



# Leading from the front

*Digital Reinvention in retail*



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## Reimagining the retail enterprise

*The retail industry has been the epicenter of innovation for centuries. Emergence of emporia or department stores in the mid-1800s, including Harrods of London, Macy's of New York and Le Bon Marché of Paris redefined the shopping experience and inspired other industries. Consumer demand for cutting-edge innovations such as virtual, augmented or mixed reality, personal devices, and open source platforms and apps – has reaffirmed retail's position at the forefront of digitization. But exposure to the brunt of technological disruption brings both challenges and opportunities. The most successful retailers we surveyed are embracing new customer-centric business strategies rather than traditional transformation. We call this new approach Digital Reinvention™.*

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## Eyes on the prize

Digital technologies and socio-economic trends are transforming how customers and businesses interact. The end-to-end consumer value chain is changing beyond recognition and the retail industry is at the vanguard of this revolution. Device proliferation, the increasing sophistication of data and analytics, and the rapid maturation of artificial intelligence and cognitive computing are accelerating the rate of technological change.

Retailers are facing more empowered consumers across different generations, with greater technological sophistication and ever-evolving expectations. Consumers are demanding opportunities for co-creation; their expectations for personalized interactions are making the retail value chain far more complex. All that coupled with the persistent repercussions from the global economic crisis of the last decade has helped to make retailers' business environments challenging and difficult to navigate.

Accordingly, retail has been subject to dramatic disruption. As the barriers to entry have fallen, competition has proliferated and intensified in the retail industry. Beyond obvious impacts, such as online versus offline retail environments, growing interconnectivity means that competition might emerge anywhere in the world, from any other industry. Global digital giants such as Alibaba from China and Amazon from the United States quickly create and adapt new business models and market opportunities into platforms with unprecedented breadth and depth.



**58% of global retail executives** feel traditional value chains are being replaced<sup>1</sup>



**44% of global retail executives** said that boundaries between the retail industry and others are blurring<sup>2</sup>



**58% of global retail executives** said that competition from new and unexpected sources is impacting their businesses<sup>3</sup>

Regional digital insurgents such as FlipKart in India, Rakuten in Japan and Zalando in Germany aggressively compete with global leaders, creating opportunities for price and service wars with unpredictable implications for other more vulnerable competitors. And niche digital businesses such as Honestbee in Singapore, Instacart or Freshdirect in the United States, or even Google Express are constantly challenging more traditional retailers, including established supermarket chains.

With intensifying competition and ever-advancing technology, the nature of retailing continues to evolve. The channels orientation of the late 1990s has ceded to a customer focus that is profoundly individualized and personalized. The products focus that has characterized retail through most of its history has evolved into a solutions and services focus – how retail can support and enable fundamental consumer needs, desires and aspirations. Transaction-oriented strategies focused on clearing pathways to purchase have transformed into processes of interactive engagement within deepening relationships.

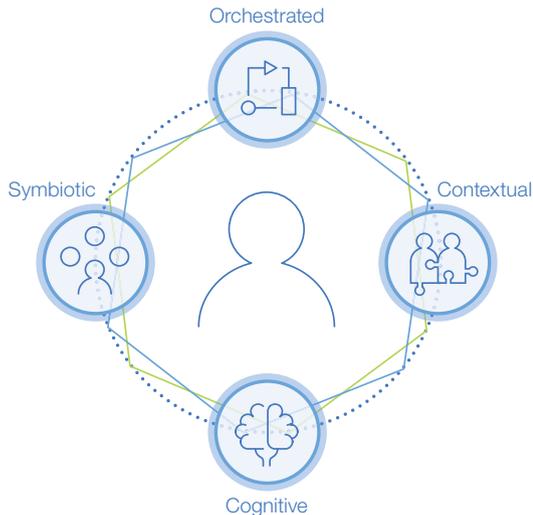
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The success of this changing focus will rely on retailers embracing entirely new sets of capabilities, skills and structures. Systems that support contextual, real-time customer insights, experiences and engagement become central, essential assets. Product, service, experience and business model innovation turn into core business functionality. And the ability to harvest and analyze structured and unstructured data across multiple, eclectic sources becomes a key differentiator.

“Digitally reinvented” retailers are positioning themselves to survive and thrive in the post-channel era in which top organizations provide frictionless, seamless customer-centric shopping experiences, be they digital, physical or both. Leading retailers will need to engage with customers through contextual, individually tailored communications and marketing. Engagement will extend beyond transactions into customers’ daily lives, lifestyles and life stages, involving co-creation and mutual collaboration as desired. Leading retailers are expected to redefine and reinvent their value chains within new ecosystems, to innovate and experiment with new technologies, and to leverage the value of data harvested from the proliferation of the Internet of Things (IoT).

**Figure 1**

*The everyone-to-everyone economy consists of four elements*



*Source: IBM Institute for Business Value analysis.*

## Everyone-to-everyone

The emerging post-channel retail environment of today is characterized by what we call the everyone-to-everyone (E2E) economy. The E2E economy has four distinct elements: It is *orchestrated*, based on business ecosystems, which are both collaborative and seamless. It is *contextual*, in that customer and partner experiences are calibrated and relevant to their specific actions and needs. It is *symbiotic*, in that everyone and everything, including customers and businesses, are mutually interdependent. And it is *cognitive*, characterized by data-enabled self-supported learning and predictive capabilities (see Figure 1).

While the retail industry has been one of the earliest adopters of the E2E economy model, like automotive with its shift toward “anywhere, anytime mobility” and consumer electronics with its ubiquitous personal devices, E2E is now extending across the economy. Organizations in industries from healthcare to government to industrial products are now following a process of “consumerization” to become more like retail. Digital technologies such as 3D printing, the IoT and robotics are altering how customers and industrial businesses interact.

An important lesson that all organizations must learn in the face of such consumerization is that customers everywhere expect compelling, engaging shopping experiences regardless of touchpoint. Retailers must provide user-enabled experiences, whether in a physical store or on a customer’s favored device. The alternative could be dire – the risk is being disintermediated completely from the E2E economy value chain.

## Disruption and retail

In our recent IBM Institute for Business Value Global Ecosystem Survey conducted in collaboration with the Economist Intelligence Unit, 58 percent of global retail industry executives said that traditional retail value chains are being replaced with new value models. Fifty-four percent report that boundaries between the retail industry and other industries are blurring. And 58 percent said that competition from new and unexpected sources is directly impacting their business.<sup>4</sup> As a result of accelerating technological innovation, new business models in retail have already begun to usurp traditional value chains. And they will continue evolving (see Figure 2).

**Figure 2**

*The changing structure of retail*

Traditional consumer value chain



Emerging consumer value chain



Source: IBM Institute for Business Value analysis.

Traditional linear value chains are transforming into broad consumer-driven ecosystems. And as a consequence, traditional retailers must change the way they operate. They must introduce innovative digital technologies that dramatically improve service and engagement while lowering total cost of ownership. For example, Twyst, an IoT startup based in Colorado, created smart connected bags to enable frictionless checkouts at retail stores. The bags automatically inventory any items put into them and then charge a customer's credit card when that person exits the store.<sup>5</sup> Similarly, Amazon is prototyping a physical grocery store called Amazon Go. It allows shoppers to use an app to automatically add the products they plan to buy to a digital shopping cart; they can then walk out of the building without waiting in a checkout line.<sup>6</sup>

While a common strategy for shopping malls for decades, individual retailers such as United States-based high-end kitchen and bathroom retailer Pirch<sup>7</sup> and global megabrand IKEA are reinventing themselves as destination shopping and entertainment centers, with cafes, coffee shops and other entertainment.<sup>8</sup> Zara, H&M and Uniqlo, are also examples of “bricks and clicks” retailers that have successfully embraced a Digital Reinvention ethos. Additionally, pure-play internet-based retailers such as Ocado in the United Kingdom are continuing to put pressure on competitors with higher levels of service and lower prices.<sup>9</sup>

To stay competitive, retail businesses will need to use emerging technologies to create compelling customer experiences and drive new efficiencies, opportunities and innovations. In the process of advancing their digital agendas, leading retailers should develop new focus, build new expertise and devise new ways of working. In short, *they will digitally reinvent their enterprises.*

## Digital Reinvention in the age of E2E

To thrive in the face of disruption, forward-thinking retailers are embracing the concept of Digital Reinvention. Digital Reinvention combines multiple digital technologies – cloud, artificial intelligence, cognitive, mobile and IoT, among many others – to fundamentally rethink customer and partner relationships, both conceptually and in real time. It involves creation or orchestration of unique experiences for customers and other stakeholders through business ecosystems, and establishes an environment in which platforms of engagement can form and evolve. In such environments, retailers might act as seller, enabler, conduit and partner.<sup>10</sup> Digital Reinvention differs in concept from both digitization of individual capabilities or functions, and the process of digitally transforming major business processes or activities (see Figure 3).

**Figure 3**

*Digital Reinvention follows a path that starts with digitization and progresses through digital transformation*

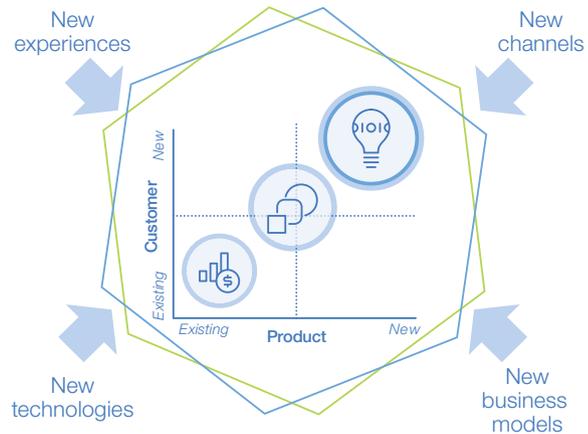


Source: IBM Institute for Business Value analysis.

Digital Reinvention in retail organizations involves a fundamental reimagining of the way retail organizations engage with customers and other stakeholders. This might involve the creation of new products, services or channels, or collaboration in ecosystems of partners. For example, Lazada, Uber and Netflix are forging an alliance in Singapore to promote more effective, contextual customer engagement at a hyper-personalized level (see Figure 4).

**Figure 4**

*A virtuous cycle of the new and improved*



Source: IBM Institute for Business Value analysis.

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## The digital advantage

Digitally conceived retailers often have an advantage in the Digital Reinvention stakes. Unburdened by legacy organization and infrastructure, digitally-born retailers already possess Digital Reinvention attributes. In retail especially, digital startups have gained strong footholds in their quest to dominate their chosen market and are putting intense competitive pressure on established traditional leaders (see Warby-Parker example).

Clique Media Group (CMG), founded in 2012, uses sophisticated data science to change how consumers shop. Using data gleaned from its fashion website and social media accounts, CMG has successfully launched a clothing collection with the Target retail chain. With more than 13 million unique visitors to its website every month, and leveraging crowdsourcing techniques to motivate new styles and ranges, CMG's Who What Wear brand has become a top performer for Target.<sup>12</sup>

And San Francisco-based Starship Technologies, founded in 2014, has developed leading-edge robots designed to deliver packages, groceries and food to consumers within a three-mile radius. Its robots are designed to carry the equivalent of two grocery bags and make a round trip within 30 minutes. Shoppers are able to track their robot's progress in real time by way of a mobile app, which also provides unique unlocking access for the cargo upon arrival. Starship has already obtained more than USD 17 million in seed funding from organizations as prominent as Daimler.<sup>13</sup> There are numerous other examples of digitally born start-ups across the retail sector that are leveraging core elements of Digital Reinvention.

Established or traditional retailers can also harness the power of Digital Reinvention to help combat the challenge that disruptive new entrants pose. But to succeed, traditional businesses need to act quickly, employing every advantage they possess, such as repurposing physical stores. They must avoid falling by the wayside like other big names that have already disappeared from retail markets.

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### **Warby-Parker: Digital access to high-fashion spectacles**

Eyewear industry leader Warby Parker creates a rich fashion experience at low cost. Over the past seven years, the company has rapidly become a leading retailer of fashion eyewear. Combining an outstanding online interface with store-based showrooming and try-at-home convenience, it has successfully created a shared relationship-based shopping experience. Offering fashion eyewear that has captured the attention of top international magazines, and at roughly one-fifth the cost of alternatives, Warby Parker has grown into a business valued at more than USD 1.2 billion.<sup>11</sup>

**Figure 5**  
*Digital reinvention operating environment revolves around new experience*



Source: IBM Institute for Business Value analysis.

## Readying for reinvention

For successful Digital Reinvention, retailers need to pursue a new strategic focus, new brand identity, build new expertise and establish new ways of working (see Figure 5).

### Build new experiences

Traditional retailers will need to continue digitizing products, services and processes that can help redefine customer experiences to compete with born-digital businesses. Engagement with customers beyond the transaction is vital: becoming essential in their everyday lives and opening up sales opportunities throughout the day. Retailers will need to augment such steps with predictive analytics and cognitive computing, along with IoT and automation, to create fully integrated, flexible and agile operating environments.

### Pursue a new focus

Retailers need to develop new ways of realizing and monetizing value. Initiatives might include spawning new business models and tapping new forms of financing and investment for technological innovation. Leaders will also need to create strategies and execution plans to deliver deep, contextual experiences, and sustain the impetus for innovation through time.

### New expertise

Like never before, retailers will need to identify, retain and build the necessary talent to create and sustain a digital organization. There is a recognized worldwide shortfall of available talent with the skills to support the new processes, operations and technology required to support the Digitally Reinvented enterprise. Customers are the focus of the Digitally Reinvented enterprise. The retailer's talent pool should reflect the cross-generational profile of the customer base so that relevant, engaging experiences can be offered to a retailer's target customers.

### Establish new ways of working

The most successful retailers will create and perpetuate innovation-infused cultures incorporating design thinking, agile working and fearless experimentation. Retail leaders of tomorrow will need to contextualize organizational priorities within business ecosystems, seeking new forms of partnering and new ways to build value within overall systems of engagement.

### Adopt a self-funding approach

Retail businesses need to deploy technology to drive optimization in customer experience and to support scalable growth and market share. To do this leaders will need to improve digital capabilities and follow an experience-based growth agenda to deliver an optimized experience, revenue enhancement and operational efficiency. Thus reducing total cost of ownership and increasing earnings.

### Embrace digital drivers

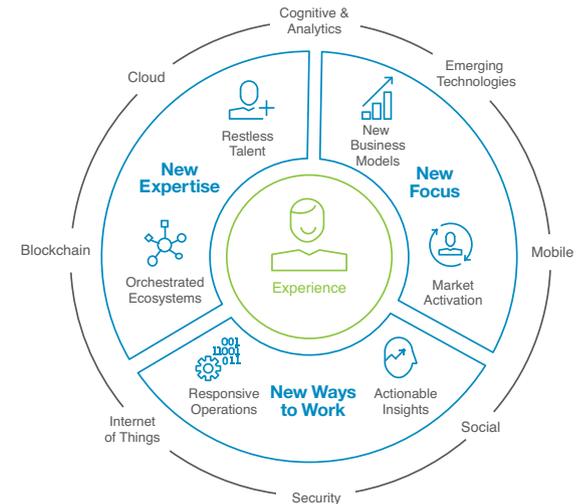
Retail leaders will need to become proficient in evaluating, understanding and deploying digital technologies. Technology underpins the provision of new customer experiences. Rather than incrementalism, Digital Reinvention provides a path for visionary organizations to adopt an experience-first approach to planning and, employing the strengths of ecosystem partners to create truly unique experiences (see Figure 6).

### The path to Digital Reinvention

There are different ways in which retailers can digitally reinvent their enterprise; internal change, external acquisition such as Walmart and Jet.com (see below), and ecosystem building such as Woolworth Australia and Quantum. However there must be a strategic approach to optimizing the reinvention process for the specific retailer, framed around an engagement model for their customers.

**Figure 6**

*Digital reinvention framework combines the strengths of ecosystem partners*



*Source: IBM Institute for Business Value analysis.*

## Reinventing the retail enterprise

To set out on the path toward Digital Reinvention, retail industry leaders can take four initial steps: envision possibilities, create pilots, deepen capabilities and orchestrate environments.

### **Step 1: Envision possibilities**

Conduct envisioning sessions based on design thinking to produce a definitive reinvention blueprint. For example, through deep conversations and in-depth marketing analysis, develop a better understanding of customer needs, aspirations and desires; brainstorm new ideas to enhance engagement; and visualize unexpected customer scenarios. Incorporate external stakeholders in these sessions, most particularly customers themselves, to encourage thinking that goes beyond business-as-usual. New strategies, technological innovations and customer-centric omni-channel operating models can help retailers provide the optimal omni-channel shopping experience for each individual customer in the most profitable manner.<sup>14</sup>

### **Step 2: Create pilots**

Develop prototypes using agile development, test them with customers and get them to market quickly to promote feedback and iteration. Establish communities of interest to create safe environments to beta test innovations, and incorporate them as a central part of design and development processes. Retailers could tap into their customer base to engage with Millennials and the even younger Generation Z shoppers who crave engagement, involvement and real relationships with brands.<sup>15</sup>

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### **Step 3: Deepen capabilities**

Augment digital capabilities with strategic initiatives, and continue to build and deploy necessary applications aligned to the target Digital Reinvention operating model and ecosystem strategy. As pilots evolve, impediments around development will emerge, highlighting limitations in existing capabilities. Adopt a continuous, iterative strategy to address these limitations by building new or extending existing capabilities. For retailers, this could include embracing technologies such as cloud to underpin broad ecosystems, AI, IoT and sophisticated analytics to understand consumers more deeply, and blockchain to secure transactions and supply chains.

### **Step 4: Orchestrate ecosystems**

Embrace a strategy based on holistic reinvention rather than a series of point solutions, maintaining a clear focus on deep needs, aspirations, or desires of customers, clients (such as partners) and colleagues (such as service providers). Focus on ecosystems to expand and align a broader set of capabilities and to help create and deliver on customer promises. Retailers should use digital technologies and their ecosystem of business partners to create compelling brand experiences, drive purchase behavior and create unbreakable bonds with consumers.<sup>16</sup>

## Digitally reinvented retailing

Some retailers are leading from the front.

*Walmart engages with Millennials with deeper, richer experiences<sup>17</sup>*

Walmart has successfully integrated Jet.com, an innovative e-commerce site into its operations to supplement its broad physical presence with an agile digital platform. With its unique, transparent customer shopping experience, Jet.com is able to offer highly competitive pricing with the aid of smart baskets, opting out of free returns and using debit cards. Jet.com recently relaunched with a clearer focus on millennials, faster order fulfillment or physical pick up capability through the Walmart store network. The result has been a highly successful, frictionless shopping experience that saves customers both time and money.

*Boots UK lifts incremental spend through highly targeted promotions<sup>18</sup>*

Boots successfully extracts actionable insights from transactional data, enabling highly targeted outreach and offers to its 15 million loyalty card holders. A deep analytics capability has helped Boots increase sales and expand customer engagement and satisfaction. Boots has been able to successfully tailor campaigns across channels from online to in-store and a new mobile app, and increase targeted messaging by upwards of 70 percent.

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*Elie Tahari harnesses predictive analytics to better align production with demand<sup>19</sup>*

Elie Tahari has successfully employed analytics to forecast customer orders four months in advance with 97% accuracy, while at the same time unifying primary data sources into a single, coherent system. Real-time insights on sell-through rates and predictive management of production planning and inventory has enabled Elie Tahari to optimize store-level merchandising decisions, ensuring that the most popular stock-keeping units (SKUs) are available in the right place, at the right time. Digital initiatives have not only enhanced decision-making, but helped Elie Tahari keep pace with customer demand to create seamless real-time reporting. Increased foresight and responsiveness to changes in fashion trends, has strengthened the Elie Tahari brand resulting in higher sales and stronger margins due to a more optimal mix of products on the shop floor along with a thirty percent reduction in supply chain and logistics costs.

*Shop Direct redefines the way it manages millions of products<sup>20</sup>*

United Kingdom-based Shop Direct improves the shopping experience by making product management, merchandising, pricing and control quicker, easier and more transparent. By centralizing product information and introducing a standardized approach to financial and assortment planning, Shop Direct ensures that the right products are available at the right time and price. By centralizing the product data, Shop Direct teams can load and update products on e-commerce platforms fast and efficiently. With significantly reduced error rates in product management as well as improved efficiency and capability, Shop Direct has been able to generate improved agility and scalability.

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### **Related IBM Institute for Business Value**

#### **executive reports**

Berman, Saul J., Peter J. Korsten and Anthony Marshall. "Digital Reinvention in action: What to do and how to make it happen." IBM Institute for Business Value. May 2016. <https://www.ibm.com/business/value/draction/>

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## **Key questions**

- How can you make your digital strategy more ambitious to satisfy evolving customer expectations, engage with consumers more effectively and face disruption head-on?
- In what ways can your organization become more agile, so it is better equipped to respond to unexpected challenges and opportunities?
- What steps can you take to determine the potential business value that participation in retail ecosystems might deliver?
- How might you identify the different specializations required of potential ecosystem partners?
- How can help your leadership leverage data from multiple sources to become more visionary, predicting the services, experiences and products that customers want before they know it themselves?

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## For more information

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