MASS-PERSONALIZATION IS THE NEW RETAIL IMPERATIVE

POWER TO THE PEOPLE
Traditional retailers face fierce competition from their born-digital rivals. Pressures on growth and profitability are remorseless. And meeting the needs of the increasingly empowered consumer is becoming ever more complex. Cost, choice and convenience are now simply table stakes. Captivating consumer hearts, minds, and wallets demands a bolder play. The smart money’s on delivering compelling consumer experiences and deep personalization. In this year’s Accenture Technology Vision for Retail, we examine five key trends that could shape the retail landscape, decisively.

The theme for the Accenture Technology Vision 2017 is “Amplify You.” This theme is a natural fit with the way the retail marketplace is developing. We’re entering a new world where, above all else, consumers hold sway. They already have unprecedented choice and control. They’ll acquire more. And retailers must keep pace to stay relevant.

Over the next decade, the boundary between online and offline will continue to blur and shift—with most path-to-purchase journeys including some online element. E-commerce penetration will grow from around 10 percent today to 40 percent in 2026.1 We’ll see growing momentum behind consumer spend on services wrapped around products, rather than just products themselves.

On the front line of consumer change, retailers recognize that they have to transform or risk being side-lined in the race for relevance. Over 86 percent of retail industry executives agree that their organizations must accelerate their pace of innovation simply to remain viable.2 It’s no surprise. The meteoric rise of Amazon3 means it’s become impossible to contemplate a retail landscape without this born-digital leader constantly changing the rules of the game.

Amazon’s stated mission, to be “earth’s most customer-centric company” is not corporate window-dressing. However, Amazon’s current market share, while formidable, is only five percent of US retail spending.3 In other words, there’s a lot left to play for.

For retailers, the five trends we present in this report—AI is the New UI, Ecosystem Power Plays, Workforce Marketplace, Design for Humans and The Uncharted—point the way to new technology priorities. Mastering them will enable retailers to compete in a game that’s only just getting started.

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1 “Shaping the Future of Retail for Consumer Industries,” World Economic Forum January 15, 2017
2 Accenture Technology Vision 2017 – Retail Survey Results
3 US e-commerce sales grow 15.6% in 2016,” Internet Retailer, February 27, 2017
Artificial intelligence (AI) is about to become a digital spokesperson for companies. Moving beyond a back-end tool for the enterprise, AI is taking on more sophisticated roles within technology interfaces. From autonomous driving vehicles that use computer vision, to live translations made possible by artificial neural networks, AI is making every interface both simple and smart—and setting a high bar for how future interactions will work. It will act as the face of a company’s digital brand and a key differentiator—and become a core competency demanding of C-level investment and strategy.

Companies are increasingly integrating their core business functionalities with third parties and their platforms. But rather than treat them like partnerships of old, forward-thinking leaders leverage these relationships to build their role in new digital ecosystems—instrumental to unlocking their next waves of strategic growth. As they do, they’re designing future value chains that will transform their businesses, products, and even the market itself.

Driven by a surge of on-demand labor platforms and online work management solutions, legacy models and hierarchies are being dissolved and replaced with open talent marketplaces. This resulting on-demand enterprise will be key to the rapid innovation and organizational changes that companies need to transform themselves into truly digital businesses.

We shape technologies so it adapts to us. The new frontier of digital experiences is technology designed specifically for individual human behavior. Business leaders recognize that as technology shrinks the gap between effective human and machine cooperation, accounting for unique human behavior expands not only the quality of experience, but also the effectiveness of technology solutions. This shift is transforming traditional personalized relationships into something much more valuable: partnerships.

Businesses are not just creating new products and services; they’re shaping new digital industries. From technology standards, to ethical norms, to government mandates, in an ecosystem-driven digital economy, one thing is clear: a wide scope of rules still needs to be defined. To fulfill their digital ambitions, companies must take on a leadership role to help shape the new rules of the game. Those who take the lead will find a place at or near the center of their new ecosystem, while those that don’t risk being left behind.
AI IS THE NEW UI

For retail, Artificial Intelligence (AI) has two distinct applications.

The first is its ability to support more personalized customer interactions and offerings. The second is to deliver game-changing efficiencies in internal processes and operations. In other words, AI is the new UI. But that’s far from the whole story.

Beginning with the customer, AI offers retailers the capabilities they need to support a frictionless customer experience, automated and independent of human intervention. In certain contexts, and for certain products, that’s exactly what consumers are looking for. Being able to auto-replenish low-engagement household goods like washing powder, for example, is already a possibility with Amazon’s Dash buttons available for a range of everyday products.

In other contexts, where consumers are looking for guidance customized to their individual needs, AI can support a higher degree of personalization, at scale. Chatbots and virtual assistants, online and available through popular messaging platforms like WeChat and Facebook Messenger, are already providing consumers with tailored, 24/7 support and advice on a whole range of products and services. Quick-service restaurants (QSRs), such as Domino’s, are reinventing the ordering process. The pizza chain now allows customers in the US to use a chatbot within Facebook Messenger to place and track their orders, without having to leave the app. It’s a significant step toward truly frictionless customer interactions.

The Internet of Things (IoT), in combination with AI, holds the key to unlocking greater value from consumers instore. French supermarket chain Carrefour, for example, uses beacon networks and in-store mapping technology to provide its customers with recommendations and promotions on their mobile devices, as well as gathering valuable data about their shopping habits.

We're just beginning to see the potential of AI as the new consumer interface. But it’s perhaps in the back-office where retailers will find the most immediate payback from investments in these technologies. Many retail executives agree, with 60 percent of them pointing to productivity as being the biggest benefit from embedded AI. The technologies cut across retailers’ entire operations, from R&D to planning, and from sales to logistics.

Retailers who lead in product and speed to customers are winners. These are two areas where AI can make a decisive difference by enabling intelligent gathering of information from a wide network of touchpoints and sources. For example, retailers can now link their supply chain with meteorological forecasts, manufacturers’ planning and other key variables that would enable them to achieve minimized inventory, more profitable sales and effective promotions.

AI can also support breakthrough advances in efficiency by augmenting people and eliminating repetitive manual processes. One telecoms retailer in the UK is doing just that. It has been able to reduce the time it takes to get new customers online from two days to 20 minutes by extensively automating manual checks.

RECOMMENDATIONS

- Bring together business and technology stakeholders to define governance and guiding principles for your organizations’ position on AI. Pay specific attention to ethical and responsible AI, addressing topics such as obligations to employees, shareholders and society, value to the organization and consequences, and deployment considerations such as compliance.

- Use the latest insights from business and technology thought leaders to identify areas of greatest AI value and to identify highest priority opportunities across all business functions.

- Identify ways to transform each touchpoint and define new journeys that turn routine interactions into inspirational design experiences for everyone: think of your employees and suppliers experiences the same way you think of your customers’ experience.

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5 “25 Retailers Nailing it with their Proximity Marketing Campaigns,” Beaconstac, February 11, 2016
6 “Shoppermotion Revolutionizes Retail Shopping Experience Using Internet of Things (IoT) Powered by Cloudera,” Cloudera, April 11, 2017
7 Accenture Technology Vision 2017 – Retail Survey Results
8 Accenture Credential
More than six out of 10 retail executives agree that digital ecosystems are dramatically transforming their industry. And 66 percent say that digital ecosystems are transforming or altering the way their organization delivers value.

Retailers should think about their participation in ecosystems across two broad dimensions. The first is the engagement with other players to achieve new capabilities and extend current operations into new areas. An example of this “predictable disruption” is UK supermarket chain Morrisons’ initial and expanded partnership with Ocado, an online food retailer, to achieve instant access to Ocado’s Smart Platform and a delivery network it would otherwise have taken considerable capital and time to develop independently. Separately, Morrisons expanded its relationship with Amazon to deliver groceries to customers within an hour in select markets. Just as important, if not more so, Whole Foods is also getting access to a huge pool of customers who already trust Instacart with delivery of their online purchases.

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9 Accenture Technology Vision 2017 – Retail Survey Results
10 Accenture Technology Vision 2017 – Retail Survey Results
11 “Ocado agrees more flexible deal with Morrisons”, Financial Times, August 9, 2016
12 “Morrison’s expands Amazon deal offering delivery in an hour,” The Guardian, November 16, 2016
13 “Whole Foods to Invest in Instacart, Signs New Multi-Year Delivery Deal,” Recode.net, February 23, 2016
The second dimension is the “unpredictable disruption” unleashed when new technology-driven ideas impact a market and rapidly change established paradigms. That’s exactly what Amazon is doing to other companies as it steadily expands its activities to embrace retail, entertainment, food delivery, home services and many more. Another example includes Uber’s expansion into food delivery globally through its UberEats service.14

In both predictable and unpredictable scenarios, retailers need to understand how and when to collaborate. Where they used to provide products and services in isolation, in today’s market they need to work with others to provide the seamless experiences that consumers demand. Over 90 percent of retail industry executives recognize that it’s critical to their business success to adopt a platform-based business model and engage in ecosystems with digital partners.15

For example, rather than selling their own and others’ products, some retailers are now creating ecosystems of multiple partners that can form new communities around a particular activity or interest. Over 90 percent of retail industry executives recognize that it’s critical to their business success to adopt a platform-based business model and engage in ecosystems with digital partners.15 As well as selling products, they’re providing access to events and club memberships. That’s what outdoor-activities retailer Wiggle has done around cycling and running.16 In addition, Wiggle is leveraging technology platforms such as Google Maps and Strava—the global social network for athletes. In the process, Wiggle’s creating an on/offline community.

Ecosystem relationships between retailers will inevitably proliferate. For one of the reasons why, look at the network effects that Amazon generates through its Amazon Marketplace offering. More are joining all the time, and as they do, Amazon profits. Fees from sellers around the world that use Amazon reached US$23 billion in 2016, nearly twice their 2014 levels.17

As more ecosystems coalesce around meeting customer needs, retailers will need to become adept at selecting the most relevant ecosystem partners. But they also need to ensure they have the right technology approach to capitalize swiftly on opportunities as they arise. That will include an architecture approach characterized by modularity, openness and APIs. They key message? In a digital marketplace, with consumer requirements changing all the time, ‘readiness is all’.

14 “Uber launches global assault on takeaway meals market,” Reuters, September 28, 2017
15 Accenture Technology Vision 2017 – Retail Survey Results
16 “Wiggle and Strava want your best mile,” Sports Insight, June 8, 2017
17 “Are investors too optimistic about Amazon?,” The Economist, March 25, 2017
Retailers represent the single largest private sector employer body in the world. Almost one-third of employees working in this industry are on the store-floor. But with the changes sweeping through this sector in the coming years, the roles they fulfill and the skills they’ll need will change beyond all recognition.

These changes would create demand for rapid, scalable and fluid access to workers to meet changing market needs and evolving customer preferences. In other words, an on-demand liquid workforce. Nearly 80 percent of industry executives agree that organizations who successfully integrate a liquid workforce into their business models will gain a significant competitive advantage through innovation.

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18 “Shaping the Future of Retail for Consumer Industries,” World Economic Forum, January 15, 2017
19 Accenture Technology Vision 2017 – Retail Survey Results
Some high-engagement staff roles are becoming an intrinsic element of the experiential retail offering. Almost one-third of employees working in this industry are on the store-floor. For example, Apple “geniuses” are crucial brand ambassadors and an essential component of the overall experience consumers expect to receive.20 In contrast, QSR staff delivering food through a drive-through counter, have less impact on consumer perceptions. Deep product knowledge and the ability to manage in-depth personal interactions are unlikely to fall out of fashion and will be less susceptible to either automation or more liquid approaches to managing the workforce.

The growing prevalence of automated check-outs is clearly just the beginning. For instance, Irish tech business Everseen has launched a product called “0Line” which uses video cameras and sensors to track items that shoppers take from a store’s shelves.21,22 Before they leave the store a receipt is sent to their mobile device. All the customer needs to do is check the accuracy of the receipt, confirm it and then simply walk out of the store.

The core skills that retailers need to keep in-house mean there is likely to be a persistent need for a roster of full-time employees. However, seasonality is a long-established driver in retail, and using new digital platforms to source talent could offer a new way of optimizing this perennial requirement and rapidly scaling up/down in line with demand. What’s more, dynamic scheduling and shift management, via an AI-powered portal, could match supply and demand with even greater accuracy and efficiency, offering employees options on where and when they will be working on a day-to-day basis.

In much the same way, technologies such as Augmented Reality/Virtual Reality (AR/VR) for training and productivity enhancement can also provide the tools and content that can help get flexibly sourced employees up to speed quickly. Doing so will require retailers to deconstruct tasks into their component parts and understand precisely what skills will be needed in different roles and functions.

As the proportion of online shopping grows ever greater, we’ll see stores transforming from being principally transactional locations to become experiential and technology-enabled. As this happens, the skills retailers need to employ will start to look very different. Digital talent will be an even more precious commodity than it is today.

Behind the storefront, some retailers recognize the need to offer a new environment that will help them to attract and retain core talent. In the UK, for example, Argos, part of the J Sainsbury PLC family of companies, has a hub-like approach for its IT personnel, co-locating them in one place and shaping an environment that’s closer to a start-up culture than a traditional enterprise technology setting.23 Sainsbury’s, also part of the J Sainsbury family, meanwhile, also has a digital lab that houses developers and designers to work on new technology innovations for in-store and online applications.24

20 Apple Website
21 Everseen Website
22 “Robots, on-demand knitting and smart shelves: Welcome to the future of shopping,” CNBC, January 18, 2017
23 Argos Website
24 Sainsbury’s Website
The physical store will continue to be the retail channel that contributes the most revenue for the majority of global retailers for the foreseeable future. However, today’s physical stores will change dramatically.

No longer simply a point of distribution, the physical store will become a venue for customers to discover, engage, experience, interact and transact. Over 82 percent of industry executives agree that organizations which are able to really understand human behavior, and design consumer experiences accordingly, will become industry leaders.\(^{25}\) With this in mind, stores will develop increasingly diverse formats (flagship, express, convenience, and so on), suited to specific locations (go where your customers are) and customer profiles. However, all will be enabled by technology to provide the best experience possible.

Some retailers are harnessing relationships with their consumers to pivot from simply selling products to providing services. CVS in the US is a great example. Already established as one of the country’s leading pharmacy chains, it is arguably becoming the country’s largest healthcare company providing healthcare advice and prescription services through a nationwide network of clinics.\(^{26}\)

In designing products, services and experiences around human needs, there’s one key concept for retailers: personalization. Increasingly, this will be a must-have, as far as consumers are concerned. And they’ll expect it in all their interactions, online and in stores. Meeting this demand, at scale, is only going to be possible through advanced analytics, AI, mastery of IoT and the data it provides, as well as agile technology approaches. It goes beyond simply mining past purchases for recommendations.

An example of the hyper-personalization that will shape the future is Accenture’s Customer Genome solution.\(^{27}\) This solution leverages customer interactions to create “Living Profiles” based on an individual’s unique characteristics. These can help drive an orchestrated experience across all personalization platforms, such as recommendation engines, data management, rules engines, campaign management and experience optimization tools.

For customers, the Accenture Genome delivers highly individualized experiences made possible through intelligent service design. Living Profiles enable brands to engage much like a personal assistant, concierge or shopper, resulting in a truly personal customer experience and relationship.

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**RECOMMENDATIONS**

- Understand and assess every touchpoint your organization has with its customers, partners and employees. Conduct extensive customer and partner research to capture an appropriate outside-in perspective vital for any improvement.

- Identify ways to transform each touchpoint, including the development of new capabilities and services, that define new journeys and turn routine interactions into inspirational design experiences for everyone.

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\(^{25}\) Accenture Technology Vision 2017 – Retail Survey Results

\(^{26}\) CVS Website

\(^{27}\) Accenture Customer Genome
The Uncharted

There are two dimensions to this trend for retail: setting standards for innovation and setting standards for risk mitigation. With technology developments outpacing the ability of regulators to keep up, it’s incumbent on retailers to help design and put in place the standards that would protect consumers without stifling the innovations that would deliver benefits and improvements to those same customers. Industry executives agree. Over 90 percent of them believe it’s important for their organization to be part of a technology consortium that plays a role in standard-setting for the industry.28

One example? Amazon’s work with the UK government on the development of a framework for the use of drones in delivery. Last year, Amazon announced that a cross-government team supported by the Civil Aviation Authority (CAA) had given the company permission to explore critical areas for its potential commercial drone services.29 These include operations beyond line of sight, obstacle avoidance and flights where one person operates multiple autonomous drones.

At a broader level, we’ll likely see the requirement for a similar public/private partnership approach to address the potential societal implications of retail’s evolution, with three areas in particular standing out. First, the impact of physical retail evolution on communities. As e-commerce forces more brick and mortar stores to downsize or close down, alternative strategies to retain the community role they fulfill will have to be developed.

Second, predictions and recent trends point to store and logistics labor being early focuses for automation. Industry leaders and policy makers will need to come together to help reskill employees affected by these developments and support their transition to new roles. Third, meeting consumer demand for ever more frequent, near real-time but environmentally friendly, personalized delivery will necessitate the development of environmental standards and approaches to counter increased CO2 emissions and increase in packaging that will accompany this trend.

Data collection and privacy is another issue retailers will have to address in new ways. The accumulation and custodianship of vast amounts of customer data (essential for the creation of personalized consumer experiences) creates a whole new raft of considerations and responsibilities. The development of robust approaches and methodologies in this space will be imperative.

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28 Accenture Technology Vision 2017 – Retail Survey Results
Online retail business has reinvented how the world shops and continues to raise the bar of consumer expectations even higher. But retailers can respond by harnessing digital technologies and reengineering their businesses, both virtual and physical, for future growth. Their vital objective? Taking advantage of digital to deliver highly personalized consumer experiences at scale. Paying close attention to the five technology trends outlined in this report will be mission-critical.
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