



2020 consumer products industry outlook

Navigating Industry 4.0
in uncertain times

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In 2020, an uncertain economy serves as a backdrop for Consumer Product (CP) executives who are balancing the need to invest in technologies to keep up with increasingly empowered consumers and being financially prudent in their investment strategy.

Making strategic choices in an uncertain economy

We are currently in the longest period of economic expansion in US history. It is not possible to predict the timing or form a downturn might take, although one will likely eventually occur. Some macroeconomic indicators suggest the economy may be vulnerable. Slowing international trade and uncertainty among businesses is weighing on growth in key advanced and emerging economies. In its October 2019 update, the International Monetary Fund forecasted global GDP growth to fall to 3.6 percent this year and to 3 percent in 2020, down from 3.8 percent in 2018. The Fund has cautioned that escalating tariffs between the United States and China could shave off as many as 0.8 percentage points from global economic growth in 2020.¹

Faltering global trade is affecting major exporting countries in Europe, such as Germany, which narrowly avoided a recession in Q2 2019. The uncertainty over Brexit has further dented business investment in the United Kingdom. Key emerging markets have also been experiencing a loss of economic momentum. Examples include China's weakening manufacturing and services business and India's deteriorating asset quality stunting growth.²

Mixed signals from economic and consumer indicators contribute to uncertainty in the US. Unemployment fell to a historic low of 3.5 percent in September. At 95.7 in November,³ the Consumer Sentiment Index

remains elevated despite some recent volatility. Long-term interest rates are at record low levels.⁴ However, strength in the labor market has not translated to strong wage growth. Real average weekly earnings grew a mere 0.8 percent in 2018. For 2019, it's up by just 1.2 percent as of this writing. Overall, Deloitte foresees real consumer spend growing by 2.5 percent in 2019 and 2.2 percent in 2020, down from 3 percent in 2018.⁵

Corporate investment growth has been weakening. The US economy grew by a seasonally adjusted rate of 2 percent in Q2 2019. This represents a slowdown from 3.1 percent in Q1. Deloitte projects real GDP growth to slow to 2.3 percent in 2019, compared to 2.9 percent in 2018. A further decline to 1.6 percent is anticipated in 2020, leading some companies to limit investments in innovation, technology, and talent.⁶

Despite the difficulty of predicting when a downturn might occur, companies are right to prepare. While the CP industry revenue trend has been positive over the last 20 years, both revenue and ROA experienced notable declines during the recessions of 2000 and 2009.⁷ Only 14 percent of companies improve both growth and margin during downturns, with 700 bps of Earnings Before Interest and Taxes (EBIT) spread between companies that have gained or lost ground. As economic conditions evolve, companies can prepare for and thrive in a potential downturn by pressure-testing their strategies.⁸

Industry 4.0 and the digital supply network

Industry 4.0 encompasses a promise of a new industrial revolution—one that marries advanced manufacturing techniques with the Internet of Things (IoT). This can create manufacturing systems that are not only interconnected, but which communicate, analyze, and use information to drive further intelligent action back in the physical world. It combines IoT, additive manufacturing, robotics, AI and cognitive technologies, advanced materials, and digital reality.⁹ As companies prepare for a potential downturn, many face competing pressure to invest in Industry 4.0 technologies or risk losing ground to competitors.

In manufacturing, companies are projected to invest \$310 billion in Industry 4.0 initiatives by 2023. This represents a CAGR of 37 percent since 2017.¹⁰ Venture capital (VC) Industry 4.0 investments are consistently in the areas of supply chain, IoT platforms and connectivity, and operations optimization.¹¹

Digital supply networks combine digital information from many different sources, transforming static, linear supply chains into an interconnected ecosystem of nodes that dynamically shapes the planning, production, and distribution of products. These digital supply networks will likely usher in a new era of digital fulfillment for consumers who desire a seamless customer experience—the ability to purchase products on their own terms where, when, and how they want to.

Many forward-thinking CP companies will lean into internal processes made more efficient by increased digitization of the supply chain to guarantee the right product arrives on time. Developing digital and analytics capabilities in supply chain is the most important priority for three-fourths of executives.¹² However, some categories are in their nascent stages. For example, fresh food executives share that their companies are still in early stages of implementing advanced technologies to digitize the fresh food ecosystem. Only 38 percent of manufacturers and retailers have partially or fully implemented AI-based warehouse management to monitor fresh food stocks.¹³

Amazon creates value for their consumers through extensive digitization. Their initial proposition was around order fulfillment and product recommendations. But they've evolved to creating value through their own logistics capabilities. Amazon now has end-to-end supply chain visibility from the first mile to the last. Amazon owns ships, Prime Trucking, Prime Air, warehouses, retail locations, and final-mile partners. This provides them with data for real-time decision-making and the ability to make same-day delivery happen in many markets.¹⁴

Another example is Zenni Optical. Zenni operates an online-only sales model and has captured roughly 50 percent of the online eyewear market. They've sold more than 20 million pairs of glasses since 2003. Zenni offers a wide range of glasses and frames, which can be customized at low prices. Consumers can search for a frame by color, style, lens coating, tint, and engraving.¹⁵



A shortage of skilled talent can inhibit implementation of digital technologies. In Deloitte's 2019 supply chain and digital analytics survey, 82 percent of executives identified internal expertise as the No. 1 talent challenge.¹⁶ But companies are taking steps to improve their workforce. Nearly 61 percent plan to increase hiring of personnel with deep experience in functional and technical topics.¹⁷ Approximately 43 percent plan to retrain existing supply chain personnel to develop digital and analytics skill sets.¹⁸

The pervasive digitization of business can have implications far beyond the improvement of operations, fundamentally transforming talent, distribution channels, and business models. At the same time, advanced technologies can enable companies to analyze the large amounts of data they've been collecting for decades. This can help them identify patterns, characterize behaviors, and ultimately drive insights. For example, the alternative meat movement was born from a simple insight into consumers: Plant-based and alternative proteins don't have to be just for vegetarians. From plant-based proteins to CBD oil to lab-grown meat, Industry 4.0 has helped enable innovations in food production with the power to change the way we think about food.

The speed and magnitude of change enabled by Industry 4.0 technologies has increased pressure on regulators to keep pace. It can be challenging for regulators to monitor and manage the effects of new technologies on the population. This is in part motivated by an effort to protect consumers from the unknown effects of new ingredients or the misuse of their data. At the same time, the transparency and interconnectedness of a digital society has helped lead to a more informed consumer base. Consumers are more knowledgeable about existing global issues such as food security, food and product safety, global sustainability, global pandemics, and third-world malnutrition. Unlike governments that are limited in scope, global companies can transcend borders to address these issues on a global scale.

Case study

Cargill has invested in numerous innovative technologies to more efficiently and effectively manage its supply chain. With the use of Industry 4.0 technologies, Cargill has improved efficiencies in agriculture by using remote control robots to herd cattle.¹⁹ Through data analytics applications to analyze vast amounts of public information, Cargill can predict the yield of agriculture produce by factoring in small changes in weather and sowing patterns in the US.²⁰ Cargill has also invested in monitoring technology along its supply chain that utilizes artificial intelligence (AI) to detect health issues and improve the poultry production processes.²¹

Consumers look to companies for leadership in addressing global issues

Consumers are increasingly looking to enterprises to lead the conversation on global issues, expecting companies to embrace corporate citizenship and sustainability. Where ingredients are sourced and how a product is manufactured, shipped, and packaged are now important considerations for consumers. Approximately 88 percent of consumers across the United States and United Kingdom want companies to improve their environmental and social footprint.²² Further, 48 percent of US consumers say they would change their consumption habits to reduce their impact on the environment.²³

CP companies seek to capture their share of these emerging markets. From 2013 to 2018, half of all CP growth came from products marketed with a sustainability claim. Sustainably marketed products delivered nearly \$114B in revenue in 2018, an increase of 29 percent from 2013.²⁴

A few examples of CP companies trying to lead by example in this space include:

- Ecolab assisted clients in conserving more than 188 billion gallons of water, equivalent to the annual drinking needs of 650 million people.²⁵
- Burberry, H&M, and Hugo Boss signed a charter for climate action in 2018 that included a pledge to reduce greenhouse gas emissions by 30 percent by 2030.²⁶
- P&G, Nestlé, PepsiCo, Unilever, and The Body Shop are exploring the option of reusable containers. For example, Unilever, which currently deploys 700,000 tons of plastic each year, has pledged to halve that figure by 2025.²⁷

Digital battle for ownership of the customer experience in Industry 4.0

Traditionally, brands have been the primary signal of quality for imperfectly informed buyers. Today, consumers are increasingly informed and empowered to make their own purchasing decisions. Digital platforms and mobile technologies provide instant access to customer reviews and price-comparison tools to guide decisions. Even though increased transparency has made it easier for consumers to make objective assessments of value, the prospect of comparison shopping for items on consumers' grocery lists each time they visit a store can be daunting.

Unfortunately, the complexity and cost of new channels and services can make it more difficult for brands to deliver a consistent experience. For example, third-party sellers and counterfeit items available on e-commerce platforms could introduce more variability into consumers' experience with a brand. As ecosystems increase in complexity, can consumers still place their trust in product brands to deliver consistent experiences across every channel where they interact with the brand?



In a modern, connected society so focused on efficiency that we're starting to debate speeding up video streaming to optimize our leisure time, it stands to reason that consumers may be actively searching for a new shortcut they can rely on to receive a consistent positive experience. Through strategic investment in customer-centric digital technologies, various players are blurring the lines between CPG and Retail in their efforts to earn consumer trust.

Further, the resulting tailored approaches to customer experience, marketing, and differentiation can be expensive. However, 62 percent of companies that invested in customer analytics observed a clear ROI. Of these, 52 percent witnessed an increase in revenue.²⁸ This suggests companies can confidently commit themselves to investing in digital technologies to increase operational efficiency or to better understand their customers. Companies can offset the cost of customization by marrying their digital front end with a corresponding digital supply network.

The growth of direct-to-consumer and subscription services

Direct-to-consumer brands are where digital engagement meets the digital supply network. They take full advantage of Industry 4.0. Direct-to-consumer brands lead their engagement through social media and scaling word of mouth. They represent a generation of companies that start with online-only sales that have ramped quickly to \$100M+ in annual revenue.

Incumbent brands have taken notice of these direct-to-consumer (DTC) trends as they too seek to regain control of the customer experience. DTC presents the opportunity to realize greater margins, greater brand stewardship, direct consumer relationships, and better proprietary consumer understanding.

Approximately 57 percent of CP manufacturers report exploring DTC capabilities to take on competition from retailers and e-commerce.²⁹ Strategies include the development of direct-to-consumer capabilities,

acquisitions of DTC subscription services, and launching flagship stores and physical pop-up experiences. Overall, DTC sales have witnessed rapid growth. For example, one-third of Unilever's sales by 2022 are expected to come from DTC.³⁰

Some CP companies apply learnings from DTC acquisitions to their traditional brands. For example, Unilever has been quick to learn from the success of Dollar Shave Club, which gained 7 percent of the market in a short period of time. They've applied the DTC model to their premium mustard brand—Maille. The brand is over 200 years old and enjoys a strong brick-and-mortar presence, but will now be entering the more lucrative DTC space.³¹

Direct-to-consumer strategies can help CP companies gain a deeper understanding of the consumer, informing strategic digital investments in operations, business model transformation, and distribution channel management. The investment strategies are likely to be different depending on the product, consumer, and usage occasion. For example, let's assume customer data reveals consumers are suffering from paradox of choice and would prefer fewer choices. A company would likely benefit more from pursuing a DTC subscription model like BarkBox, a monthly subscription service providing dog products, services, and experiences. Designing a front-end app could allow consumers to develop highly custom treats with a digitized supply chain that can provide speedy and economic delivery options.

Some CP companies are launching their own flagship stores with the intention of better engaging with customers to understand their needs, as well as drive sales. These stores immerse consumers in the brand experience by creating memorable, unique experiences. For example, Kellogg's store allows consumers to design a meal from the wide range of Kellogg cereal products. But the focus is on having the preferred flavor in a relaxed environment while experiencing the nostalgia associated with cereal. L'Occitane offers customers the experience of a scenic French background as they explore products.³²

The rise of private label brands

Access to rich customer data across a consumer's entire shopping basket is a distinct advantage for retailers. By combining their lower cost base with unique insights into consumer behavior, some retailers have successfully developed high-quality private label brands. These brands have the potential to generate loyalty to their stores. Though private label products have been in the market for 30–40 years, retailers have only recently begun to successfully transform their rich customer data into actionable insights to dramatically increase the quality and sophistication of their products. Supported by marketing programs, branding, and packaging, private labels have gained more visibility and consumer acceptance. Consumers now have more choices, resulting in increased competition for traditional CP companies.

In 2018, private label brands accounted for 17 percent of CP sales in retail—approximately \$129 billion dollars.³³ Sales of private label products are growing three times faster than branded products and are estimated to account for 25 percent of dollar sales in the next 10 years.³⁴ For example:

- Albertsons' O Organics private label reached \$1B in sales in 2018. The company is rolling out 1,400 new private label products, more than double its 2017 rate.
- Target introduced new private label brands, including Made by Design, a home furnishings brand, and Smartly, a low-priced home care brand.

Private label brands are gaining a presence on e-commerce platforms as well. Most notably, Amazon now offers more than 120 private label brands.



Closing thoughts

Given the uncertain economy in 2020, CP companies will likely be judicious about investments in Industry 4.0. Companies should focus on committing themselves to investing in digital technologies with built-in analytic capabilities that help them better understand their consumers and the operational problems they are trying to solve. Collecting data is just the first step. Data is only useful to the extent that it can be harnessed to generate insights.

Critical to creating seamless customer experiences in the future and fully realizing the potential rewards of Industry 4.0 will likely be:

- Developing data analytics and intelligent decision-making capabilities that enable analysis of consumer behavioral data and help provide consumers with products tailored to their needs
- Leveraging consumer insights to guide investment decisions around digital supply chain networks, new business models, and distribution channels that can provide the seamless experiences customers desire
- Retraining existing employees while hiring new talent with the right skill sets to implement advanced technologies, which can help foster a culture built on learning and collaboration

These strategies can drive the way forward for CP companies in 2020.

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