NOURISHING THE CPG AND DISTRIBUTION INDUSTRY FOR THE NEW ERA

COVID-19 Response Strategy and TCS Point of View

CPG AND DISTRIBUTION

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COVID-19 is one of the most devastating pandemics in recent history. The impact is threefold. First, is the human impact; with almost 6 million cases globally, over 300,000 fatalities as of May 2020 (worldometer, 2020) and no vaccine yet. Second, is the economic impact; estimated to be worth trillions of dollars due to lockdowns in many parts of the world and restrictions on travel. Third and most importantly is the social impact; social distancing and need for fewer physical interactions are becoming the new norm. These three together have a profound impact in the Consumer Packaged Goods (CPG) and Distribution industry.

Different segments of the CPG and Distribution industry are seeing varying disruptions to their supply and demand due to lockdown restriction and changing consumer buying behavior. There is a spike in demand for essential products as consumers stockpile causing immense supply chain pressure. On the other hand, there is a dip in demand for non-essential products as consumers defer discretionary spend causing high inventory holding cost. Irrespective of the situation, enterprises are prioritizing on COVID-19 essential products to support the community to navigate through the crisis. For example, a global home and personal care major is manufacturing N95 masks; a global tobacco manufacturer is investing in the development of COVID-19 vaccines; a global alcohol beverages manufacturer is making hand sanitizers. Distributors are also repurposing their fleets to provide logistics to essential shipments. Empathetic branding, optimal capacity utilization, alternate sourcing, realigning the supply chain to make and sell the most critical, workplace sanitation and financial discipline are some of the key focus areas towards driving purpose during COVID-19 times.

Different CPG Industry segments have their own unique strategy to navigate through COVID-19. CPG industry needs to orchestrate the supply chain to meet demand variability and adapt to changing consumer behavior such as shift to direct to consumer channels, subscription models, virtually engaging with products and enterprises, focus on at home food and buying healthy and safer products. The Distribution industry focusing on consumable products needs further automate its process to scale up its operation. Enterprises that can be purpose centric, adapt to change and build resilience will emerge stronger from the crisis.
Introduction

There are six key consumer buying behavior thresholds (Figure 1) that we categorize into three timelines of COVID-19 pandemic –

During COVID-19 phase: There is a huge spike in demand for health essentials and essential products as consumers start stock piling with a shift to online purchases.

During mid-term post COVID-19 phase: Consumers limit their visit to stores and buys judiciously with increased basket and pack size at a lower buying frequency.

Long-term post COVID-19 phase: Consumers are expected to return to a new era of lifestyle with increased focus on hygiene, demand for precautionary measures and increased reliance on ecommerce.

The Impact of COVID-19

Different products in CPG Industry segments have varying disruptions to the supply and demand due to current situation and consumer priorities (Figure 2). For example, a US based packaged food company has seen an increase in 53.5% sales during the lockdown.¹ Similarly, for royalty-based toys there has been reduced sales due to postponement in movie production and release.

Global pandemic has varying level of impacts on the supply and demand ecosystem across CPG segments

<table>
<thead>
<tr>
<th>Food &amp; Beverages</th>
<th>Home &amp; Personal Care</th>
<th>Alcohol Beverages</th>
<th>Tobacco</th>
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</thead>
<tbody>
<tr>
<td><strong>Demand</strong></td>
<td><strong>Supply</strong></td>
<td><strong>Demand</strong></td>
<td><strong>Supply</strong></td>
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<tr>
<td>Increase in online grocery sales; Increase in sales for dairy products, ready to eat segments; Bigger basket size and pack size</td>
<td>Workforce restriction; High lead time due to extra time to sanitize shop floor; Restricted logistics due to lockdown</td>
<td>Increased demand for educational toys, family games; Online and digital games; Lost sales due to delayed launch of royalty toys</td>
<td>Temporary production closure in outsourced geographies causes supply pressure; Regional lockdowns resulting in redirecting the Supply Chain</td>
</tr>
<tr>
<td>High demand for sanitizing/cleaning products; Increase in sales due to consumer stock-ups; Bigger pack size</td>
<td>Production interrupted due to centralized sourcing; Manufacturing capacity reduced due to workforce shortages; Realign supply chain for online fulfillment</td>
<td>Reduced demand as consumers prioritize essentials; Delay in new fashion launches resulting lost sales</td>
<td>Increase in supply chain cost due to lockdown in Asian countries; Downstream order cancellations resulting higher network inventory</td>
</tr>
<tr>
<td>Lost sales due to on-premise channels closure; High demand of economy and budget brands; Increase in online sales</td>
<td>Impact on supply of raw materials; Realign manufacturing to produce larger pack sizes; Align supply chain for online fulfillment</td>
<td>Increase in demand for safe beauty products; Online sales and online beauty consultation gain popularity</td>
<td>Temporary disruption in the supply chain due to heavy reliance on manufacturing from a single geography; Realign supply chain for online fulfillment; Sales to on-trade channels impacted</td>
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<tr>
<td>Spike in demand due to panic buying; Increase in demand for reduced risk products</td>
<td>Depletion of primary and secondary stock; Re-lane supply chain due to lockdown restrictions</td>
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The matrix below (Figure 3) depicts the detailed impact of supply and demand parameters for CPG segments during COVID-19. Due to varying impacts to supply and demand parameters, each segment can have varying recovery speeds. The Food and Beverages (F&B) segment will rebound faster as it has an established local supply chain whereas the Home and Personal Care (HPC) and Apparel and Footwear (A&F) segment will see a drastic shift towards decentralized sourcing. Clearly, a detailed segment-wise analysis is needed to nourish the CPG industry for the future.

* Companies operating in multi-segment/product categories will have multi-layered impact in demand and supply. This chart represents impact to individual CPG segments.

![Figure 3: Impact on Supply and Demand](image-url)
Response Strategy

CPG and Distribution companies will need different strategies to navigate through the three phases of COVID-19:

- **During COVID-19:**
  To make, sell and distribute the most critical products

- **Mid-term post COVID-19:**
  Adapt to emerging needs

- **Long-term post COVID-19:**
  To withstand future disruptions

The following sections will detail the strategy (Figure 4) for different CPG and Distribution segments for each of these three phases.

**Figure 4:** Response Strategy for CPG and Distribution Industry
Home and Personal Care Segment

The HPC segment saw robust volumes and sales during the first quarter of calendar year 2020 due to panic buying. A leading HPC major reported an 8% increase in volume due to an upswing in demand for home cleaning and personal hygiene products. High pantry loading of essentials required companies to prioritize fulfillment and realigning the supply chain to online channel. Reducing SKU variability would reduce the overall bullwhip in the supply chain. During COVID-19, HPC companies should be able to quickly design and source materials required to help the frontline workers and general public. In the mid-term, we recommend evaluating alternate sourcing for raw materials to reduce major reliance from a single geography and restore original service levels. In the long-term, we advise companies to focus more on creating innovative products with longer shelf life, Direct to Consumer (D2C) fulfilment through ecommerce, selling through virtual channels, contactless delivery, subscription models, remote workforce management, remote and cognitive operations to build a lasting resilience.

Figure 5: Home and Personal Care Segment Impact

**Demand Impact**
- Panic buying and stockpiling of cleaning, washing and disinfectant products due to extended lockdown
- Higher usage for hygienic commodities due to increased sanitizing and cleaning requirement at home
- Reduced demand for cosmetics and haircare products due to lockdown restriction

**Supply Impact**
- Reduced manufacturing capacity for sanitizer and other cleaning/disinfectant products due to rising demand
- Shortage of manpower
- Constrained logistics to meet demand volatility
- Product stock outs due to capacity constraints and disruptions in domestic supply chain
- Realign supply chain to e-commerce focus

**Mid-Term Post COVID-19**
- Increased levels of online shopping with larger basket sizes
- Increased preference for products with hygiene and health benefits along with brand identity
- Higher levels of consumption of health and wellness products, cleaning agents, detergents, hand sanitizers
- Re-establish original service levels
- Dip in demand for sanitizing and cleaning products due to very high pantry loading
- Lack of accuracy on future demand from traditional forecasting models for next 6-12 months

**Long-Term Post COVID-19**
- Potential long-term import gaps for products made in impacted countries due to logistics disruptions
- Long-term supply chain strategies towards sourcing and inventory policy
Figure 6: Response Strategy for Home and Personal Care Companies
Food and Beverages Segment

In F&B segment, dairy products, cooking oil, ready-to-eat products and grocery items saw an increase in sales. A US based packaged food company have seen a 53.5% increase in sales in the initial weeks of the lockdown.³ We suggest CPG enterprises should orchestrate replenishment with shorter planning cycles in both the offline and online channels with key imperatives to online channels with increased traffic. The supply chain in F&B is mostly local; however, workforce shortages and increased sanitization of shop floors and warehouses are resulting in delays to add to the network inventory. In the mid and long-term, consumer behavior changes towards safe, healthy, nutritious and immunity boosting products. We recommend F&B enterprises to adapt to technology-based ecosystem for quality gradation, supplier selection and collaboration, food handling and storing and last mile delivery with genealogy and subscription models, as consumers will drastically reduce out-of-home food and beverage and prefer online.

Figure 7: Food and Beverages Segment Impact

**Demand Impact**
- Rise in ecommerce sales for grocery and fresh-foods
- Consumers embracing click and collect and contactless delivery
- Stocking up on shelf-stable items and comfort foods
- Consumer behavior for food consumption evolves (consumption of cereal for dinner and larger acceptance of alternate products - plant based meat) as dining-out and order-ins drastically reduces.

**Supply Impact**
- Unavailability of raw materials due to movement restrictions
- Restricted logistics impeding inbound and outbound operations
- Depleting Inventory in the distribution network
- Workforce shortages
- Periodic sanitization of shop floor and warehouses adds to lead time

**Mid-Term Post COVID-19**
- Increased need for home delivery and contactless delivery
- Increased focus on health and wellness products (Sugar-free and nutritious products)
- Reduced impulse buying and focus on buying necessary food items
- Apprehensions towards purchasing imported goods

**Long-Term Post COVID-19**
- Focus on purchasing healthy and hygienic products.
- Growing demand for sterile packaging and hygienically manufactured products
- Bigger basket sizes and reduced frequency of buying
- Rise in demands of luxury food items

- Continued impact on supply chain due to inter/intra-national restriction
- Demand planning will get impacted due to stockpiling
- Shorter production shift will result in supply variability

- Changing buying size and frequency leading to changes in Supply chain
- Spike in demand of luxury discretionary products like luxury food items
- Redefine business continuity for future proofing supply chain

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**Figure 7: Food and Beverages Segment Impact**
**Figure 8: Response Strategy for Food & Beverages Companies**

<table>
<thead>
<tr>
<th>Customer Response</th>
<th>NPD</th>
<th>Supply Chain planning</th>
<th>Sourcing</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Sales &amp; Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKU rationalization</td>
<td>Distribution planning for essential categories</td>
<td>Collaborate with strategic suppliers</td>
<td>Workforce/ labor planning and visibility</td>
<td>Contactless and last-mile delivery</td>
<td>Virtual store connect</td>
<td></td>
</tr>
<tr>
<td>Develop new healthy and nutritious products</td>
<td>Retailer collaboration to address demand variability</td>
<td>Relaxing on-time in-full requirements</td>
<td>Flexible scheduling for running prioritized products</td>
<td>Direct to Consumer channel</td>
<td>Conversational commerce</td>
<td></td>
</tr>
<tr>
<td>Consumer sentiment analysis</td>
<td>Logistics planning addressing social distancing</td>
<td>Evaluate tier 1 supplier risk</td>
<td>Remote manufacturing</td>
<td>Subscription based model</td>
<td>Trade spend optimization</td>
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<td></td>
<td>Revised forecasting for essential category</td>
<td>Inbound material visibility</td>
<td>Industrial automation with cognitive operations</td>
<td>Brand protection</td>
<td>Alternate sales channel ecosystem</td>
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<td></td>
<td>Update inventory policies and safety stock</td>
<td>Evaluate and activate alternate sourcing</td>
<td>Maintaining increased quality and health standards (e.g. improved taste modeling)</td>
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<td></td>
<td>Tracking end-to-end supply chain</td>
<td>Re-evaluate share of business</td>
<td>Digital Twin for dynamic modeling</td>
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<td></td>
<td>Cognitive supply chain planning</td>
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</table>
Alcohol Beverages Segment

Amid COVID-19 and the subsequent lockdown, sales of alcoholic beverages sky-rocketed by around 55% during the initial weeks of lockdown due to consumer stock piling with online being the key channel.⁴ A US-based online alcohol beverage aggregator reported 300% increase in sales, whereas a leading alcoholic beverage manufacturer saw a drop-in sale of up to 60% due to closure of on-premise channels such as bars, pubs and airports.⁴ During COVID-19, most of the companies have repurposed the manufacturing line to make hand sanitizer as it contains 60% alcohol content.⁵ We predict that the key focus now is to sell bigger pack sizes with sterile packaging and online as the preferred mode. In the new era, focus should be on manufacturing low alcohol content products as consumers will prefer healthier drinks. Re-planning for economy/value brands, re-evaluating trade and promotional investments along with exploring virtual channels to go to market would be some of the key priorities.

⁵National Center for Biotechnology Information, Retrieved April 2020, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3291447/
Figure 9: Alcohol Beverages Segment Impact

- Consumer demand is for economy and premium drinks as against luxury brands
- Larger bottle sizes are in demand (1.5L+) in the US as compared to smaller 375 ml in spirits
- Impact on supply of raw materials due to closures and lack of labor in many countries
- Factory closures and labor absenteeism in most breweries / distilleries due to government regulations
- Limited stocks at retail outlets – esp. of economy brands
- Higher preference for healthy drinks given the health scare
- Loss of jobs and dull economy forecast for lesser demand
- Consumer will expect discounts/benefits on products to return to on premise sources
- High social activities and heavy demand for alcohol beverage products among consumers
- Consumers will expect variety due to high demand
- Overall demand flat until economy growth is back to 2019 levels

Demand Impact

During COVID-19
- Impact on supply of raw materials due to closures and lack of labor in many countries
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Mid-Term Post COVID-19
- Summer demand in Europe and US will be lesser considering cancellation of major events
- Focus on newer channels to boost growth – home delivery service, online marketplace and closer B2B relation with online retailers in the US for delivery services
- Re-focus on digital/ new technologies for route to market to aid salespeople to function remotely (esp. to reach difficult geographies)

Long-Term Post COVID-19
- Focus on Product Quality and low alcohol products /healthy drink
- Focus on distilleries and breweries to run efficiently and in full capacity
- Upgrade/increase production capacity and expand production to newer locations
- Redefine business continuity plans (suppliers/route to market/ manufacturing)
- Higher focus on assortments and safety stock levels across value chain

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Figure 9: Alcohol Beverages Segment Impact
**Figure 10: Response Strategy for Alcohol Beverages Companies**

**NPDI**
- Rapid prototyping of COVID essential products
- SKU Optimization (bottle sizes and Value-added packaging) across premium and luxury brands
- Low Alcohol and healthy beverages

**Supply Chain planning**
- Shorter and agile planning cycle
- Inventory Optimization
- Stronger S&OP to sense demand & manage supply across all channels
- Supplier & retailer Collaboration
- Cognitive supply chain planning

**Sourcing**
- Higher quality checks and remote monitoring of raw materials at various stages
- Larger inventory with raw material freshness monitoring
- Source from new suppliers
- Higher focus on sustainability

**Manufacturing**
- Re-purpose Manufacturing lines to produce COVID essential products
- Flexible line scheduling
- Re-plan economy and luxury brands production
- Hygienic packaging
- Digital Twin for dynamic modelling

**Distribution**
- Higher focus on distributor collaboration and B2B commerce
- Focus on smoothing the sales in vs sales out curve
- Sterile Packaging/Disinfected Transportation
- Automated pick and pack
- Focus on better fulfilment – OTIF

**Sales & Marketing**
- Identify new Sales Channels (B2C commerce, Home Delivery Partners)
- Virtual Store Connect
- Reduced A&P spend
- Revised pricing strategies
- Sales strategies to restore on premise sales
- Renewed digital marketing focus based on limited spend

During COVID-19  | Mid-term post COVID-19  | Long-term post COVID-19
Tobacco Segment

Tobacco products saw a spike in demand as soon as lockdown started as consumers resorted to stockpiling. The UK observed a 9% increase in sales during COVID-19 while a steady demand was observed in the US. The sales of reduced risk products and non-tobacco products increased due to health and safety concerns among consumers. However, travel restrictions imposed by the countries have affected revenue streams from duty free outlets (<1% of revenue for a leading tobacco manufacturer). Current fulfillment is possible due to higher network inventory levels however, prolonged shut down will lead to out-of-stock and force consumers to switch brands. One leading tobacco manufacturer has repurposed their resources to help develop a vaccine for COVID-19. The situation warrants redefining their existing HSE standards to meet the requirements of the new era. In the mid and long-term, we advise companies to design a resilient supply chain with increased focus on alternate and digital sourcing, reduced risk products to address the new buying patterns and health and work standards.

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6 Financial Times, Smokers stock up on tobacco and nicotine products, April 2020, Retrieved May 2020, https://www.ft.com/content/362d7d51-6561-493b-a29b-72784157c0a7

Figure 11: Tobacco Segment impact

**Demand Impact**
- Panic buying leading to spike in demand
- Non availability leading to
  - Brand switch
  - Switch to Reduced Risk Products and non-tobacco products
- Online channel will become a preferred channel of purchase for certain tobacco products

**Supply Impact**
- Impact on Non-Tobacco Material (NTM) and tobacco leaf (stem/lamina) supplies to factories
- Impact on leaf operations during buying season (Brazil, Turkey and China)
- Factory closures and workforce shortage
- Non availability of stocks at retail outlets
- Increase in sale of Reduced Risk Products (B2C)
- Building primary and secondary stock

**During COVID-19**
- Focus on factories to run efficiently and in full capacity
- Focus on product quality
- Realignment of route to market/trade/distribution in few countries
- Source Non-Tobacco Materials (NTMs) from new countries / suppliers
- Evaluate new contract manufacturing sites
- Revisit inventory policies and safety stock levels across the value chain

**Mid-Term Post COVID-19**
- Continue the focus on factory efficiency and product quality
- Upgrade/increase production capacity
- Ensure stock availability at retail outlets
- Redefine business continuity plans (suppliers/contract manufacturing)

**Long-Term Post COVID-19**
- Online channel will become a preferred channel of purchase for certain tobacco products
### Figure 12: Response Strategy for Tobacco Companies

<table>
<thead>
<tr>
<th>Customer Response</th>
<th>NPDI</th>
<th>Supply Chain Planning</th>
<th>NTM and Sourcing Tobacco Leaf</th>
<th>Threshing, Primary and Secondary Manufacturing</th>
<th>Trade Marketing and Distribution (TM&amp;D)</th>
<th>Sales &amp; Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Experimentation and development of COVID-19 vaccine from tobacco leaf</td>
<td>- End-to-end supply chain planning and visibility</td>
<td>- Evaluate tier 1</td>
<td>- Improve secondary</td>
<td>- Improve on key TM&amp;D pillars - planning/</td>
<td>- Improved efficiency/cycle time in B2C commerce for reduced risk products</td>
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<td></td>
<td>- Effective working capital planning</td>
<td>- supplier risk</td>
<td>operational efficiency and</td>
<td>segmentation capabilities, order to cash,</td>
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<td>- Tobacco leaf sourcing, yield management, pest detection, leaf</td>
<td>- Collaborate with</td>
<td>reduce costs – cut-tobacco utilization, non tobacco material utilization, spares management</td>
<td>pricing engine, trade marketing execution, BI and reporting</td>
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<td>- grading</td>
<td>- evaluate alternate</td>
<td>- Ensure cigarettes with</td>
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<td>- Tobacco blend optimizer</td>
<td>- Sourcing</td>
<td>highest Quality and safety standards - physical and visual parameters</td>
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<td>- Cognitive supply chain planning</td>
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<td>- Tobacco blend</td>
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Apparel and Footwear Segment

During and immediately post COVID-19 consumers are likely to spend less on A&F causing a decrease in demand of about 27-30%. Cancelled orders worth over $1.5 billion will cause supply disruptions and increase unemployment in developing countries. However, a leading A&F major saw a rise in ecommerce sales of 35% in the first quarter, as consumers prefer online channels. As sales drop, enterprises must prioritize on repurposing their manufacturing lines to develop COVID-19 essential products. We recommend enterprises to focus on empathetic branding to resonate well with consumers after the lockdown. In the near and long-term the key focus should be increasing sales on the online channel and enriching the consumer experience leveraging digital ecosystems in areas such as online fashion, digital trial rooms, contactless self-checkouts and AR/VR to make buying a safe, convenient and differentiated experience.

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10Adidas Q1 2020 Results, Retrieved April 2020, https://www.adidas-group.com/media/filer_public/dc/77/dc77fde6d18f4e3b-a0a5-169c36d1b46/adidasag_q12020results_final_en.pdf
Figure 13: Apparel and Footwear Segment Impact

**Demand Impact**
- Lost sales due to retail shops closure during lockdown
- Online order cancellation due to exceptional lead times
- Companies are appealing to fashion buyers to do commerce with compassion to sustain demand

**Supply Impact**
- Increase in input cost due to sharp increases in prices of raw materials like cotton and yarn
- Increase in overall supply cost due to operations shutdown in Eastern Asian factories

**During COVID-19**
- As overstock clearance becomes a high priority, consumers will expect discounts
- Delay in change in fashion trends as fashion event get postponed due to lockdown and travel restrictions

**Mid-Term Post COVID-19**
- Recovery of demand and supply chain will take at least 8-10 months post the lockdown uplifting
- Ecommerce to be the preferred fulfillment channel for consumers

**Long-Term Post COVID-19**
- Optimizing total supply chain costs to offset price increase of raw materials and services
- Re-imagined supply chain to address hyper-personalization

**Recovery of demand and supply chain** will take at least 8-10 months post the lockdown uplifting.
Figure 14: Response Strategy for Apparel & Footwear Companies

- **Customer Response**
  - Repurpose manufacturing lines to develop COVID-19 essential products
  - Increased focus for sentiment analysis to plan for new products
  - Alternate transportation planning to address logistics disruptions
  - Intelligent allocation of safety stock for inventory optimization
  - Plan advance procurement and forecasting for future material delays
  - Cognitive supply chain planning

- **NPDI**
  - Collaboration with suppliers to plan demand and production supply
  - Evaluate tier 1 supplier risk
  - Evaluate and activate alternate sourcing
  - Evaluate share of business

- **Supply Chain planning**
  - Flexible manufacturing to cater to emergency products and variable demand
  - Localized manufacturing of apparel and footwear
  - Improved manufacturing visibility
  - Shift to automating manufacturing processes and advanced robotics

- **Sourcing**
  - Sterile packaging/disinfected transportation
  - Focus on direct to consumer and omnichannel fulfilment

- **Manufacturing**
  - Optimal allocation of trade investment, advertising and promotions
  - Building brand protection
  - Hyper-personalization to protect brand loyalty
  - Focus on digitizing the consumer experience (digital trial room, contactless self checkout, etc.)

- **Distribution**
  - Localized manufacturing of apparel and footwear
  - Improved manufacturing visibility

- **Sales & Marketing**
  - Sterile packaging/disinfected transportation
  - Focus on direct to consumer and omnichannel fulfilment
  - Optimal allocation of trade investment, advertising and promotions
  - Building brand protection
  - Hyper-personalization to protect brand loyalty
  - Focus on digitizing the consumer experience (digital trial room, contactless self checkout, etc.)
Beauty and Cosmetics Segment

COVID-19 crisis has shocked the global beauty industry which accounted for $500 billion in revenue during 2019. The first-quarter sales have been weak, amid closure of stores and lockdown restrictions. A global beauty and cosmetics major reported an overall loss of sales of 4.8% during this period. The company also observed an increase in sales by 52.6% through online channels, which marks the shift in consumer buying behavior amid lockdown restrictions and social distancing. During COVID-19, many companies have repurposed their manufacturing lines to produce essential products like hand sanitizers and are investing on vaccines. In the new era, we suggest a sustained focus on inventory optimization and alternate sourcing will be required to embrace digital channels in order to combat the competition from digital native brands that are already providing personalized skincare products. Safe products, sterile packaging and transportation, contactless delivery, online consultations and digital route to consumer with subscription models will be a priority to adapt to new era.


### Figure 15: Beauty and Cosmetics Segment Impact

#### Demand Impact
- Consumer spend less on cosmetic as they prioritize on essentials. In the US, average monthly spend on beauty care declined by 5-10%.
- Online channel become more popular due to lockdown restrictions.

#### Supply Impact
- Product development delays due to ongoing lockdown situations across multiple geographies.
- Significant impact on supplies due to heavy reliance on Chinese manufacturers.

#### During COVID-19
- Shift in preference for beauty products that promote health and safety.
- Increase in demand for products that provide genealogy.
- High preference for personal care products having benefits beyond sanitation.

#### Mid-Term Post COVID-19
- Higher emphasis will be on stock clearance through omni-channel capabilities (D2C and online channels).
- Realigning supply chain to cater to D2C channels.

#### Long-Term Post COVID-19
- Consumers might become less reliant on beauty professionals.
- Demand for hyper-personalized skin care. US startup attracts consumers by offering personalized products.
- Consumers will prefer more clean, organic and high quality products.

- Changing preferences to onshore/nearshore manufacturing.
<table>
<thead>
<tr>
<th>Customer Response</th>
<th>NPDI</th>
<th>Supply Chain Planning</th>
<th>Sourcing</th>
<th>Manufacturing</th>
<th>Distribution</th>
<th>Sales &amp; Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repurpose manufacturing - Production of essentials</td>
<td>Alternate transportation planning to address logistics disruptions</td>
<td>Continuous communication with strategic suppliers</td>
<td>Re-purpose manufacturing lines to produce COVID-19 essential commodities</td>
<td>Enhance shipment tracing and tracking</td>
<td></td>
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</tr>
<tr>
<td>Developing safe and healthy products</td>
<td>Agile business planning</td>
<td>Evaluate tier 1 supplier risk</td>
<td>Sterile packaging/disinfected transportation</td>
<td>Conversational commerce</td>
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<tr>
<td>Digital skin to test new products</td>
<td>Revised demand forecasting</td>
<td>Evaluate and activate alternate sourcing</td>
<td>Flexible production scheduling to counter demand variability</td>
<td>Online beauty consultation services</td>
<td></td>
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</tr>
<tr>
<td>Focus on innovative, DIY and personalized products</td>
<td>Inventory management and safety stock planning</td>
<td>Inbound material visibility</td>
<td>Remote and automated manufacturing and advanced robotics</td>
<td>Subscription based model</td>
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<tr>
<td>Meta learning to create hyper-personalized product</td>
<td>Cognitive supply chain planning</td>
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</tbody>
</table>

**Figure 16: Response Strategy for Beauty and Cosmetics Companies**
Toys and Games Segment

The widespread of virus has caused closure of manufacturing plants resulting in a temporary supply pressure in the toy segment. Subsequent lockdowns across the world and closure of non-essential services affected retail stores sales. In the first quarter, a toys and games major saw a fall in revenue by 8%. As kids prepared for the extended lockdown periods indoors, the demand spiked in the educational toy segments, family board games and puzzles. Additionally, there was an increase of 82% in sales of video games during March 2020 compared to previous year as lockdown restrictions commenced. In the mid and long-term, we predict that promotional investments will play a key role in the large retail formats to boost sales. Flexible supply chain to adapt to both the offline and online with alternate hubs to address supply side issues would be key to regaining business. Potential M&A opportunities exist for toy companies in areas such as movies and TV series production houses to boost sales through royalty products.

Figure 17: Toys and Games Segment Impact

- Increased demand for family board games and educational toys/games
- Spike in engagement with online and digital games
- End point delivery temporarily affected due to supply disruption
- Increase in input cost due to re-routing of supply chain
- Toy Sales from large format retailers reduced due to global restrictions
- Manufacturing units to go overtime to fulfill back orders
- Leading toy retailers experiencing lower demand
- Evaluate alternate sources of supply
- Changed inventory policies and safety stock levels
- Online purchases will get a boost since people avoid stores in the long term
- Manufacturing units to go overtime to fulfill back orders
- Leading toy retailers experiencing lower demand
- Evaluate alternate sources of supply
- Changed inventory policies and safety stock levels
- Increased focus on direct to consumer channel for sales
- Redefine business continuity plans for a more resilient and disruption proof supply chain

**Demand Impact**

- Increased demand for family board games and educational toys/games
- Spike in engagement with online and digital games

- Lost sales during Holiday Seasons due to inability of consumers to buy from a physical store due to lockdown restrictions
- Consumers to defer buying royalty based toys

- Online purchases will get a boost since people avoid stores in the long term

**Supply Impact**

- End point delivery temporarily affected due to supply disruption
- Increase in input cost due to re-routing of supply chain
- Toy Sales from large format retailers reduced due to global restrictions

- Manufacturing units to go overtime to fulfill back orders
- Leading toy retailers experiencing lower demand
- Evaluate alternate sources of supply
- Changed inventory policies and safety stock levels

**Mid-Term Post COVID-19**

- Manufacturing units to go overtime to fulfill back orders
- Leading toy retailers experiencing lower demand
- Evaluate alternate sources of supply
- Changed inventory policies and safety stock levels

**Long-Term Post COVID-19**

- Increased focus on direct to consumer channel for sales
- Redefine business continuity plans for a more resilient and disruption proof supply chain

**Figure 17: Toys and Games Segment Impact**
Figure 18: Response Strategy for Toys and Games Companies

- Product lines move towards educational toys
- Delayed launch of movie royalty based products
- Alternate transportation planning to address logistics disruptions
- Intelligent inventory allocation
- Cognitive supply chain planning
- Inbound material visibility
- Continuous communication with strategic suppliers
- Evaluate tier 1 supplier risk
- Improve supplier collaboration to reduce risk
- Evaluate and activate alternate sourcing
- Flexible Scheduling for running prioritized products
- Improved manufacturing visibility
- Higher focus on distributor collaboration and B2B commerce
- Sterile packaging/disinfected transportation
- Focus on direct to consumer fulfillment
- Building brand protection & engagement through online presence
- Fulfillment in large stores post COVID restrictions
- Accelerating online marketplace
- Subscription based models for consumer lock-in

* In the toy industry majority of manufacturing is outsourced.
Response Strategy for Distribution Industry

Distribution industry is closely related to the CPG industry segments focusing on wholesale distribution of CPG products and industrial supply, MRO, electronics, etc. We categorize the industry into two primary segments: Food and B2B distributors. Similar to the CPG segments, the demand have varying impact in the value chain of distribution and it requires a unique response strategy.
Food Distribution Segment

The Food Service distributors distribute food and non-food products to restaurants, healthcare, schools, workplaces and cafeterias in public places. Amid lockdown and closure of all these public places, the institutional food distributors are plagued by a sudden drop in demand (50% decline in case volumes by end of March 2020). One large food distributor reported an overall loss of sales of 6.5% in the March quarter and expects a significant impact in the June quarter due to impact of the pandemic. Over 10 million food service jobs are at risk with 60% of COVID-19 related layoffs in food services during March 2020. In order to offset the revenue losses, the distributors are repurposing their excess fleet and workforce to provide logistics services for grocery focused initiatives. For example, the distributors cater services to retail grocery customers, enable small restaurants to start home delivery operations and distribute cleaning supplies to help maintain the restaurants sanitized. We recommend that the distribution companies should increase drop shipment and focus on contactless and sterile transportation in the mid-term to build customer confidence. In the long-term, the distributors should automate and re-design the warehouse operations to cut costs and build resilience.

<table>
<thead>
<tr>
<th>Demand Impact</th>
<th>Supply Impact</th>
<th>Figure 19: Food Distribution Segment Impact</th>
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</thead>
<tbody>
<tr>
<td>Reduced demand due to shift in consumption pattern of consumers from away– from home locations to eating food at home</td>
<td>Restricted logistics impeding inbound and outbound operations</td>
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<tr>
<td>High impact in demand due to closure of hospitality chains amid lockdown</td>
<td>Need to optimize routing and truckload</td>
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<td></td>
<td>Improve HSE standards to ensure complete safety of suppliers, employees and customers</td>
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<td></td>
<td>Over supply in the network resulting in spoilage</td>
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<td></td>
<td>Excess available workforce resulting in layoffs</td>
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<td></td>
<td>Revisit order maximum to align with inventory policies/safety stock management</td>
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<td></td>
<td>Increase drop shipment</td>
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<td></td>
<td>Realign operations to contactless delivery and sterile transportation</td>
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<tr>
<td></td>
<td>Re-open hospitality chains will increase the demand</td>
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<td></td>
<td>In the next era, online education in schools and colleges, remote workforce in businesses may hamper the demand in catering services</td>
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<td></td>
<td>Reduce total supply chain cost, e.g. energy management, outbound logistics, warehouse management, etc.</td>
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<td></td>
<td>Automated warehouse operations</td>
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Figure 20: Response Strategy of Food Distribution Companies

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<tbody>
<tr>
<td></td>
<td>Shorter and agile business planning cycles</td>
<td>Collaboration with tier 1 suppliers</td>
<td>Remote workforce management</td>
<td>Repurpose transportation fleet for COVID-19 essential services and businesses</td>
<td>Contactless and remote customer services</td>
</tr>
<tr>
<td></td>
<td>Distribution planning for essential businesses such as emergency respondents</td>
<td>Increase drop shipment</td>
<td>Remote operations assistance</td>
<td>Disinfected transportation</td>
<td>Compassionate pricing</td>
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<td></td>
<td>Customer collaboration to address demand variability</td>
<td>Renegotiation of contracts</td>
<td>Sterile packaging</td>
<td>Contactless delivery</td>
<td>Net Revenue management and profitability</td>
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<td></td>
<td></td>
<td>Inbound material visibility</td>
<td>Update inventory policies and safety stock</td>
<td>Global track and trace for real time visibility and provenance</td>
<td>Trade spend Optimization</td>
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<td></td>
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<td>Warehouse design for ease of sanitation and movement</td>
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<td>Increase footprint in ecommerce platforms</td>
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<td>Automated material handing and packaging</td>
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<td></td>
<td></td>
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<td></td>
<td>Fleet optimization</td>
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</tbody>
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- **During COVID-19**
- **Mid-term post COVID-19**
- **Long-term post COVID-19**
B2B Distribution Segment

The Industrial Supplies (IS), MRO and grey goods distributors play a significant role for all industries. During COVID-19, the IS and MRO distributors prioritized on emergency shipment to businesses and government agencies providing essential services. To sell the most critical they compromised on their profit margin. The distributors faced a shortage in workforce in DC’s due to lockdown restrictions. Moreover, packed warehouses had more lead-time and complexity in sanitization. During the lockdown phase, a US-based IS&MRO distributor reported a sales growth of 5.7% in the March quarter as there were lesser inventory shortages and suppliers doing more drop shipments to cut down on the lead-time. Similarly, grey goods distributors saw an increase in demand from educational institutions, students and businesses for their workforce operating from home. We see B2B distribution enterprises focusing on improving employee productivity, re-planning the supply chain for emergency shipment and warehouse sanitization during COVID-19. Mid-term and long-term post COVID-19, we suggest enterprise to scale up on visibility in the warehouse, automate package movement and reduce total supply chain cost.

Figure 21: B2B Distribution Segment Impact

**Demand Impact**
- Increase in demand for IS&MRO for PPE and cleaning products (emergency shipment for COVID-19 related products)
- Increase in demand for grey goods to enable Work from home, business continuity and educational programs
- Increased requirement for Order assistance and visibility

**Supply Impact**
- Restricted logistics impeding inbound and outbound operations
- Need for periodic sanitization of warehouses increases turn around time
- Depleting inventory in the distribution network resulting in stock out
- Re-planning the supply chain for emergency shipments

**During COVID-19**
- Sterile packaging and transportation will be a common demand
- Dip in demand of Grey Goods due to lockdown restrictions
- Surge in demand for IS & MRO post lockdown restriction

**Mid-Term Post COVID-19**
- Continued impact on Supply chain due to Inter/Intra-national restriction
- Optimize order maximum to align with inventory policies/safety stock management
- Increase footprint in digital and ecommerce platform

**Long-Term Post COVID-19**
- Reduce total supply chain cost: e.g. energy management, outbound logistics, warehouse management, etc.
- Contactless customer service and delivery
Figure 22: Response Strategy for B2B Distribution Companies
Nourishing the CPG and Distribution Industry

TCS Business 4.0™ framework helps industries monetize digital transformation through four business behaviors – creating exponential value, driving mass personalization, leveraging ecosystem and embracing risk. The companies have to take stock of each business function and nourish them to address the short-term needs while preparing to succeed in the new era by being purpose driven, adaptable and resilient.

Being Purpose Driven

During COVID-19, many brands are re-purposing production lines to make and distribute essential products even with low profit margins, addressing lockdown restrictions and adapting to online channels.

Empathetic branding to align with consumers, AI-driven compassionate pricing, direct to consumer with contactless delivery, increased workplace sanitation and minimum workforce, alternate sourcing, orchestrating online and offline channels through supplier and Distributor collaboration will be the key levers to re-imagine CPG and Distribution enterprises to make, distribute and sell the most critical.
Being Adaptable

Many consumers have primarily migrated to online channels as social distancing has become a norm. Different segments will continue to see demand fluctuations and CPG and Distribution enterprises must recalibrate the supply chain to address those and revert to original operational standards.

Factory and warehouse automation leveraging AI, Inventory optimization and safety stock management, ensuring sterile transportation and contactless last-mile delivery, increased drop shipment, consumer sentiment and spend insights leveraging deep learning, rapid prototyping and developing new demand driven products will be key levers for enterprises to adapt to emerging needs.

Being Resilient

To be resilient, enterprises need to de-risk the supply chain through remote and cognitive operations on principles of innovation at scale leveraging agile and leveraging ecosystems.

Setting up new automated plants and warehouses with cognitive operations, setup new sources of supply and network design, remote workforce management, decentralized sourcing, cost analytics, end-to-end supply chain visibility, virtual and alternate sales channels and enriching consumer experiences leveraging digital and AR/VR will be the key levers for CPG and Distribution enterprises to build resilience to withstand future disruptions.
Conclusion

While the overall impact of COVID-19 is significant, the CPG and Distribution companies are crucial to our day-to-day life. We strongly believe that the CPG and Distribution industries will survive and emerge stronger from the crisis in the new era. Our outlook is a result of our extensive global experience and understanding of the industry and can help your customers, employees, suppliers and distributors navigate through the operational challenges in this crisis to regain market leadership.

The evolving consumer behavior adopting online and digital channels during the crisis will likely persist in the new era. This requires enterprises to make a structural shift and reimagine their business model, transform their processes to become more agile, adaptable and resilient and drive a more purpose-centric agenda to tap the opportunities in the new era leveraging enterprise intelligent automation.
About the **Author**

**Sudhakar Gudala** is the Vice President, Global Head, CPG and Distribution Business Unit at TCS. He has more than 30 years of experience across business strategy, outsourcing, offshoring, large program management, architecture, governance, general management and technology. Sudhakar has worked across various industry verticals and geographies worldwide. He is an alumnus of Stephen M. Ross School of Business and National Institute of Technology, Tiruchirappalli.
Contact

For more information on TCS’ Consumer Packaged Goods and Distribution Services, please visit https://www.tcs.com/consumer-goods-and-distribution

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