

“Health is the new currency,
which is not only accepted but also respected across the Globe”

Phygital Supply Chain A New Vaccine Post Covid-19 for Consumer Goods Industry



Pretext: Over the last few weeks, supply chain of consumer goods industry has witnessed a dramatic disruption. These disruptions have deeply impacted the consumer's outlook & preferences. Along with the escalating health crisis, there are also major economic implications across industries and consumer goods Industry is not an exception. The change in consumer preferences is resulting in a re-visit at the brand loyalty and pushing the demand for healthy products. From exponential growth of demand on one sub-sector to collapsed demand in another sub-sector is all being witnessed in the consumer goods industry landscape. To manage this first of its kind crisis, Consumer goods companies are grappling to realign their supply chain to keep the lights on in short term to laying the foundation of Phygital – Amalgamation of Physical and Digital Supply chain in long term.

Impact of Covid-19 on Consumer goods:

On one side, manufacturing needs to assess the product relevance and capacity utilization in this uncertain time and on the other hand, Consumer Goods companies are witnessing unprecedented level of supply chain disruptions that may prevent them from meeting the changing consumer needs. The full impact of COVID-19 on supply chains is still unknown, but one thing is for certain, its ramifications will be felt through global supply chains for many months to come. Hence, companies who will not realign their supply chain, may face an existential crisis soon.

Today, most of the Consumer goods companies are in crisis-management mode and prime focus is on keeping the lights on and ensuring that supplies of essentials continues uninterrupted. The fundamental question remains unanswered that how can these companies prepare for medium to long term and build sustainable, and scalable supply chain.

Below is one such analysis where the impact of Covid -19 across sub-sectors in consumer goods Industry can be best illustrated with the Impact Analysis Matrix below (See Fig 1.0). As we understand where on one side, the pantry hoarding led to exponential increase in demand for essentials while on other hand, the big stop on discretionary spending led to diminishing demand for non-essentials, for example clothing, footwear, cosmetics products.

Consumer Goods Industry - Sector Wise Impact Anlysis over time Horizon						
CG Sector	1 to 3 Months	3 to 6 Months	6 to 12 Month	12+ Months	Impact Driver	Description
	Today	Tomorrow	Day After	Future		
Fashion	Red	Orange	Yellow	Light Green	Stores Closure	Major Impact on Fashion Segment because of Store closures. Only Respite is having Direct to cosumer Channels.
Alcoholic Beverage	Red	Orange	Yellow	Light Green	On-Premise Closure	Significant Impact on Alcoholic Beverage Sector because of On -the Premise Disruptions
Tobacco	Orange	Yellow	Light Green	Light Green	Supply Chain Disruption	Major Impact on Tobacco Sector because of Supply Chain Disruptions & Limited Online Presence
Non Alcoholic Beverage	Orange	Yellow	Light Green	Light Green	Stores Closure	Significant Impact in Alcoholic Beverage Sector because of On -the Premise Disruptions
Home & Personal Care	Orange	Yellow	Light Green	Light Green	Erosion of Purchasing Power	Likely erosion of purchasing power with lay-offs, pay-cuts etc. leading to consumer confidence to have some impact on discretionary purchases like consumer durables
Food	Light Green	Light Green	Light Green	Light Green	Focus on Essentials	Demand largely stable as consumers continue to spend on essentials; however, some trend in down-trading visible giventhe uncertainties

Fig 1: Impact Analysis on Consumer Goods Industry



The fashion sector has been impacted massively because of store closures and decline in non-discretionary spending. The only relief for fashion companies is their presence in Direct to Consumer channel and Nike is one such case in point, which is leading by an example. Nike's digital sales soared by 36% after its online revenue clocked \$ 10.1 Billion in 3rd Quarter ending Feb 29.



Tobacco is another segment, which is impacted by Covid -19 primarily by supply chain disruptions. Though inability of distribution and inability of offline reach to consumers are the prime driver within the supply chain bucket. The distribution to mom & pop stores and lockdown has impacted severely in a country like India but it has not impacted that much in US & Europe market. As per Jack Bowles, Chief executive, BAT, "We are fortunate that our business is resilient and is supported by a geographically diversified supply chain from both a manufacturing and distribution standpoint."

From Covid -19 cure perspective, BAT is in the process of potential vaccine development by leveraging its proprietary new, fast-growing tobacco plant technology. The vaccine is in human trial stage. BAT has the potential to produce 1 -3 million doses of vaccine per week post approval.



The alcoholic beverage sector has also been impacted and prime reason for this disruption is the absence of on-premise channel. The scale and magnitude of pandemic has increased significantly, resulting in restrictions imposed on many customers as well as other limitations and social distancing measures in many countries, resulted in loss of sales. The presence of Digital channels across sectors is a relief in this uncertain time and ABInbev is an example, where it is reallocating resources, to in-home channels and the growing e-commerce channel in a big way.



The non -alcoholic beverage sector is majorly impacted on short term as consumers are preferring food and grocery products. As per Industry experts, there is a significant decline in demand for soft drinks, snack foods etc. as they fall under non-discretionary spending. The out of home closures, restriction on movement of consumers is also causing a drop in overall sales of leading Snack & Beverage companies such as PepsiCo in near future.



The Home & Personal care segment, as it comes under daily essentials is likely to witness an increase in demand in near future. Within the 'Home & Personal Care' segment, the sub- categories such as hygiene products, toilet paper, napkins, pads etc. is already seeing significant demand as panic buying and pantry loading are the key drivers. The supply chain disruptions are leading to out of stock situations at the stores and an increase in production hours in the manufacturing facilities.

As we all are experiencing a huge spike in demand for Food & other essential products and panic buying and pantry hoarding are the key drivers for this surge in demand. In fact, as per Industry reports, in US, for the week ended March 21, Retail purchases of milk rose nearly 53%, butter sales surged more than 127% and demand for cheese increased more than 84%, compared to the same period a year earlier. We anticipate though spiked demand will stabilize in 3-6 months' time frame but there will be good growth for the food sector in the coming time.

We have seen the impact of covid-19 on consumer goods companies. Now, let's delve into its key implications for CG Companies and how they should deal and manage with this impact both from short term and long-term perspective.



Strategies for CG companies in Covid-19 Crisis:

Most of the firms are now in the Crisis Management mode to ensure the safety of their employees and consumers. The immediate target is to fill the customers' (Retailers) shelf. Hence, below are short term and long terms strategies for Consumer goods companies:

- a) **Near Future Dynamic Demand** – With the advent of Covid-19 crisis, change in consumer behavior is making the short-term demand irrelevant for most of the consumer goods companies. AI/ ML driven Demand forecasting models need to consider the nuances created by change in consumer behavior and provide a relevant picture.
- b) **Re-alignment of Manufacturing:** On one hand, the food companies must increase their production, on other hand, many of the Personal care companies must realign their manufacturing facilities. This exercise is to ensure balancing diminished capacity due to employee safety and lockdowns with dynamic demand. The case in point is LVMH, L'Oréal, Nike and many others who have realigned their manufacturing facilities. The major paradigm shift has been done from their core product to health care products such as hand sanitizer, PPE etc. The situational shift will not only help companies to generate some revenue but also to keep the lights on for workers & manufacturing facilities.
- c) **Gearing up logistics Engine:** The volatility of demand has created new set of challenges during Covid -19 crisis. The spiked demand for food companies is a positive news but this has triggered a big strain not only on production capacities but also on logistics part.

The spiked demand requires higher transportation capacity, but transportation routes are affected due to border closures. According to McKinsey report, Trucking capacity to ship goods from factories to ports is operating at around 60-80% of normal capacity. This has resulted in goods facing delays of around 8-10 days

d) **Renewed Focus on Direct to Consumers** – Reaching out to consumer and satisfying their needs through the right products is the end objective of any consumer goods company. Hence, in the unavoidable situation of stores closures, restricted movement and negligible marketing, Digital is the only way forward, where companies can reach to their customers. Let us accept the fact that digital connect will be here even post Covid-19 era. Hence, the renewed focus of CG companies on Direct to consumer is understandable. This is not surprising, where most of the Consumer goods industry leaders such as Nestle, Nike, AB Inbev and many more, across the Consumer goods sub-segment are driving the key initiatives in this channel. A couple of cases in point are JD.com, China's second largest e-commerce company, saw its transaction volume increase by 374 percent year-on-year from January 24 to February 2, 2020. Similarly, Missfresh, an online fresh food e-commerce platform with its headquarters in Beijing, also saw trading volume increase by 321 percent from January 24 to January 28, compared with the year earlier.

Below pictorial representation talks about Short-term and Long-term strategies for Covid -19 impact on Consumer goods companies:

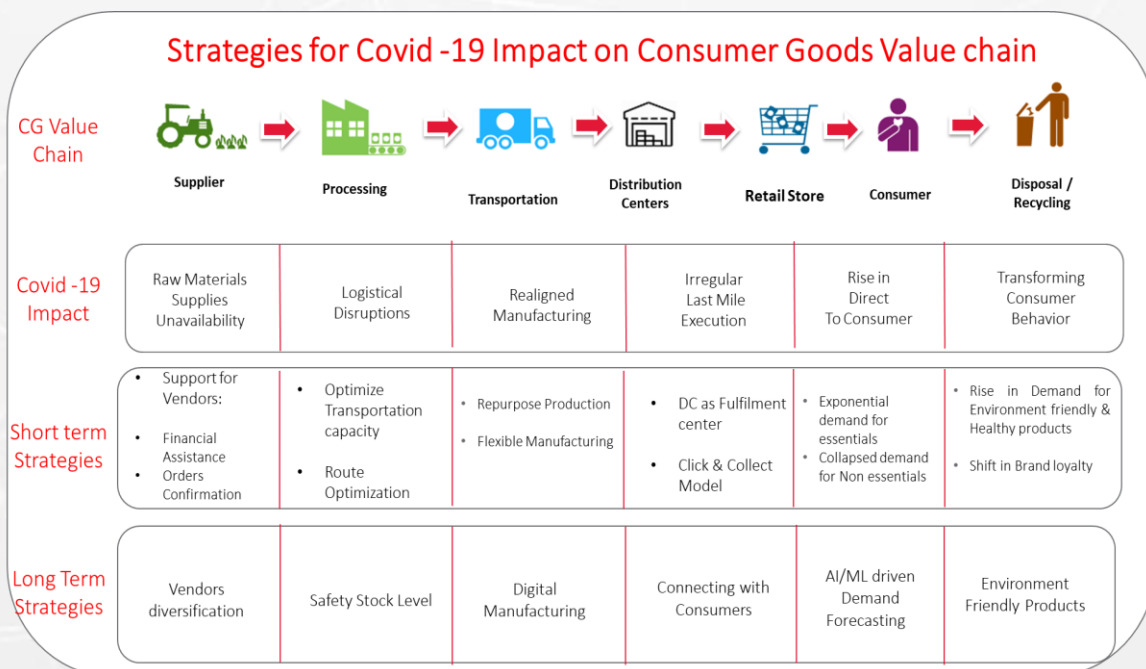


Fig 2: Strategies for Covid -19 Impact on Consumer Goods Companies

Long Term view of supply chain:

As we understand that a volatile business environment creates not only new set of challenges but also leaves many key lessons to be learnt and Covid -19 situation is not an exception. For a short term, Consumer goods companies can focus on Dynamic demand but on longer term basis, they should adopt various strategies to make their supply chain digital. The futuristic supply chain or Digital Supply chain will have all the key elements interlinked by leveraging 3 basic pillars – People, Process & New generation technologies such as RPA, AI /ML, 5G, Blockchain, IOT and many more.

To achieve the Phygital supply chain, Companies need to adopt following strategies:

- a) Vendors Diversification
- b) Digital Manufacturing
- c) Safety Stock Level
- d) AI/ML Driven Demand Forecasting
- e) Connecting with Consumers
- f) Environment Friendly Products

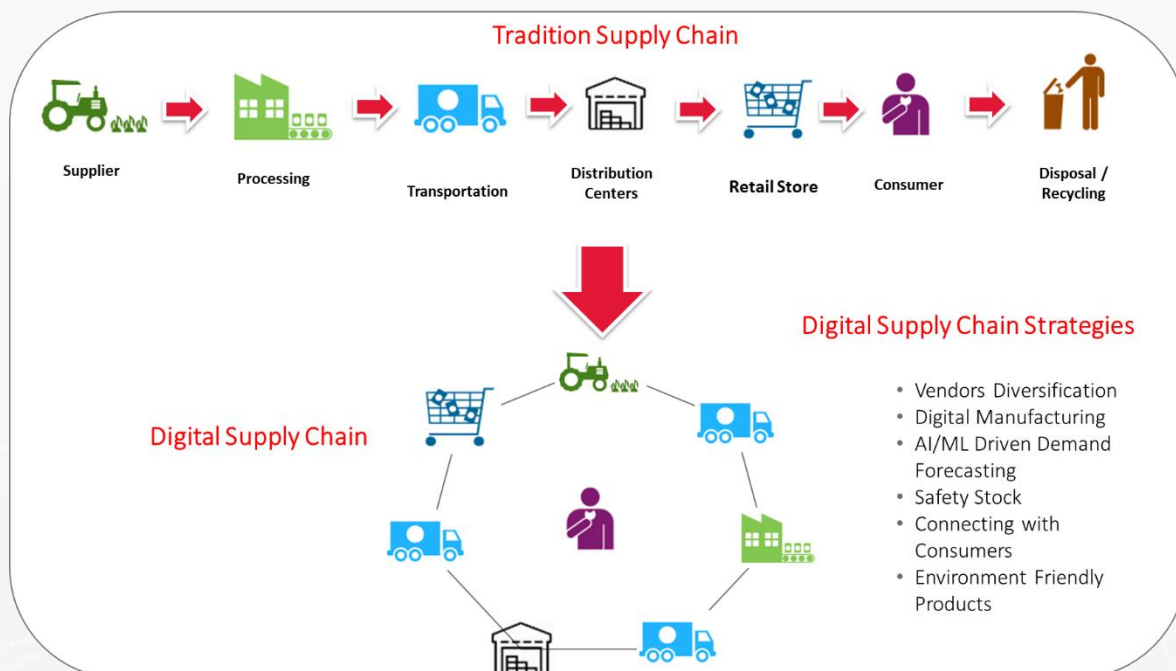


Fig 3: Paradigm Shift from Linear Supply Chain to Digital Supply Chain

The digital supply chain would enable end-to end visibility, collaboration, responsiveness, agility, and optimization. The futuristic supply chain would not only help consumer goods companies to anticipate disruptions but also ensure a minimum impact on the overall business in uncertain scenarios such as Covid-19.

Hence, the paradigm shift of Linear supply chain to Phygital supply chain is the future to make companies leader's in their respective domains / space.

Conclusion – The COVID-19 aberration is pushing the CG companies towards designing and developing the Supply Chain of Future, so called Phygital Supply Chain by leveraging disruptive technologies. CXOs are fast tracking investments across value chain to meet digital demand of employees, customers & Partners in their eco system. The most crucial learning is that the business landscape is rapidly evolving. It continues to be volatile and dynamic in the coming time. Consumer goods companies need to pay utmost attention in building futuristic Supply Chains, which will be sophisticated and vital to growth and competitiveness. A technology driven supply chain will help companies to minimize costs, reduce inventories, and drive up asset utilization. Hence, in the end, companies need to provide painkillers (Supply Chain Visibility) and vitamins (Demand sensing & Inventory Optimization) courses till they are ready for major vaccination (Phygital Supply Chain).

About the Author: Amit Bhatia works as a Principal Consultant for Consumer Goods Vertical Business Unit at Tech Mahindra. Amit has extensive experience of more than 18 years spread across serial entrepreneurship, strategy, Team building, turning idea into revenue generating venture, Consulting, Supply chain in the Fashion, Retail & CG industry. Amit had authored multiple whitepapers, articles, newsletters and blogs across various National and International forums. Amit has done dual Masters – MBA from ISB – Hyderabad & Garment Manufacturing Technology from National Institute of Fashion Technology and Engineering from NIT -Calicut, Kerala

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