and delight.

Another element of the curated shopping experience will be the emergence of the next generation of digital assistants. Today's digital assistants, in the form of Siri, Cortana and Google, are just the beginning, and going forward, digital assistants will become far more sophisticated, applying the cognitive power of artificial intelligence to e-commerce. This is already happening at a very early stage, as evidenced by the work of IBM's Watson Group and its acquisition of Fluid. These advanced digital platforms will eventually become available on a white-label basis to retailers, making them affordable and easy to implement.

Key takeaways

We predict that by 2026, curated shopping and digital assistants will be widely used, as consumers receive an ever-increasing number of promotions from an ever-increasing number of stores. Many consumers will be happy to let a trusted assistant do the job of identifying the deals that are most likely to be of interest to them at a given point in time (for instance, by filtering out clothes that are not their size and by focusing on items the user is looking for, such as prom dresses).

However, curated shopping and digital assistants will not appeal to all consumers because of questions of agency – some people will ultimately prefer to retain more control over the purchasing experience. Also, some types of products lend themselves to digital assistants more than others – for example, while few consumers would object to having an automated assistant add discounted replacement batteries to their shopping carts, the same may not be true for consumers of higher-involvement product categories, such as big-ticket consumer electronics.

Consumers take more control of personal data trade-off terms

By 2026, consumers will have come to expect a high level of convenience and personalization in their interactions with retailers and brands and will accept that this is enabled by sharing personal data. However, consumers will be far more aware of the value of their personal data and will expect more control and agency over the breadth and depth of what is shared, and the entities with whom the information is being shared. Retailers will need to recognize and respect this and accept that there are gradations to privacy depending on the nature of the data sought and what is being offered in return. For example, health and finance products are associated with highly sensitive information that consumers will only want to share with trusted, expert health or finance providers.

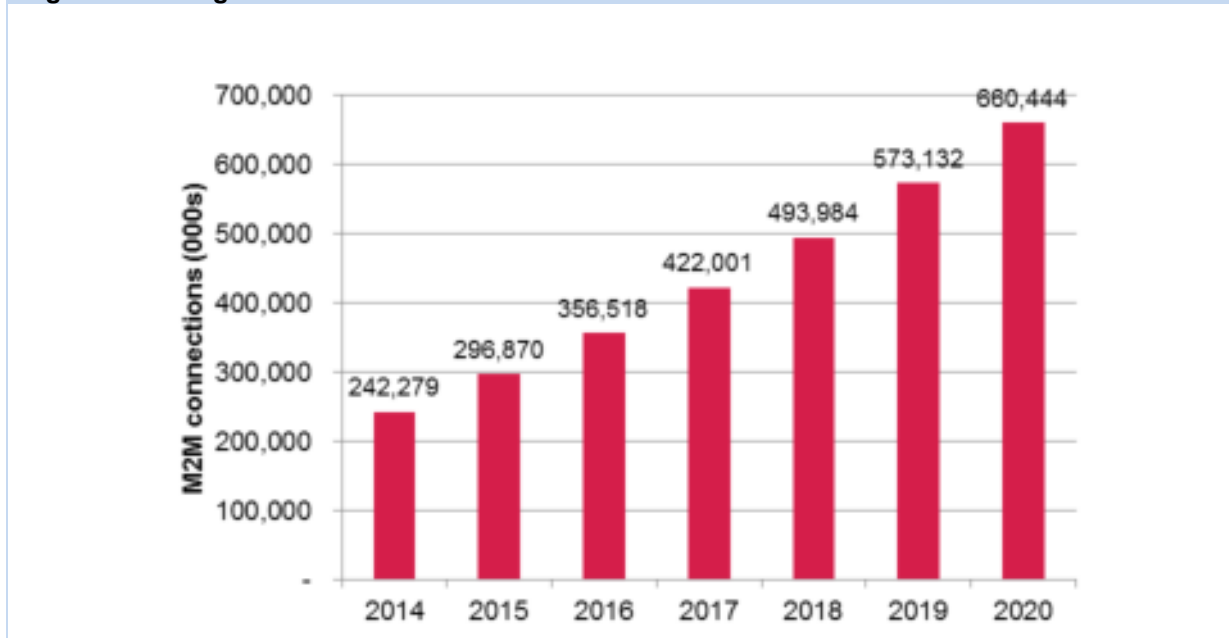
When it comes to privacy control, we predict that users will increasingly want centralized control over data that is spread across many different sites. As a result, by 2026, initiatives such as the GSMA's Mobile Connect in the UK will have become standard. Mobile Connect gives consumers a single digital ID that they can use to securely log on to sites and/or authenticate payments from their mobile phones. More importantly, it allows consumers to control how much personal data they share with third parties.

Key technologies that will shape retail

Hyperconnectivity will create new dynamics in retail

By 2026, consumers will be living in a hyperconnected, high-speed world where the Internet of Things (IoT) will be part of the everyday fabric of life. By 2020, there will be 660 million machine-to-machine (M2M) connections, as shown in Figure 8. Over the next 10 years, M2M connections will make retail more efficient and effective. Connected retail display cabinets and smart product tags will be commonplace, enabling retailers to track demand and report on stock levels in real time, which in turn will improve supply chain effectiveness. M2M connections will also enrich consumer engagement in retail, for example, via connected indoor and outdoor digital signage equipped with sensors. Content and advertising feeds streamed to connected displays will be adapted in real time to anticipate and target the needs of consumers based on local conditions, such as the location of the screen, the time of day and even the weather.

Figure 8: Total global M2M connections



Source: Ovum

M2M will play out in adjacent sectors that will impact retail. For example, connected driverless cars with built-in GPS and video screens supporting streamed content could become an important marketing platform for brands and retailers. Connected appliances in smart homes could also become part of the retail equation, and Amazon is already exploring the opportunities. A key part of Amazon's emerging smart home strategy is its Dash Replenishment Service (DRS), a test-phase product replacement service that will integrate with third-party connected devices to monitor supplies and automatically reorder them when they are getting low. It also features an instant-buy Dash button that can be retrofitted onto existing products or built into new ones, allowing consumers to make their own purchases.

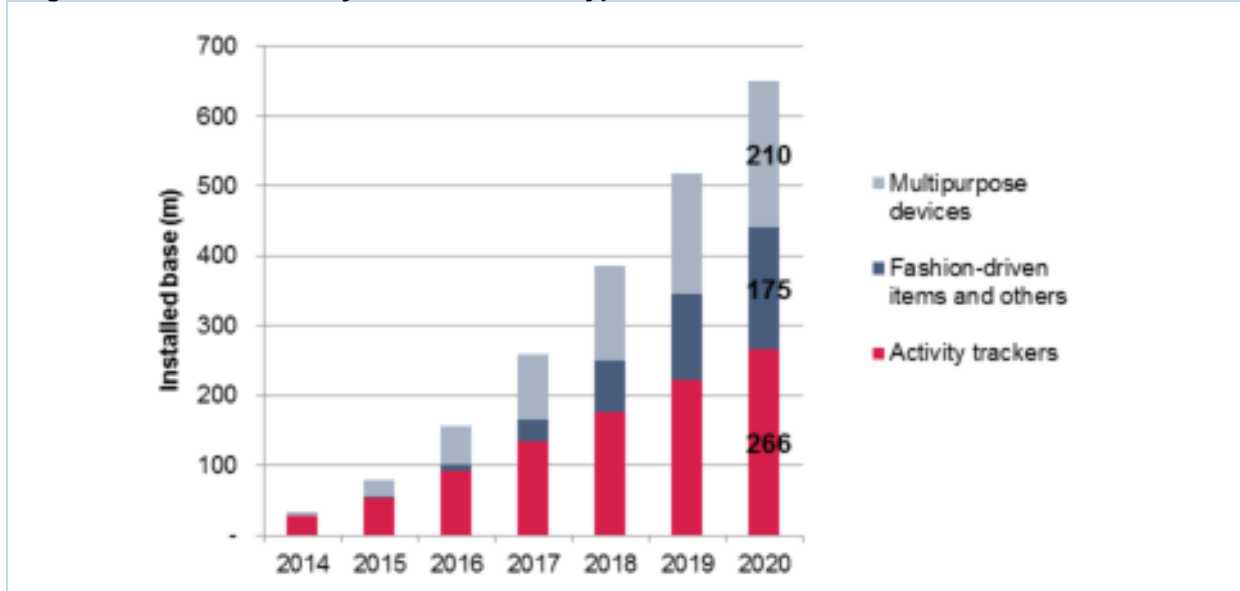
Key takeaways

At this point we remain skeptical about the potential of many IoT/M2M payment and commerce services. Just because connected things can be turned into a payment platform does not mean they should be – there has to be a genuinely compelling use case. If not, then IoT payment and commerce applications will be a gimmick rather than a solution to a genuine problem or a service that provides a significant improvement in convenience and utility. For some consumers, IoT payment and commerce applications might infringe on their sense of control over their environment and could cause frustration if such a replenishment service locks them into a prescribed list of suppliers.

Wearables will become a platform for m-commerce, albeit with limitations

There is a lot of excitement about wearable technology, and although the ecosystem is still emerging, the number of wearable devices coming to market is increasing. Ovum expects the installed base for wearable devices to reach 650 million by 2020, as shown in Figure 9.

Figure 9: Installed base by wearable device type



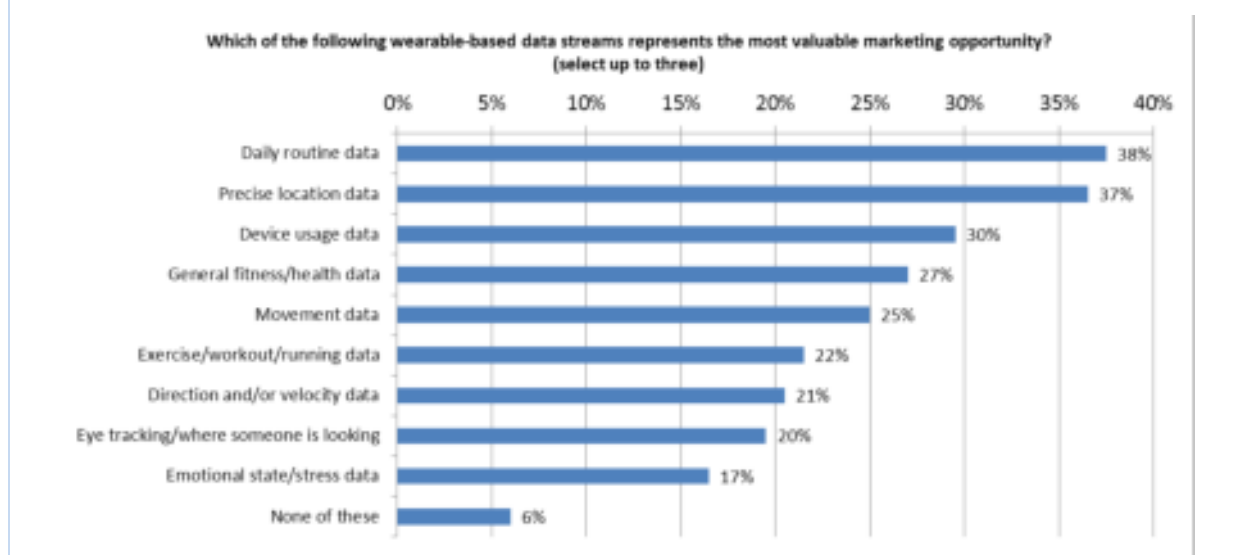
Source: Ovum

We do not foresee wearables becoming a mass-market m-commerce platform in the manner of smartphones. This is because of the inherent constraints in the form factors and capabilities of wearables, the obvious ones being tiny screens and the fact that most wearables are companion devices; although as the technology matures, wearables will become smarter. In the mobile payments space, we can see a viable role for smart watches in tap-and-go mobile proximity payments.

Key takeaways

For mobile advertising, the key benefit of wearables will be as a source of very granular data insights and also new types of behavioral and usage data. Wearables of the future will have the ability to capture a wide array of data related to a user's contextual activity, health and emotional state. This information can be used to enhance and tailor both products and marketing messages to a very high degree, providing it is within acceptable privacy boundaries. Indeed, marketers are already mindful of this potential, as revealed by findings in the Ovum mobile marketer survey shown in Figure 10.

Figure 10: The value to mobile marketing of data insights from wearables



Source: Ovum

Augmented reality (AR) will be a strong driver for online and physical retail

We think that going forward, augmented reality (AR) rather than virtual reality (VR) will have the greatest impact on the retail experience. Our definition of AR describes normal views of reality that have been enhanced by digitally generated information or graphics superimposed on that view. This is in contrast to VR, which describes fully immersive digital environments of the kind being developed by Facebook-owned Oculus Rift.

AR has the ability to blur the boundaries between the physical and digital worlds and with it the boundaries between online and in-store shopping. AR will give online customers an in-store experience, addressing the fit-and-feel issue that can deter consumers from making online purchases, particularly in apparel. For example, AR will allow consumers to virtually try on clothes and jewelry. This could significantly help lower returns on products that do not fit one's body or personal space, such as clothes and home furnishings. According to a survey by the U.S. National Retail Federation, returned merchandise cost U.S. retailers \$284 billion in potential sales. AR apps will also allow consumers to view products in their homes, which can then be purchased on the spot from their mobile devices.

AR will also be widely used to enhance the in-store experience, particularly for concept and showroom stores that we are starting to see today with certain high-end brands, such as Burberry.

Forget the hype – 3-D printing will have a limited impact in the retail space

3-D printing will grow but only if it can provide genuine benefits, quality outputs and speed at a reasonable cost. However, even if 3-D printing does manage to deliver on all these parameters, it will still have a limited role in mainstream retailing. The scenarios in which we can expect 3-D printing to have an impact relate to highly personalized products, such as gifts. It could also be used for spare parts in more complex products, such as cars and motorbikes. For more simple items, such as DIY goods like screws and hammers, the cost is already so low that the benefit of production via 3-D printing would be minimal. We can see a stronger role for community-run 3-D fabrication shops, which ties in with the trend for collaborative consumption discussed earlier.

Preparing for the road to 2026

Recommendations: actions to help retailers stay ahead of the game

“The winning retailers will spend more time looking at the windshield and less time looking at the rearview mirror.” Dunkin’ Brands

Cultivate agility and constant learning

Retailers will have to be able to recognize rapidly changing trends and have the ability to change with them. This includes adopting promising new technologies and embracing partnership opportunities and organizational agility.

Many retailers today approach learning as an exercise in analyzing the past and making small, incremental changes. This may no longer be enough to place retailers in a winning position going forward. Instead, they should adopt a forward-looking stance of constant learning and selective testing of fresh, innovative concepts for engaging and interacting with customers and partners.

Rethink segmentation

Traditional approaches to customer segmentation already sit uneasily with digital consumers and, by 2026, will no longer be appropriate. Consumers exhibit hybrid purchasing behavior today, and this will continue; for example, more affluent consumers combine premium and value brands in their shopping mixes, while lower-income consumers save up for select premium products as status symbols. Consumers will increasingly move between segments, and this fluidity means that the boundaries between segments will blur. Consumers are also drawn to the heightened relevance and utility that more personalized services can afford (when executed well), and expectations here will intensify. Old segmentation models based on socio-demographic parameters and past search and purchase patterns alone will prove ineffective. Instead, retailers need to take a far more sophisticated, creative approach to segmentation that is based on context rather than old-school, prescriptive, one-size-fits-all models.

Be mindful of the limits to personalization

It will be very clear by 2026 that while hugely beneficial, personalization has its limits. There are serious cost implications in the production and supply of highly personalized products and services. For many products this will not be viable and will instead translate into mass customization. Mass customization is becoming a familiar term that describes the ability to offer more tailored, personalized products and services, but in a way that such products and services can still be produced and delivered with cost-efficiency and at scale (i.e., mass production). This is clearly a lot easier in principle than in practice, but it has been implemented in several industries, notably in the apparel and automotive sectors. At the same time, not all consumers will want a highly personalized offer due to questions of agency and concerns over data privacy.

Understanding the customer journey will become critical to channel investment

As channels become fully integrated, understanding individual channel profitability becomes problematic, as the value of a channel is not the transactions that go through it but the impact it has on delivering sales, regardless of the channel the transaction is made in. Understanding the customer shopping journey becomes critical in understanding the role each channel has and the level of investment that needs to be made in it. The value of stores is no longer simply the worth of the goods sold in them but the impact they have in encouraging sales online, showcasing the brand and

developing top-of-mind awareness. Measuring these is difficult and requires a deeper understanding of and engagement with customers.

Create a brand experience

In an era in which consumers expect a seamless shopping experience as a matter of course, retailers will have to seek other means to differentiate and stand out from the crowd. In this context, building a brand experience will become more important than ever before. A brand experience goes deeper than advertising alone and is a matter of the overall quality of service provided. It is also about fostering a brand identity that has a strong emotional bond and relationship of trust with consumers. This in turn means that how advertising *feels* to a consumer will be as important as what is being sold. A key thrust of retail advertising will be the story it tells about the retail brand, and the key factor in making the story persuasive and personal will be a retailer's conversational marketing skills. The reality today is that most retailers do not have a brand experience of the kind envisaged above, unlike many of the manufacturers whose products they sell.