The Digital Capabilities of the Most Resilient Retailers

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Sixty-six million years ago, the Chicxulub asteroid smashed into the earth, ending the age of giant, lumbering dinosaurs in the blink of a (geologic) eye while creating new opportunities and ecological niches for small, agile mammals.[111] In today's global business landscape, the COVID-19 pandemic is acting as just such an evolutionary accelerant. And one sector most notably affected has been retail.

Before and after the dust settles and an effective vaccine is universally available, a key question for retailers will be this: What capabilities will they need to survive and expand? From our work with some of the world's largest retailers and from our recent research, we believe the answer is digital capabilities that make retailers easy to do business with, create ultra-efficient operations and make them highly knowledgeable about the status of products in their supply chains.

In this article, we talk about those capabilities, how to put them in place and how to improve upon those that are already there. We draw on a recent survey we conducted, which included 23 retailers in North America, the UK and Europe, seven of which had revenue of at least $10 billion, and the rest between $1 billion and $10 billion.[112]

But first we assess the retail landscape created by the pandemic, as well as by the rapid growth of e-commerce merchants over the last three decades.

[111] Smithsonian Magazine, Sept. 9, 2019. Accessed here: https://www.smithsonianmag.com/science-nature/dinosaur-killing-asteroid-impact-chicxulub-crater-timeline-destruction-180973075/

[112] TCS, "Digital Readiness and COVID-19: Assessing the Impact," Accessed here: https://www.tcs.com/business-impact-survey-2020

The Pandemic's Big Toll on Retailers

The devastating impact of the novel coronavirus on retail cannot be overstated. Global retail sales were projected to decline nearly 6% in 2020 from 2019, a bigger hit on the sector than even during the Great Recession, according to eMarketer.[113, 114] This is an abrupt change after years of steady growth.

In the United States, 29 retailers declared bankruptcy through the third quarter of 2020 (10 more than in all of 2019), including such legendary and respected names as Lord & Taylor, Niemen Marcus, Brooks Brothers (after 202 years of operation) and J.C. Penney.[115] The recent TCS survey found that since the dawn of the epidemic, revenue has declined at 61% of retailers polled.

The COVID-19 pandemic has truly rocked the sector. Consumers purchasing habits were transformed nearly overnight. This spring, people stopped going to stores, forcing many to close—some temporarily, others permanently.

E-commerce sales soared as consumers moved their shopping online. According to Kantar research, 40% of consumers around the world have "increased or significantly increased" their online purchasing.[116] However, at the beginning of the pandemic, people

[113] eMarketer report from July 2020. https://www.emarketer.com/content/covid-19-impact-on-worldwide-retail-will-worse-than-great-recession

[114] eMarketer, https://www.emarketer.com/content/global-ecommerce-2019

[115] Retail Dive, "The running list of 2020 retail bankruptcies," https://www.retaildive.com/news/the-running-list-of-2020-retail-bankruptcies/571159/[2]

[116] Kantar research, cited by CNBC, July 27, 2020, "How coronavirus is changing the way we shop—and what we're buying," https://www.cnbc.com/2020/07/27/the-future-of-retail-amid-covid-19.html

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rushed into stores fearing stock-outs. They bought essentials in bulk, leaving even logistically adept retailers such as America’s Costco Wholesale struggling to keep up with demand for basics like bottled water, peanut butter and, famously, toilet paper.[117] Digitally adept retailers like Best Buy, Albertsons, Walmart and Kroger managed well by quickly rolling out digital capabilities such as contactless payments and curbside pickups.

While revenue from digital channels may have saved many retailers’ balance sheets, it also created significant upstream and downstream challenges. Downstream, the huge warehouses that online retailers rely on quickly reached capacity in the early days of the pandemic. That delayed orders and frustrated customers, even as some inventory was essentially imprisoned in stores emptied of employees and consumers.

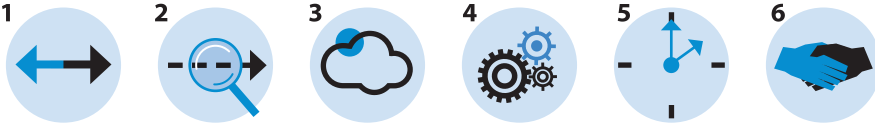
Upstream, factories closed to slow the spread of disease, and trucks (and drivers) were idled, leading to even longer back-order delays and hits to retailers’ bottom lines.

In short, the retail sector abruptly entered a newly hostile environment of shrinking margins and fierce, almost existential, competition for customers. Only the fittest—the agile, the nimble, the technologically adept—will survive.

[117] National Retail Federation, July 28, 2020, https://nrf.com/blog/investments-bopis-pay-target

Six Key Digital Capabilities

To remain competitive, our survey found that retailers need six critical digital capabilities:



1. **An end-to-end customer experience (CX)**
2. **AI and analytics to improve the CX continuously and guide the customer's journey**
3. **Cloud-based core enterprise systems**
4. **Highly automated core business processes supporting employees and managers**
5. **Real-time supply chain visibility**
6. **Key partnerships in digital ecosystems**

Many retailers have long understood the importance of these capabilities. Our survey found that retailers led 10 other sectors in creating an end-to-end digital CX (adopted by 39% of retailers) and in deeply automating their core business processes (44% adoption). In an era of shrinking margins, such automation can save millions annually in store and operational costs.

However, no more than 30% of the retailers we surveyed had yet to adopt the other four essential capabilities. Fortunately, most retailers are working hard to remedy that situation. (See Figure 11, "The State of Retail Technology.") The two most frequently cited areas in which retailers are building digital capabilities are in moving core enterprise systems to the cloud (engaged in by 63%) and developing robust AI-enabled analytics to improve the digital CX (being implemented by 61%). We believe both these investment choices are necessary, but that retailers must develop all six capabilities to thrive after the pandemic recedes.

Status of Technology Development, Retail Sector

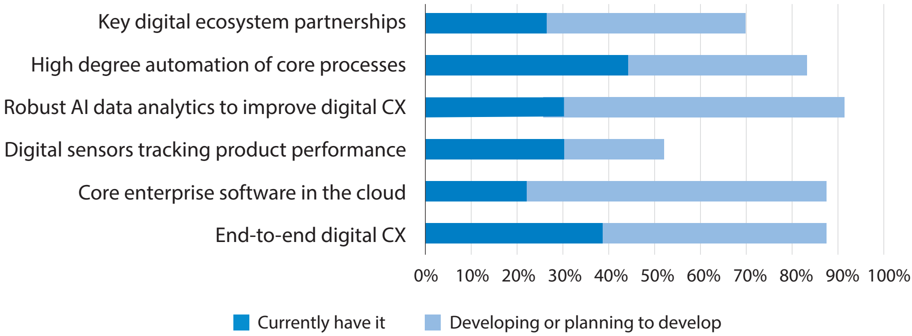
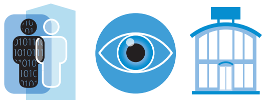


Figure 11: The State of Retail Technology

The Big Question: Where to Invest Now

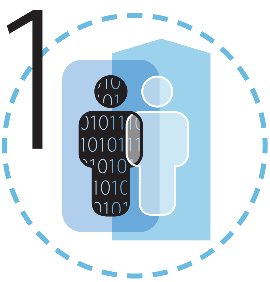
The evolving dynamics of digital retail and the increasingly omnichannel nature of consumer shopping behaviors will require/need/force retailers to be able to make complex decisions about their supply chains in real time. Retailers can only do this if they can orchestrate data and algorithms across their value chain. This means training computers to sense, understand and make decisions while processing millions of data points and signals. Only by doing this will the machines be able to recognize emerging patterns and anomalies and take insight-based actions in real-time.

To do this, retailers have to address fundamental weaknesses in their business processes and technology infrastructure. They must take a rigorous evaluation of their business process landscape and prioritize improvements based on when they need certain business outcomes.



Three key areas that can unlock exponential value are **a unified digital customer experience**, **cognitive-driven supply chains** and **future stores**.

Creating a Unified Digital CX



For years traditional retailers designed and optimized separate customer experiences for store patrons and e-commerce shoppers, and (for certain retailers) the catalog shopper. But today, as consumers largely begin their buying journey online, they no longer recognize or reward these distinctions. Consequently, these silos must be integrated so that a customer who searches for a product on a mobile app can see where the product is and choose whether to pick it up or have it delivered. In short, retailers must seamlessly integrate these channels and hyper-personalize the customer experience they provide.

There are three pillars to doing this:

- **Integrate silos with unified commerce.** Retailers must invest in a unified commerce platform built on a cloud-native architecture, using microservices and application programming interfaces (APIs). This creates a fluid technology stack that spans channels and devices, makes data available in different parts of their company and enables customers to tailor their interactions with a retailer based on what they (not the retailer) find most convenient. At the same time, such technology enables retailers to leverage all their capabilities—without channel constraints—to build new customer journeys, services and apps quickly.

Take the example of Kingfisher PLC, a major UK-based home-improvement retailer that operates B&Q, Castorama, Brico Depot and other stores (1,350 in all, in eight European countries). It has digitally transformed its business over the last four years, with the pandemic accelerating its development of a customer experience for mobile devices. With a unified commerce platform, Kingfisher has instituted a seamless mobile commerce and payments program. That lets customers total up their purchases while they are in a Kingfisher store and do their own checkout and payment.

These innovations have shortened customers' check-out times and reduced their physical interactions with store personnel. That's been a big selling point in the pandemic. All 297 of Kingfisher's B&Q stores in the UK and Ireland have adopted the technology, which supports more than a quarter million transactions a day. B&Q's revenue rose 10% for the first nine months of 2020, while overall Kingfisher sales grew 4.8%.[118] The data collected by B&Q's systems has also improved promotions because they are based on deeper insights into each customer's preferences.[119]

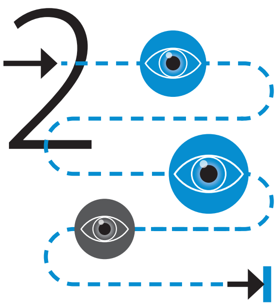
- **Drive loyalty with hyper-personalization.** With the recent uptick in online shopping likely to become permanent, retailers need to create personalized blueprints for every customer to deliver hyper-relevant experiences reliably. To do this, they must invest in algorithmic frameworks that leverage a deep understanding of online behaviors from cues captured by various data sources. That allows a retailer to deliver personalized content, offers and recommendations—all of which create a better customer experience and greater loyalty.

[118] Kingfisher investors page, Nov. 19, 2020, accessed here: https://www.kingfisher.com/content/dam/kingfisher/Corporate/Images/Other/20201119%202020_21_Q3%20trading%20update_RNS.pdf.downloadasset.pdf

[119] TCS, "The New Retail Model," https://www.tcs.com/content/dam/tcs/pdf/Industries/Retail-logistics/Insights/The-new-retail-model.pdf

- **Experiential and physical retail.** Retailers must adopt new ways to engage customers online and in-store with connected experiences. This requires upgrading the CX strategy. That, in turn, could lead to a number of improvements. One might be allowing consumers to virtually "try on" merchandise (i.e., clothes or a sofa in their living room). Another could be to offer appointment schedulers so that consumers can book a time to shop during less-hectic hours. Another might give shoppers online connections to store personnel to ask basic questions. These are but a few of the improvements that are possible today for retailers to make in their websites and stores.

The New Cognitive Supply Chain



Supply chains have evolved from cost and efficiency drivers to enablers of great customer experiences, with responsiveness being a key factor.

For example, whenever customers change their preferred channel for buying a product, it should set off a chain of events at the retailer: stock must be identified at a granular, individual item level (and moved, if necessary, to the appropriate node). That may require delivery times to change. What's more, fulfillment requirements may be affected, and price points altered, as are the reverse logistics of returns. To build such an intelligent supply chain, a retailer must also be prepared to make several moves:

- **Diversify ecosystem sourcing.** This reduces the risks that come from relying on a single supplier, or on a sourcing region. Retailers can no longer restrict themselves to static partnerships. Instead, they need to create a dynamic web of long- and short-term suppliers that co-exist, sharing data and access to multiple channels across platforms. This is the digital ecosystem in action, and it needs to be orchestrated to predict and pre-empt disruptions from changes in the environment or stakeholder expectations.
- **Work more productively with suppliers.** Retailers must collaborate with their suppliers to develop and clarify crisis management strategies, helping them develop practices for manufacturing and allocating products during shortages and demand surges. This may include pricing policies that accommodate market and demand fluctuations.
- **Build fluid networks.** In 2020, retailers had to change on the fly to accommodate abrupt changes in demand and supply. Some did so successfully; others did not. But reacting is not a business strategy, at least, not a sustainable one. If nothing else, the pandemic has taught retailers the hard lesson of preparing for all the "what-ifs." Algorithmically powered network modelling can help retailers gain supply chain flexibility and switch suppliers quickly in case of delays or disruptions, thereby protecting both the top and bottom-line.

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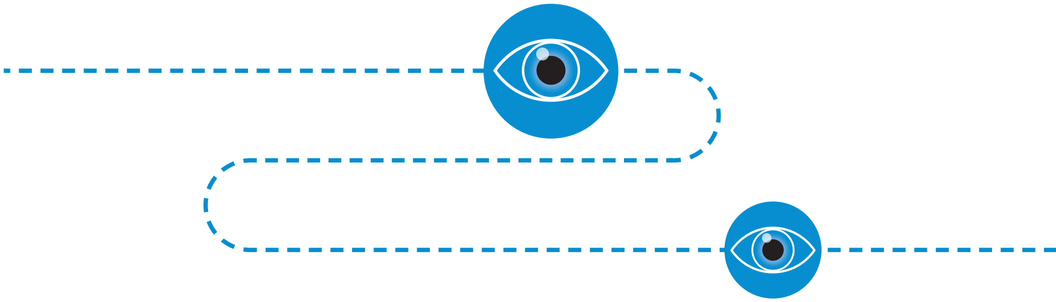
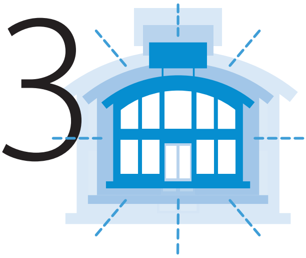


- **Invest in accelerated fulfillment.** With last-mile delivery becoming the new battleground, especially for online groceries, leading retailers are forging alliances with gig last mile delivery platforms. For example, while Kroger has teamed up with Instacart and other partners for delivery, part of their Instacart business still is delivered through the Kroger ecosystem. The customer places an order on kroger.com or the Kroger app and Instacart picks the product to help Kroger meet the promise of same day deliveries.[120]
- **Optimize the last mile.** Retailers are investing in AI-based solutions for last mile optimization as AI uniquely can harness troves of logistics data to make real-life business and operational decisions, streamlining logistics. For example, an AI-based solution can suggest a better route and pick-up plan against demand fluctuations during peak seasons. resulting in cost reduction, improved customer experience and better resource management.
- **Create a cognitive workforce.** As the workforce shrinks, robots and algorithms will play a central role in supply chain operations. By 2020, 42% of tasks will be performed by machines.[121] However, we need to have a real-time visibility and control over these machines and optimize the utilization of these systems.

[120] The Kroger Co Q3 2020 Results - Earnings Call Transcript, Dec. 3, 2020; https://www.fool.com/earnings/call-transcripts/2020/12/03/kroger-kr-q3-2020-earnings-call-transcript/

[121] World Economic Forum, Machines Will Do More Tasks Than Humans by 2025 but Robot Revolution Will Still Create 58 Million Net New Jobs in Next Five Years, Sept.17, 2018; https://www.weforum.org/press/2018/09/machines-will-do-more-tasks-than-humans-by-2025-but-robot-revolution-will-still-create-58-million-net-new-jobs-in-next-five-years/

An Expanding Role for the Old-Fashioned Store



Post COVID-19 there are going to be lasting changes in the way consumers shop due to their concerns about health and safety. And this will have a profound impact on stores. However, that future needn't be dire if retailers take the following steps:

- **Double up stores as fulfillment nodes.** To compete against digital native e-commerce retailers, traditional retailers must leverage their key differentiating feature: their stores. Sometimes (and shortsightedly) viewed as a constraint and a cost-center, retailers can use their brick-and mortar stores as local inventory points. Using them in this way can avoid the necessity for large investments that would otherwise be needed to improve fulfillment capacity.

For example, Best Buy seized the opportunity to extend contactless curbside pickup across its 1,000+ stores. It invested heavily in technology to support "buy-online, pickup in store" (BOPIS) capabilities. According to Best Buy CEO Corie Barry, "With first-time launches of our app up 40% in Q3 compared to last year . . . it is increasingly becoming a great self-help tool in addition to a compelling shopping experience."[122] Best Buy is also testing new store formats as primary fulfillment hubs as well as remodeling a few stores to make incremental space for staging products for in-store pickup. Further, pleased with the progress of its 250 ship-from-store hub locations, it added 90 locations for the holiday period.

[122] The Motley Fool, Best Buy Q3 2021 earnings call transcript, Nov. 24, 2020. https://www.fool.com/earnings/call-transcripts/2020/11/24/best-buy-bby-q3-2021-earnings-call-transcript/

- **Reimagine store operations to reduce operational costs.** As stores become hubs for omnichannel customer journeys, retailers will feel the pressure of rising costs. But AI-powered solutions can mitigate those costs by helping enabling retailers to reimagine store operations. Among many benefits, they could use AI to reduce operational costs—for instance, by dynamically rationalizing energy consumption. Or they could use AI to improve productivity—for example, by accurately forecasting intraday sales and in-aisle customer distribution, thereby optimizing labor hours. By giving store associates intelligent tools, retailers can turn them into custodians of valuable customer experiences while freeing them up from significant manual work.
- **Pivot to intelligent merchandising.** Retailers can, and should, use AI to move away from traditional and rigid calendar-based category resets, and toward offer choices more aligned with market dynamics and shifting customer preferences. With AI, retailers can make decisions as granular as what to stock, at what price and how much shelf space to allot to each product category—including BOPIS and BOPAC (buy-online, pickup at a counter) facilities. Retailers can use AI to re-evaluate demand patterns and re-establish sales forecasts across multiple channels, review open orders and future buy plans.
- **Improve workforce productivity.** With labor costs becoming greater than inventory costs, stores will have to improve their productivity by 20-30% to remain profitable. By building a repository of data-driven forecasting models for each manual task, retailers can reduce labor and operational costs.

- **Ensure an always-on digital ecosystem for uninterrupted experiences.** Autonomous IT operations can enable retailers to monitor devices, applications and their technology infrastructure in real time and resolve issues without human intervention. It can also ensure safety and compliance through automatic patch updates.

The Retail Comeback

Delivering safe, connected retail experiences without reducing profit margins is possible. But it requires retailers to adopt an algorithmic and digital-first approach to their businesses. It also demands that retailers replace legacy processes, plug talent gaps and create a collaborative culture.

Retailers who can unify their channels to customers and design new stores that offer valuable customer experiences will rule the landscape this decade. They will be the ones that reset the cost structure, bring in operational efficiencies, gain full visibility into their value chain and become more agile and resilient businesses.

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