



COGNITIVE FIRST – ENABLING A HOLISTIC TRANSFORMATION IN THE CPG INDUSTRY





A world of changes in the CPG industry

Even before the COVID-19 pandemic took the world by storm, the consumer packaged goods (CPG) industry was already in the throes of sweeping changes. Catalyzed by digitally savvy consumers, a globalized supply chain, the rapid evolution of technology, this cluster was poised for disruption. The onset of the pandemic has only amplified and accelerated the changes. For instance, the eCommerce business experienced a meteoric rise as consumers switched to online shopping. Grocery shopping, predominantly in-store before 2020, shifted online as U.S. online grocery sales increased from \$1.2 billion in August 2019 to \$7.2 billion in June 2020¹.

These trends exert tremendous influence across the three critical stakeholder categories – consumers, suppliers and employees.

The impact on consumers is perhaps the most visible change in the industry.

Technology-savvy consumers have altered the rules of the game beyond recognition and dictate the way consumer brands must engage with them. Buying behavior

also changed as shoppers expected more variety of products, flexible order sizes and faster delivery. Further tilting the power to the consumer and bringing in a new dimension is the pervasiveness of social media channels. Users devoting two hours or more a day on social media sites have become a significant influencer in the buyer's journey². As a result, CPG firms are eager to establish closer links to the consumer and actively explore innovative business models such as Direct to Consumer (D2C) and increasingly adopt digitization to stay relevant.

Globalization of the supply chain sector has led to massive transformation across the value chain. In an intensely contested market, there is an urgent need for flexibility and responsiveness. The consequences of failing to meet these new standards can have repercussions on the financial and reputational fronts nudging organizations towards digitization. Furthermore, in an increasingly connected world, CPG firms, retailers and logistics players must work together to create a synergistic ecosystem.

Finally, employees are a critical component in this evolving ecosystem.

They must be geared to handle the

changing business models and the growing role of technology. Another critical angle to consider is the rising percentage of millennials and GenZ in the workforce. The younger users as a segment are more technology savvy and expect more digital solutions. They spend a significant amount of time online and are accustomed to the do-it-yourself culture. It is said that millennials spend almost four hours a day on social media. This segment is geared and, in fact, expects more automation and cognitive solutions.

However, the endeavor to synthesize these trends and make an enterprise future-ready is a challenging one. Sample the crucial questions that enterprises in these industry sectors must deal with every day –

- How do I enhance the productivity of my business?
- How can I make my business more agile?
- How do I make my enterprise more intelligent and perceptive of changes in the market?
- What should my business do to compete effectively with new-age startups?
- How do I find the resources to invest in transformation initiatives?

Enterprises must attempt to answer these vital questions in conjunction with business objectives.

¹The Good, Bad and Ugly for Consumer Retail in 2021 | RIS News

² How Much Time Does The Average Person Spend On Social Media? (digitalmarketing.org)

What's in store for enterprises?

CPG enterprises must now relook their business models to survive and thrive in a post-pandemic world. First, the CPG industry is undergoing upheaval as they contend with a slew of changes. It includes a pronounced adoption of “all things digital” by consumers. As a result, CPG firms scrambled to implement omnichannel and online strategies as well as offer the D2C model to engage with consumers better. Next, the COVID-19 pandemic underscored the importance of injecting resilience into the supply chain and staying nimble. At the same time, they had to enable employees to handle the new environment digitally. Finally, while many companies undertook cost-cutting measures to tide over the pandemic impact, they must now plan for investing in strategic transformational initiatives to survive over the long term.

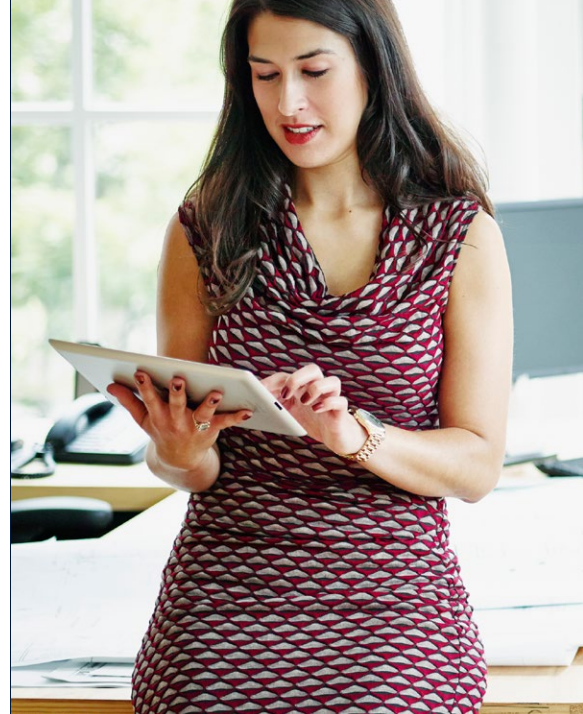
For this, first, they must augment their understanding of the consumer substantially by garnering data from across the supply chain and retailers and traders. Second, they must empower their employees to cope with these changes. Third, Infosys experts say that retailers, CPG and logistics firms need to collaborate more to foster efficient supply chains, effective demand sensing, and agile inventory management.

There are a few roadblocks for enterprises as they change. First, data will be the primary mover to understand stakeholders better and collaborate across different ecosystem players. But making data available when and where it can make a difference will be no easy task for several reasons. Usually, data is present in silos in enterprise systems, and efforts are plowed into integrating disparate systems. Next, even if the data is accessible, an enterprise must generate meaningful insights, emphasizing the need for analytics engines.

In addition to data transformation, automation will play a massive role in amplifying the enterprise's productivity and making it more responsive, flexible and agile - key requirements for success in the current dynamic conditions.

It is widely accepted that consumers wield tremendous power in the CPG value chain. Enterprises hence need to anticipate consumer expectations and demands and proactively offer solutions. AI and ML based solutions can help enterprises anticipate and devise the right approach to solving consumer problems.

Further, a booming startup ecosystem that thrives on being lean, agile, and dynamic compels large CPG companies to reimagine how to invoke technology to make themselves more nimble, perceptive, and efficient.



Digital technologies and beyond hold the key

Infosys Knowledge Institute research irrefutably states that only those CPG companies that morph into digital leaders will survive. Why is that important? Because these companies can harness digital technologies to fast-track growth, make the supply chain more consumer-centric, deliver fulfilling and integrated experiences to consumers, and enable employees to perform their role effectively. At the same time, they are open to changes to business models and organizational culture as part of the process. They realize that they have a chance at future success only if they become a digital native⁴.



³Gen Z & Millennials Use Social Media Differently—Here's 3 Charts That Show How - YPulse

⁴Infosys Digital Radar 2019

A digital footprint across the CPG value chain can generate concrete results

The CPG value chain starts at the supply chain and culminates in selling to consumers and analyzing the sales. Digital technologies can play a defining role in each component of the value chain. Here's how -



Plan – The CPG industry has traditionally been fiercely contested as players grappled to establish leadership and elusive consumer loyalty. Today, the added element of continuously introducing products appropriate for consumers necessitates a deep understanding of consumer behavior, expectation, wants, and needs. AI and ML solutions can facilitate this understanding and accelerate concept-to-market significantly.

The Infosys touch

Demand & Forecasting using AI for a CPG industry leader: Real-time demand sensing and forecasting complementing demand forecasting improved forecast accuracy by over 80%.

Buy – A significant consequence of the digital age is the demand for a wide variety of choices and shortened delivery times. As a result, CPG firms must have high-performing supply chains to meet consumer expectations, which means near-zero errors and enhanced visibility and collaboration across suppliers. Automation solutions for vendor management, AP/AR processes, SC planner, inventory planning in the warehouse can enhance the supply chain outcomes and increase customer satisfaction.

The Infosys touch

Supply Chain Planning Automation using BOTs and AI/ML for a CPG major: Eliminated internal planning processes and transactional steps to deliver.

- *Productivity improvement 75% (7,500 to 2,500 planners)*
- *Reduced inventory by 0.5 day*
- *Increased service level by 0.1%*
- *Optimized planner resources managing business growth of 10%*

Make - CPG businesses face increased pressure on margins due to a combination of pushback on price increase from retailers and consumers, reliance on a small set of recurring customers, and a growing share of eCommerce sales. As a result, they must reduce costs and strive towards leaner operations. Intervention through automation, AI/ML solutions can help realize these goals.

The Infosys touch

AI powered concept to market: A significant drop of concept to market time by 30% enabled by real-time analysis of events, supplier performance to predict and respond to delay in production completion and warehouse delivery.

Move – CPG businesses worldwide accept that consumers hold power in the value chain. So, keeping consumers satisfied by providing speedy and error-free deliveries (same day or under 60 minutes) becomes a priority. In the backend, it means no stockouts, efficient warehousing and faster logistics. Again, automation and AI/ML solutions can contribute significantly to achieving these objectives.

The Infosys touch

Order Management Automation based on predictive modelling: AI/ML Lego blocks intelligently resolved order blocks to minimize manual interventions, reduce order processing time by 40%, decrease OTIF fines by 50-70% and improve customer satisfaction.

Sell – The most efficient planning, manufacturing, and operations do not guarantee high sales.

For that, CPG enterprises must determine the right media mix and ensure the right product placement in the right store. Again, AI/ML and analytical algorithms are spearheading breakthroughs in this area.


The Infosys touch

Data and analytics driven approach to being in the right place: Helped business growth by ensuring products are in the right stores, with the right shelf sets, placement, sampling and marketing.

Analytics – At every stage of the value chain, enterprises must analyze the data to derive insights into customer consumption. Data can be gathered from diverse sources such as POS systems, supply chain systems and command centers for IT.

By exploiting the power of analytics and predictive technologies, CPG firms can enhance order management and fulfillment, design more relevant loyalty programs and elevate efficiencies across the supply chain.





However, given the pace and nature of changes, it's evident that merely adopting digital technologies will no longer suffice. Instead, a new approach to technology must be applied for enterprises to reach their goals which include these facets -

- **Cognitive:** *continual learning and improved operations*
- **Agile:** *IT systems that can reengineer workloads and self-heal*
- **Experience:** *superior experience delivered in a contextual manner*
- **Cost-effective:** *optimal automation to enable cost-optimization*

For the modern CPG enterprise, this sets the stage for a cognitive value chain that can harvest information, learn and evolve aligned to the consumer's needs. With such an approach, discrepancies and issues are anticipated or detected and resolved before impacting the consumer. At the heart of this transformation is the pressing need to prioritize consumer expectations and keep them satisfied.



Conclusion: A magnified outcome

Change will be the new normal for companies, and adapting to the changes their reality. In such an environment, only those companies that quickly respond to the changes can survive and thrive.

With its considered architecture bolstered by sophisticated technologies, the Infosys Cognitive First framework is designed to positively impact cost, service and experience across the value chain through automation. A glimpse of what it can deliver -

- **Hyper-productivity:** Workplace automation will eliminate redundant tasks and simplify work, dramatically enhancing the operations teams' productivity and optimizing operating costs and resources.
- **Digital experience** – Digital technology

can create a memorable customer and employee experience, a priority for CPG firms today.

- **Cognitive business** – Inputs from machine learning and AI processes enable an IT operations model that continually learns and evolves dynamically to cope with changing situations.

Infosys' Cognitive First framework is clearly a necessary tool for forward-looking CPG enterprises that want to master market changes and stay at the top of a heavily contested game. A rich repository of use cases and solution accelerators ensures enhanced business value by facilitating digital experiences and amplifying operational efficiencies. The best part is that these can be achieved in a truly agile manner. Armed with a solid framework, we are excited with the possibilities that Cognitive First presents for CPG clients.

For more information, contact askus@infosys.com



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