RESILIENT AND ADAPTABLE SUPPLY CHAINS: THE DE FACTO TO THRIVE IN THE POST-COVID WORLD
Introduction

COVID-19 has forever changed how people perceive the value and importance of the supply chain. Never have supply chains been mentioned more frequently by political leaders and healthcare professionals or relied upon more heavily by producers and consumers. Almost every industry, geography, supply chain participant (supplier, manufacturer, wholesaler, ecommerce provider, transporter, retailer), and supply chain node (distribution center, ecommerce hub, store) has been impacted.

Some of the impacts of COVID-19 on supply chains will be temporary, while others may become permanent as the new operating normal is collectively defined. Unprecedented demand changes at the SKU, segment, and channel level has ranged from irrationally infinite for certain goods and services to near zero for others, throwing the previous stable supply side into hyper-reactive mode to match the changed demand patterns. The ability to adroitly respond to the instantaneous imbalance has been a consumer determined and publicly displayed gauge of a company’s supply chain capabilities.

Throughout this event, some companies have differentiated themselves with their response, building brand and emotional equity as a result of their advertising efforts backed by their capabilities; these companies harnessed the power of data and algorithms in response to shifting consumer demands, thereby creating exponential business value.

When we emerge from the current crisis, there will be scrutiny and assessments across all areas of the business with a focus on planning and preparation for the next once-in-a-lifetime event. The lessons learned from business strategies conjured and deployed; customers gained or lost; and the evaluation of supplier alliance strength, inventory position, and the redundancy of sourcing and supply chain length will define the capabilities needed for resilient and adaptable supply chains of the post-COVID era.
Resilience refers to the ability to withstand shocks to the system and quickly adapt or evolve the existing business models, while continuing to provide superior customer experiences. Visibility, flexibility, and collaboration are the characteristics of resilient supply chains. Companies who have ensured business continuity by self-organizing and reconfiguring stakeholder roles, and building differentiating capabilities will emerge stronger when tested by volatile impacts.

Key enablers include:

- **Strong business continuity planning and execution:** While resilient companies have a strong foundation, and a playbook and an execution strategy, they need to demonstrate adaptation for scale by building key capabilities. This includes:
  - Performing all mission critical functions remotely
  - Defining clear roles and accountabilities
  - Building open communication channels and updating messages frequently
  - Maintaining a single source of organizational information without latency
Competitively differentiating tactical capabilities: How supply chains respond to COVID-19 challenges determines organizations’ ability to build competitive advantage. Organizations should be able to quickly respond to disruptions by building tactical capabilities to mitigate risks:

- **Redirect supply** – Redirecting high demand products to hot spots on compassionate grounds.

- **Stretch supply** – Control purchase limits (retail outlets or consumers) and cancel ongoing or upcoming promotions if needed.

- **Pivot and execute** – Redirect labor and efforts as needed to satisfy consumer need—switch to digital marketplace, in-store picking by associates, and curbside or home delivery.

- **Map source, have visibility, and simulate disruptions**
  - The shortest supply chains are the most responsive because there is less distance to travel—direct store delivery (DSD) vs. imports being the two extremes.
  - Have clear line of sight through information and/or visibility platforms to know the quantity and location of goods in the supply chain.
  - Model and simulate supply disruptions and demand spikes, and use the results to change policies or processes and feed back into the business continuity plan.

- **Control and adjust data**
  - Automated demand-driven pricing models may inadvertently lead to price gouging resulting in bad publicity and more likely litigation and remediation.
  - Most AI models rely on historical data to predict probability and patterns in the future. Most of the demand and supply data during this period is unusual, and without normalization could wreak havoc in automated systems.
Adaptability is the ability to think ahead and build capabilities to respond to exigencies. Companies that showcase resilience in fast-changing economic environments will not only be able to respond to COVID-19 challenges but will also gain a competitive advantage over peers.

A prerequisite for building adaptability is redesigning the supply chain, repurposing assets, and leveraging ecosystems. It requires a flexible technology architecture.

Some common characteristics are:

- **Diversified sourcing:** Reduce the supply-side risks from any one country or region to reduce the reliance on any one supplier. Although sourcing for the same item from multiple suppliers can increase complexity and cost, the trade-off is a resilient supply chain.

- **Joint contingency planning:** Engage with suppliers on crisis management, allocation of product/resources during shortages, and mutual agreement on surge capacity quantity and pricing.

Adaptable Supply Chains: Embracing Change
- **Flexible capacity and staffing:**
  - Hire in mass through outreach even if it is a gig assignment. For example, employ furloughed staff for stocking activities
  - Make new hires more productive in the shortest possible time
  - Simplify onboarding and job tasks through aids (e.g. planogram maps on retail shelves)

- **Increasing contextual input:** Many will say that this event should have been anticipated and that will be strongly debated. The real question should be was there consumable information beyond the internal traditional business metrics (non-intuitive leading indicators such as social media, international trends or patterns) that should have been gathered and used for planning.

- **Leveraging AI/ML/RL:** The most experienced mind is not able to concurrently consider all the inputs and possible outcomes for each supply chain decision. Gut decision making has been replaced with data-driven decisions written by data scientists who have enabled advanced algorithms; these models consider multitudes of complex factors helping retailers drive efficient decision making across the value chain. Those riding the data-powered algorithmic retail wave have set themselves on the right path.
The latest and significant disruption to the business as usual model has provided valuable lessons to define the new ways of working across all business functions. Supply chain, the function that has traditionally been the invisible backbone, has transitioned into one of the most visible and enabling capabilities needed for business success.

The foundational capabilities of visibility, flexibility, and collaboration need to be bolstered by continuity planning, modeling, and simulation with increased usage of AI/ML/RL.

These technologies can concurrently analyze conditions with far greater speed and accuracy than the most experienced supply chain professionals. The net result of these focused efforts will be a more resilient and adaptable supply chain which may be the differentiating factor between financial success and failure.

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About TCS Retail

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