







# Serving Today's Always-Online Consumer



Today's connected consumers are no longer satisfied with being marketed to. Instead, they expect brands to recognise who they are, what they want, and what issues are important to them, including global sustainability, health and wellness, product safety and transparency, social justice, and fair trade.

A modern customer experience (MCX) must deliver on each of these fronts, evolving to meet changing needs and preferences in the moment while fulfilling our industry's intention for providing quality products that consumers actually need and want.

**We live in an experience economy: journeys are nonlinear, the shopper is the innovator, and experience defines value.** For brands and retailers, this means putting individual shoppers at the very center of their business models for new product development, supply chain and demand

management, promotion planning, merchandising, and customer engagement with greater authenticity.

It also means evolving the supply chain by understanding the consumer better, delivering relevance, personalisation, choice, convenience, and simplicity along the path-to-purchase. This can only be achieved by tightly connecting the supply chain with customer data and touchpoints, leveraging supply chain transparency in concert with an updated, vastly improved customer experience designed not only to sell products but to build trust.

To serve today's empowered consumer, brands must make and sell what shoppers actually want to buy versus sell what they have decided to make. Conversely, retailers must buy what they can sell versus promoting to sell what they just bought.

## Consumers demand more

- People of all ages have changed the way they work, shop, eat, and live during the pandemic.<sup>1</sup>
- 75% of consumers now expect brands to make more of a contribution to their well-being and quality of life.<sup>2</sup>
- 69% of consumers say customer service is very important when it comes to their loyalty to a brand.<sup>3</sup>
- 80% of consumers are more likely to make a purchase from a brand that provides personalised experiences.<sup>3</sup>
- 1 in 3 customers will quit on you after a single bad experience.<sup>4</sup>

Digital-savvy retailers—some selling fast-moving consumer goods, others in different retail subsegments—have stepped up by building and rolling out data-driven experiences distinct from traditional business models.

- Hybrid retailers like **Amazon Fresh** combine the convenience of digital commerce with the tangible familiarity of brick-and-mortar stores to embody the phygital movement.
- **Stitch Fix** has zeroed in on personalisation with a wide range of curated fashion, based on customer-specific preference data, using AI and machine learning to optimise selection options, with the added benefit of ensuring more predictive demand and supply.
- **Pinduoduo**, a five-year-old e-commerce app that turned discount shopping into an online game, has overtaken Alibaba Group as China's most popular marketplace with 800 million users in 2020.<sup>5</sup>



<sup>1</sup> Smarter CX: What Consumers Purchased During the Covid-19 Pandemic

<sup>2</sup> SmallBizGenius: 40 Amazing Customer Loyalty Statistics in 2021

<sup>3</sup> Epsilon: The Power of Me – The Impact of Personalization on Marketing Performance

<sup>4</sup> Mindy Support Outsourcing

<sup>5</sup> WSJ: How Pinduoduo Beat Alibaba to Become China's Top Shopping Site

# Resilient Supply Chain, a New Reality

For some decades now, the supply chain has been fine-tuned to remove excess, match ever more precisely supply to demand. This has helped organisations improve various processes within the enterprise. However, many brands and retailers still find themselves exposed, leaving them vulnerable in meeting unexpected surges in demand, as witnessed in a string of significant out-of-stock conditions during the pandemic.

The traditional supply chain has been a one-way, linear path. Products went from factories to warehouses, backrooms to shelves. Now, and increasingly, right to our doorsteps. While certainly complex in its own right, the old model was generally more predictable and manageable than the tri-model; a supplier-retailer-consumer ecosystem that trading partners are only just

now beginning to understand the implications of as they pivot for a new era.

For example, in the UK, an analysis of 100,000 consumers shopping habits found that only a slight minority of shoppers engaged in stockpiling during the initial COVID-19 outbreak.<sup>6</sup> In fact, just three percent of dry pasta shoppers and six percent of liquid soap buyers took home what could be considered unusual quantities. What is more, only a few extra products were added on average to the significant majority of baskets during this period. This relatively minor shift in buying habits, coupled with more frequent shopping visits, was able to disrupt the just-in-time inventory model, resulting in the temporary shortages that reverberated throughout collaborative supply networks.

“While today’s supply chains have better visibility and resilience than ever before, they still aren’t resilient enough. Understanding the multidimensional nature of risk and creating a resilient supply chain is essential to minimising risk, especially when disruptions seem poised to occur more frequently and with greater severity.”

**Bart Talloen, VP of Supply Chain Innovation, Johnson & Johnson**

For fast-moving consumer goods companies and retailers, supply chain gaps, such as those experienced in the UK, eroded consumer trust and confidence that their needs, however they might perceive them, would be met. A recent research report authored by Capgemini Research Institute, *“The Wake-Up Call: Building supply chain resilience in consumer products and retail for a post-COVID world”* surveyed more than 400 executives from consumer products and retail companies across 11 countries about the effects of COVID-19, found 63 percent of consumer products organisations and 71 percent of retailers took at least three months for their supply chains to recover from the disruptions.

**23% of consumer product organisations and 28% of retailers believe that their supply chain is agile enough to support the organisation’s evolving business needs.<sup>7</sup>**

The temporary shortages experienced during the early months of the COVID-19 pandemic underscore the need for organisations to strengthen the supply chain through advanced demand- planning capabilities. In the end, planning needs to explicitly account for the vagaries of consumer behavior under any condition.

Capgemini Research Institute’s, *The Wake-up Call*, goes on to say that 68 percent of organisations faced difficulties in demand planning due to a lack of accurate and up-to-date information on fluctuating customer demand during the pandemic. To that end, 66 percent of organisations plan to segment supply chains according to demand patterns, product value, and regional dimensions post-pandemic. In comparison, 54 percent say they will use analytics/ AI/machine learning for demand forecasting to cope with disruptions such as the impact of COVID-19.



<sup>7</sup> Capgemini Research Institute, *The Wake-Up Call: Building supply chain resilience in consumer products and retail for a post-COVID world*

In a recent CGT supply chain report, 83 percent of surveyed consumer goods executives cited the inability to make rapid adjustments with supply chain partners as a major supply chain obstacle. Some 75 percent stated that expanding collaboration with supply chain partners is a high or medium priority supply chain investment area.<sup>8</sup>

These technologies can help organisations review historical patterns, select best-fit statistical models, and draw on a variety of inputs and forward-looking variables, such as promotional grids, sell-out data, and environmental factors, to create more accurate demand forecasts with less manual effort. As organisations continue to build maturity, they will also be

able to support a planning system that is autonomous and touchless—meaning that it can identify disruptions, shortages, transportation delays, and any other number of issues and then automatically replan to account for that event.

Current and evolving technical capabilities are absolutely essential to the ability of fast-moving consumer goods and retailers to weather future disruptions, be they public health events, geo-political issues, or natural disasters.

**58% of retailers and 61% of consumer products companies say they will increase investments in supply chain digitisation.<sup>9</sup>**

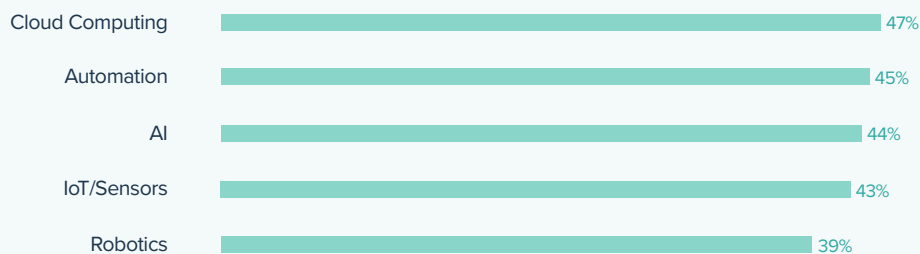


<sup>8</sup> Consumer Goods Technology: The Evolving Global Supply Chain – Where Do We Go From Here

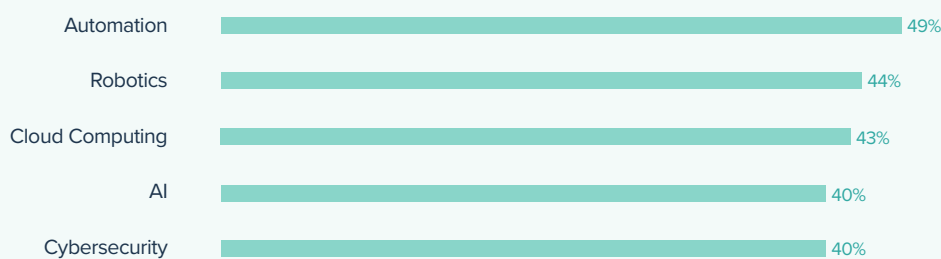
<sup>9</sup> Capgemini Research Institute, [The Wake-Up Call: Building supply chain resilience in consumer products and retail for a post-COVID world](#)



Investments in supply chain digitalisation, especially cloud computing, by consumer products companies set to increase.



Investments in supply chain digitalisation, especially automation, by retail companies set to increase.



Source: Capgemini Research Institute, Supply Chain Survey, August-September 2020, N=400 CPR organizations. \*Automation - business process automation, robotics process automation.

### Building a next-generation replenishment algorithm that trading partners can live with

A major European grocer wanted to develop a data-driven replenishment algorithm that could predict transaction forecasts across stores. Leveraging machine learning, the retailer was able to segment stores, determine relevant features, calculate event effects, and clean the data in order to create a next-generation algorithm. The algorithm also considered external variables, such as weather forecasts and local events, to ensure optimal performance.

Built with flexibility in mind, the algorithm is equipped with a prediction mode for daily use and a calibration mode to refit the model. Model calibration takes less than 10 hours while utilising 16 CPU cores at 100 percent capacity.

#### Outcomes

- Leveraged 1.6 million rows of historical data to predict 27,944 transaction forecasts daily per store
- Reduced more than 1 million features and interaction terms to just 44 for final calibration
- Analyzed more than 5 million yearly event-store combinations to determine uplift

# An Empowered Consumer Paves the Path

At the heart of the supply chain is data, structured and unstructured. The former includes inventory-in-transit information; store, SKU, and PLU inventory data, forecast, and past purchase data. Unstructured data isn't new and, until recently, was costly and time-consuming to analyse. There are more unstructured data sources today, thanks to social listening, online search history, that can be leveraged for upstream planning while doing a better job fulfilling shopper expectations.<sup>10</sup>

To enable a true, omnichannel experience, retailers must pool these data sets, unlocking the visibility needed to understand and serve today's and tomorrow's shopper.

As Walmart's renowned supply chain management has shown, sharing data-driven insights across suppliers, warehouses, and stores can help drive down inventory and transportation costs and reduce stock-outs. It is arguable that enabling its supply chain partner network to behave as part of a single firm is among the chief reasons why Walmart has been able to outlive and outgrow so many of its rivals. But it's abundantly clear that this model has served its most loyal customers well for decades.

To modernise the consumer experience, this collaborative visibility must now also extend to the whole value chain— including the consumer. Today's consumer expects a higher level of transparency and traceability, matching their interest in knowing where product commodities are sourced from, what labour practices are in place and certified, and how —or even if— these products are efficiently brought to market. Increasingly, brands and retailers find that consumers are altering their purchase preferences based on these very points and related issues, including health and safety, social responsibility, inclusiveness, and environmental impact.

In fact, the concern for sustainability registered as one of the more prominently measured upticks in consumer sentiment during COVID-19, according to a 2021 Forbes article.<sup>11</sup> This fits well with the current trend towards local supply chains, hastened by more aware shoppers.



“The power of the technology means we have the ability to add human value to the data for augmented intelligence. By having a consumer psychology or a research lens on the data, tools, and technology help us create meaningful insights.”

Paul van Gendt, CMI Director for the People Data Center, Unilever<sup>12</sup>



<sup>12</sup> Capgemini Research Institute, The Age of Insights: How Consumer Products and Retail organizations can accelerate value capture from data

# Moving from Supply and Demand to Fulfilling Shopper Need-States, When and Where They Want

Tying together supply chain and customer experience data threads can help create a context-aware system that works both up and downstream, from manufacturing through distribution, from the shelf or digital store to any shopper's home. This three-way conversation has the potential to both transform and enhance the interrelationships between buyer-seller-consumer, whether on-premise, through BOPIS, some combination of both, or, where desirable, direct-to-consumer.

The basis for this enhanced process solves for:

- Which products are available by store location at any given time
- What products are in route, by store or for home delivery
- When high-demand products may suggest shortages, how do we communicate between and among suppliers, stores, shoppers to ensure out-of-stocks can be better managed, with need-states more immediately satisfied

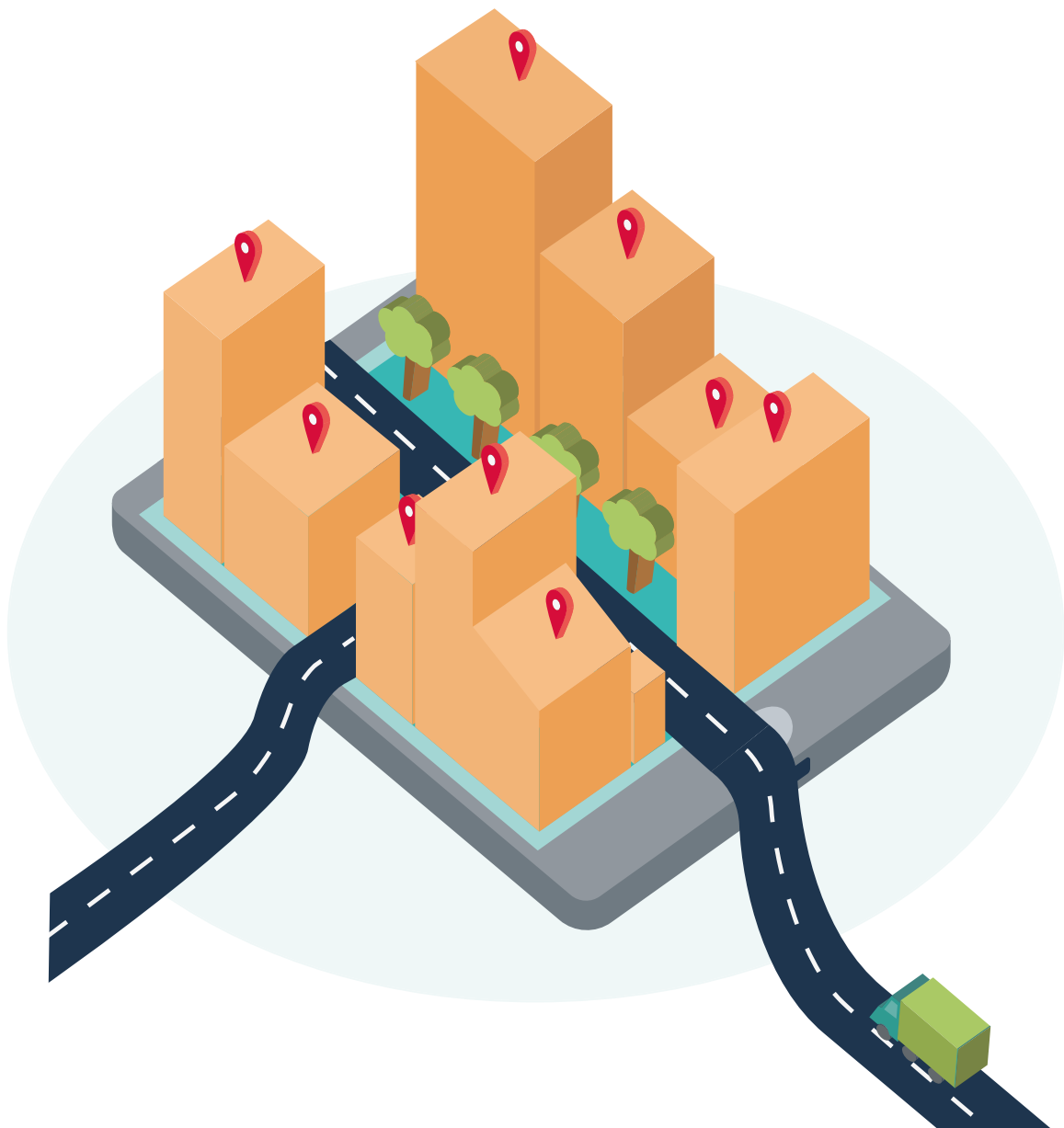
# Enabling Efficient and Cost-Effective, Last-Mile Delivery

While the shift to digital may have accelerated rapidly in 2020, it was not necessarily smooth. During this period, 72 percent of retailers and 75 percent of brands faced difficulties in switching to digital channels—with delivery being one of the biggest pain points.

Online commerce is not just a logistical issue—it also adds costs with last-mile delivery services accounting for 41 percent of overall supply chain expenses. Aside from picking, packing, and delivery, return rates can also be high. Organisations need to rebalance the delivery costs to increase the profitability of online order delivery through automation, optimisation, and collaboration.

“The company doubled down on its AI modeling, continually retraining its delivery route optimisation algorithms on the latest data. And that means that on a daily basis we run over a billion iterations in which we basically try to optimise our overall delivery schemes and our overall delivery routes.”

Guus Dekkers, CTO, Tesco



# Using Dark Stores as a Delivery Asset

Given the significant upsurge for eCommerce, retailers may consider repurposing a portion of their stores as distribution centers. “Dark stores,” as they have come to be known, are used for online order fulfillment and returns, vs. only for on-premise shopping.

Dark stores have been found to be 23 percent less expensive than conventional stores for same-day deliveries. While operational improvements benefit retailers, the consumer is engaged in a new way with the dark stores as well. Independent operations and hyper locality enable immediacy and real-time engagement. If deliveries from dark stores increase by 50 percent, profit margins could grow by 7 percent due to lower delivery costs and higher delivery throughput compared to stores – while not affecting store operations.



# Starting the Conversation

To remain relevant, brands need to create a more resilient supply chain while serving a more empowered, increasingly demanding consumer. But how?

With its pan-global reach and member roster, we see The Consumer Goods Forum as the perfect place to start this discussion. Here, manufacturers, retailers, technologists, and consultancies have already committed to a core vision for helping to create better lives through better business. Here, we are best arrayed to share and discuss, in an open forum, the following topics:

- Why this is a pivotal moment for our mission
- What meaningful change would look like
- How we might bring this all about with speed-to-value for all involved

## A Bold Call to Action

Moving forward, we are recommending a broad-based, cross-industry discussion to examine—with radical clarity—wholly new ways of working together. Of course, for this to work, a critical mass of suppliers and retailers would need to connect and pool specified non-competitive data. This outcome will only be possible through candid discussion for a shared vision that begins by asking:

1. What business do we really think we are in?
2. What is the opportunity cost and benefit for the change we seek?
3. What is the cost of not seeking and implementing such change?

The fast-moving consumer goods and retail sector has performed admirably for decades in providing for the well-being of the world's population in food production, health and beauty care, and household products. So it is a big step to imagine rethinking the trusted models that have served for decades. But, just as some early adopters and disrupters have already demonstrated, one company's bold move in a successful new direction can set a precedent for an entire industry.

A near quarter through the 21st century we might ask of ourselves, what is next? At Oracle and Capgemini, we believe that intelligent supply ecosystems yield resilient supply networks. Coupling a newly empowered consumer with such a network sets the stage for change we seek.

Let us take the conversation we are having today to impact for a brighter tomorrow.

**A Resilient Supply Chain Network + An Empowered Consumer =  
A New Way to Serve**

**RSCN + EC = NWTS**





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For more information on building supply chain resilience in the consumer products and retail industry, download **The Wake Up Call**, a **Capgemini Research Institute** report.

How to Make Your Supply Chain More Agile, Responsive and Secure, a report by CGT and Oracle:

<https://consumergoods.com/how-make-your-supply-chain-more-agile-responsive-and-secure>



# About



The Consumer Goods Forum (CGF) is a global, parity-based industry network that is driven by its members to encourage the global adoption of practices and standards that serves the consumer goods industry worldwide. It brings together the CEOs and senior management of some 400 retailers, manufacturers, service providers, and other stakeholders across 70 countries, and it reflects the diversity of the industry in geography, size, product category and format. Its member companies have combined sales of EUR 3.5 trillion and directly employ nearly 10 million people, with a further 90 million related jobs estimated along the value chain. It is governed by its Board of Directors, which comprises more than 57 manufacturer and retailer CEOs.

Visit us at: [www.theconsumergoodsforum.com](http://www.theconsumergoodsforum.com)

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