POINT OF VIEW

Retail Recovery: Forecasting New Opportunities in a Reimagined Environment

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Key insights

The retail industry is recovering but to thrive, it must become more resilient using customer analytics and a simplified retail supply network.

- Four key dimensions must be considered for the retail industry to thrive post-pandemic
- Safety in retail spaces and uncovering new ways to ensure in-stock supply levels will remain customer priorities
- Driving growth in average customer spend will be critical for brick-and-mortar retailers

COVID-19 has had profound impacts on every aspect of our global society and the global economy. As regional and national economies continue the process of "reopening," a great deal of thinking and discussion has gone into predicting what the new normal will look like post-COVID. The Harvard Business Review (hbr.org) already contains more than 1,180 "new normal" articles and more than 4,100 "new normal" case studies. These insights will continue to shape financial, economic, and social conditions over the longer term as governments, businesses and people adapt to new constraints and respond to new opportunities in retail and other industries presented by this global pandemic.

Understanding Retail's new normal

Four dimensions are critical to understanding and anticipating the new normal in Retail: economic conditions, social preferences, state of supply, and individual needs and behaviors.

Understanding, forecasting, and anticipating uncertain future conditions remain a critical element of business and government. Current analytical tools will be of limited help, however, in determining the quantitative elements of post-COVID normal. Without comparable events in the digital age, forecasting models that rely on historical data are limited. While effective in forecasting, machine learning-based forecasting may require re-tuning and re-learning due to COVID-19 impacts. Machine learning easily adapts to gradual evolutionary and continuous changes; the discontinuous changes associated with COVID-19 may require parameter tuning other than machine learning adjustments. Best-in-class retailers will need to leverage machine learning and multi-variate forecasting models that leverage external data sources source as COVID infection, local COVID containment, and economic conditions. To develop effective business forecasts, commercial enterprises need to develop detailed qualitative views of the new normal. Next, they to evaluate the readiness and adaptability of business operations and plans against these potential post-COVID economic and social conditions.

To understand and anticipate what is happening within the Retail ecosystem, it's important to look at these four dimensions: economic conditions, social preferences, state of supply, and individual needs and behaviors.

- **Economic conditions** after the onset of COVID includes reduced disposable income and increased unemployment. The U.S. Bureau of Economic Analysis estimates that U.S. consumer spending dropped 7.5% in March 2020 after increases of between 0.2% and 0.4% in the three previous months while the European Employment Commission forecasts the loss of 12 million full-time jobs in the E.U. due to COVID-19. Government intervention is likely to expand beyond direct measures to reduce unemployment. Governments will accelerate direct investments and loans to key industry sectors, likely in conjunction with domestic production incentives. Domestic production incentives will focus on health, food and critical economic impact sectors, such as airlines, automobiles and technology.
- **Social preferences** focus on health and safety. The COVID-19 pandemic will have lasting impact on social behavior. Personal safety has grown in influence as the primary selection criterion for some consumers. Going forward, for example, "flu season" will become a retail demand driver of the same magnitude as "back to school" shopping.

- **State of supply** includes the products and services available for consumption and the channels/retailers able to offer those products and services. Factors impacting state of supply include retailer bankruptcies, available supply chains, and retailer strategies in response to lessons learned from the pandemic and related containment measures. Retailers have already been hard hit with J. Crew, Neiman Marcus and J.C. Penney declaring bankruptcy. S&P Global Ratings estimates that approximately 30% of retail and service firms that they track now have a credit rating that indicates greater than 50% chance of debt default.
- **Individual needs and behaviors** are governed by two conflicting sets of needs (the bottom and top two sets from Maslow's hierarchy of needs): physiological and safety needs versus self-actualization and esteem. Physiological and safety needs motivate continued limited personal contact while self-actualization and esteem drive increased social connection and interaction.

Defining the new retail normal

Consumer behavior: Demanding product value and safety

Retail consumers will return to physical stores in the new Retail normal. They will come because e-commerce does not satisfy the consumer's need for personal connection, social interaction and the desire to see and touch products[1]. They will also come because, for some consumers, physical retail is an entertainment and emotional experience whereas e-commerce is more transactional. It is important to remember that, while usage dramatically increased, e-commerce did not fundamentally change from a technology or process perspective during COVID-19 containment. The entertainment aspect of the in-person retail experience helps consumers feel that they received value for their money. Value for money will be a critical theme of the new normal as disposable incomes and consumer optimism erode. Successful retailers in the new normal will be those that understand that their purpose is to provide the perception of value for money paid, not just the provision of goods in return for payment.

The need for health and safety will lead to fewer shopping trips and higher average expenditure ("basket size") per customer visit. With fewer shopping trips and the fresh memory of empty shelves during COVID, consumers will place much greater emphasis on in-stock and product availability. When consumers shop, they will shop by car. Ride share and public transit usage

[1] From Harvard Business Review: "An Emotional Connection Matters More than Customer Satisfaction;" by Alan Zorfas and Daniel Leemon; 2016

will not return to pre-COVID-19 levels given social distancing and health concerns. Despite the environmental concerns, the car as a "personal safety zone" will gain additional influence in the new retail normal.

Brick and mortar stores:
Exploiting physical space and visual merchandising

Retailers will need to continue to adjust and reconfigure bricks and mortar stores in the new retail normal as consumer preferences and habits evolve. Visual merchandising and inviting store layouts need to be balanced with social distancing, lower customer capacities, and directed customer flow. Lower customer capacities (fewer customers allowed in the store at any time to ensure social distancing) will be the particularly difficult challenge since fewer customers generally lead to lower sales revenue. Walmart, for example, limited its stores to 20% capacity in April 2020 as part of pandemic containment and customer safety measures. Under national and state laws, most retailers reopened to reduced customer capacity and line-ups outside their stores. As a result, retailers need to speed customers through the store and drive larger basket sizes (average spend per customer) to maintain sales.

Retailers can grow average spend in three ways in the retail new normal: customer safety perceptions, product assortment, and traffic flow.

As much as customer count will be the key to retail survival as pandemic containment eases, growth in average spend per customer will be the key to overall sales growth including same-store sales. Retailers can grow average spend in three ways in the retail new normal: customer safety perceptions, assortment, and traffic flow. Customers who feel safer will spend more time in the store. Elements of the store safety perception include visible disinfecting precautions, line management, store layouts, and speed of check-out. More time shopping generally drives larger baskets.

Assortment planning and execution will likely be significant challenges in the new retail normal. Retailers will broaden assortments (add more product categories) to drive larger basket size. Analytics will also drive larger basket size through assortment optimization and improved space planning. Fewer customers in the store at any time provides the opportunity for more cross-merchandising, stack-outs, free standing display units, and off-shelf merchandising. Critical to effective cross merchandising will be data-driven understanding of customer behaviors and preferences. While retailers may add products to drive greater sales, fresh in the minds of consumers are recent shortages and empty shelves. As such, consistent in-stocks and product availability are going to become much more important for consumers. Keys to product availability will include improved machine learning-based forecasting and forecast analytics. Given the need to reduce store workforce interactions with customers (social distancing), retailers also need to provide more shelf space per product to ensure adequate stock is on the shelf for the entire day. More space per product can be achieved in part by reducing assortment depth (number of varieties of same product) through assortment optimization. As a result, we can look forward to stores with broader but shallower assortments. Non-apparel retailers can simplify the challenge of assortment reduction if they reduce or eliminate differences in price per unit across product sizes and reduce the number of size variants per item.

In the new normal, the layout and customer traffic flow in stores will evolve to become subtle competitive advantages. For large basket categories such as grocery, housewares and home improvement, store traffic flow needs to guide the customer past products in a logical manner while reducing the risk that customers need to "double-back" or wander the store to find items on their list. Retailers may need to reexamine store layout conventions like "milk at the back of the grocery store" and bulk-stocked items at the front of the store so they can better support safer customer flow and reduce the need for restocking staff on the sales floor while the store is open.

In the new normal, the industry can expect heightened cost pressures on brick and mortar retailers. Sales per square foot will decline while store operating costs will increase due to COVID safety measures. Bricks and mortar retailers can, however, leverage other dimensions of the new retail normal to reduce store costs while gaining competitive advantage. Social preferences for health and safety make indoor retail spaces and enclosed malls less appealing. Social distancing can best be implemented in large footprint retail spaces with single story and separate entrances and exits. Regional malls that combine retail with entertainment may fall out of favor given their social distancing challenges. Retailers looking to manage costs may look to older, large footprint malls for expansion. Larger footprint spaces allow retailers the space for social distancing, increased shelf stock, and space to better manage curbside and store-to-customer delivery. Given these factors, older forgotten local malls and stand-alone spaces abandoned by bankrupt retailers may be better retail locations in the new retail normal.

E-commerce and omnichannel: Ensuring in-stock inventory and delivery channels

While e-commerce and omnichannel retail flourished during COVID-19 onset and pandemic containment, these retailers also need to adapt to the new retail normal.

While e-commerce sales blossomed during COVID, online retailer "out-of-stocks" and fulfillment challenges became more pronounced and more visible to the customer. Numerous product categories went out of stock; premium "next day" delivery became "next week" or "next month." For example, according to Statista.com, more than 30% of cough remedies were out of stock across all e-commerce retailers in China at the end of February 2020. This means that all retailers, regardless of channel, need to improve in-stock and inventory services levels. "Endless aisle" and "a million SKUs" will stop being the mantra of e-commerce. Instead, online retailers will shorten assortments to simplify supply networks and improve in-stock levels.

Prior to COVID-19 some brick and mortar retailers adopted curbside pick-up and store-to-home delivery as defensive measures to blunt the impact of Amazon and other sophisticated online competitors. In 2019, Walmart piloted the Walmart Pickup Point format near Chicago. With Walmart Pickup Point, customers place orders online, drive to the store and wait for a Walmart associate to bring their order to them. By the end of 2019, more than 3,000 Walmart stores offered curbside pick-up. Concerns for personal safety in the new retail normal ensure that curbside pick-up and store-to-home delivery will continue to be important customer fulfillment channels in the new retail normal. The challenge for omnichannel retailers will be to continue reduce costs and improve service volumes to make these fulfillment channels sustainable.

Retail supply networks: Tighter alignment with new customer preferences

Resiliency will be the key theme for retail supply networks in the new normal. Resiliency needs to encompass an adaptive core and stronger linkages in the supply network. Given the depressed economic conditions that are likely to prevail in the new retail normal, supply resiliency needs to be achieved with minimal increased costs. Retailers can minimize the costs of supply network resiliency by aligning supply networks with store imperatives and customer preferences in the new normal. This alignment will allow supply network simplification.

Supply networks can, for example, be simplified by reducing pack size variations and product size assortments. Removal of retail strategies that discourage customer product substitution make the supply network more robust without penalizing customers or suppliers. Retail strategies that discourage customer product substitution include hierarchical pricing families (good-better-best pricing for similar products) and price-per-unit increases for smaller product sizes. As an example, Amazon offers a popular breakfast cereal in six different sizes. Price-per-ounce/ gram decrease as the cereal box sizes increase. The breakfast cereal supply network could be simplified with fewer box sizes, and sales would not be impacted if all box sizes had the same unit price.

As mentioned earlier, consumers will continue to place greater emphasis on in-stock and product availability in the new retail normal. Retailers can make supply networks more robust over the short-term by increasing inventory holding capacity in stores and taking greater steps to limit hoarding activity.

Forecasting demand in this new economy will require:

- Retuning of machine learning-based forecasting
- Relearning for machine learning-based forecasting
- Adoption of multivariate regression models that leverage external data sources and economic models
- Investment in external data sources encompassing COVID infection and current state of pandemic containment restrictions
- External data supporting supply chain risk assessment
- External data sources that provide visibility into customer risk assessment

Demand forecasting for retail and supply network innovation

Every supply network is only as good as its demand forecasting. Retailers have already discovered the limitations of regression-based forecasting in the face of COVID-19 onset and containment due to the demand disruptions caused by hoarding, "out-of-stocks" and discontinuous demand. Artificial intelligence and machine learning-based analytics will also be challenged as the new normal evolves due to the suitability of machine learning to gradual (evolutionary) changes in demand and customer behavior whereas the new retail normal represents discontinuous (revolutionary) change in terms of customer behavior, purchase priorities, disposable income, seasonal patterns, and retail operations. All retailers, regardless of the success of their customer analytics and AI prior to the pandemic, will need to reinvest in the tools required to forecast demand and to gather insights on customer behavior including brand preferences, substitution and purchase basket.

In the new retail normal, the "last mile" will continue to grow as a focus of retail and supply network innovation. Shared ride providers are likely to turn more of their attention to last mile delivery. Uber has already developed grocery partnerships in Spain, France and Brazil following similar pilot projects in Australia and the UK in 2019. Grab and Gojak are part of the retail ecosystem in Indonesia. With societal and regulatory imperatives for social distancing and health precautions, "packages are more profitable than people" will be the new mantra for mobility transportation-sharing services. Retailers need to close the time gap between the customer request and home delivery fulfillment to capture more of the customer's needs and wants.

Recap: The return to Retail…reimagined

For retailers to survive they develop a strong understanding of the qualitative aspects of the new retail normal. Consumers will return to bricks and mortar retail stores as pandemic lockdowns lessen because many consumers find physical interactions to be more satisfying than e-commerce transactions. Store traffic will decrease in comparison to pre-pandemic levels while average purchase (basket size) will increase. With fewer shopping trips and the fresh memory of empty shelves during the onset of COVID, consumers will continue to place greater emphasis on in-stock and product availability. Faced with decreased customer traffic, lower sales per square foot and social distancing requirements, brick and mortar stores need to adjust by adding new product lines to drive sales while reducing product and size variations to simplify assortments and increase inventory holding capacity. Older single-floor retail locations with multiple street entrances may become more appealing given their ability to support social distancing and to support local fulfillment. Retailers need to reinvest in demand forecasting, assortment analytics and customer analytics to respond to the disruptions in supply networks and in customer behavior brought about by COVID-19. Supply networks will continue to be a key competitive focus in the new retail normal given the competitive advantages open to the retailers that can consistently and cost-effectively execute "last mile" store-to-home delivery.

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