A BRIEF OVERVIEW OF SUPPLY CHAIN MANAGEMENT AND THE EMERGENCE OF QUICK COMMERCE IN THE BACKDROP OF COVID-19 PANDEMIC

Abstract

This article succinctly describes all of the aspects of supply chain in the Indian setting and various supply chain management strategies. It also sheds light on how a new business model, such as fast commerce, is likely arise in the near future following the Covid 19 epidemic.

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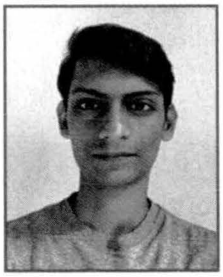

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INTRODUCTION

In recent years, India's manufacturing industry has become one of the country's fastest-growing industries. The current administration's "Make in India" campaign has the goal of making India a leading manufacturing country and raising its international profile. According to the IBEF, by 2030 India could contribute more than US$ 500 billion annually to the world economy, making it one of the countries with the highest potential to become a global manufacturing center. India's manufacturing sector showed significant signs of recovery in the second quarter of FY2022, with a capacity utilization rate of 72 per cent, according to a survey done by the Federation of Indian Chambers of Commerce and Industry (FICCI). This is a significant improvement from the disastrous effects of lockdowns during the COVID 19 pandemic. The pandemic has created an opportunity for India's manufacturing industry to pool its resources and piqued large global manufacturers' interest in locating factories there. With a high degree of innovation, "Make in India" and "Atmanirbhar Bharat" may do wonders for the manufacturing sector's growth.

THE LION STARTED ROARING

India's manufacturing purchasing managers' index (PMI) increased from 54 in March 2022 to 54.7 in April, 2022. This was driven by an increase in production of coal, electricity, refinery products, fertilizers, cement, and natural gas. Coal production increased by 28.8 per cent, electricity by 10.7 per cent, refinery products by 9.2

per cent, fertilizers by 8.7 per cent , cement by 8 per cent , and natural gas by 6.4 per cent . In April 2022, the retirement fund organization EPFO added 1.7 million net subscribers, a 35 per cent YoY increase. Zoho, an information technology leader, announced in October 2021 that it would invest Rs. 50-100 crore (US$ 6.7-13.4 million) to create a new firm focused on R&D related to manufacturing. This move signals a shift in the company's focus from purely software-based solutions to those that also incorporate hardware. The new firm will help Zoho meet the needs of its growing customer base in the manufacturing sector. First Solar, an American manufacturer of solar panels, intends to spend Rs. 4,800 crores (US$ 645.7 million) in Tamil Nadu for a new 3.3 GW production plant. The business intends to begin production with contract manufacturer Cloud Network Technology, a Foxconn subsidiary in Chennai. Samsung's Noida facility began producing mobile display panels in April 2021, with plans to increase production of IT display panels. The State Government provided incentives to Samsung Display Noida, which invested Rs. 4,825 crores (US$ 650.42 million) to relocate production from China to Uttar Pradesh. Bharti Enterprises Ltd. and Dixon Technologies (India) Ltd. established a joint venture in April 2021 to take advantage of the PLI programme of the Government for the production of telecom and networking devices. By 2025, the business hopes to raise the capacity of its AC production to 8 lakh units by investing Rs. 100 crore (US$ 13.48 million).

A MASTER STRATEGY FOR FORWARDING INTEGRATION: EMERGING OF INDIA'S NON-PROFIT ONDC

The growth of the manufacturing sector demands a strongly integrated supply chain mechanism along with the e-commerce market. According to Government estimates, India's

> Quick commerce is a business model that brands are adopting to make visible and significant forays in consumer homes

e-commerce market was valued at more than $55 billion in gross merchandise value in FY 2021. This is expected to grow to $350 billion by the end of the decade. Majority of the market is controlled by Amazon and Walmart's Flipkart, who hold more than 60 per cent of the market share between them. The Indian Government has started to integrate forwards in order to create more marketing opportunities, especially for the MSMEs and the Indian buyers. As a prospective alternative to the dominant global giants Amazon.com and Walmart, have recently launched their Open Network for Digital Commerce (ONDC) in their fast-growing e-commerce market. (ONDC, 2022). The ONDC network will enable the display of products from all participating e-commerce platforms in search results across all apps on the network. In a country of 1.35 billion people, ONDC aims to raise e-commerce penetration to 25 per cent of India's consumer purchases in the next two years from nearly 8 per cent at present. It also hopes to sign up 900 million buyers and 1.2 million sellers on the shared network within the next five years while achieving a gross merchandise value of $48 billion. (Ministry of Commerce & Industry, 2022)

NEED FOR THE ABILITY TO CAPTURE AND HANDLE DYNAMICS OF THE SUPPLY CHAIN

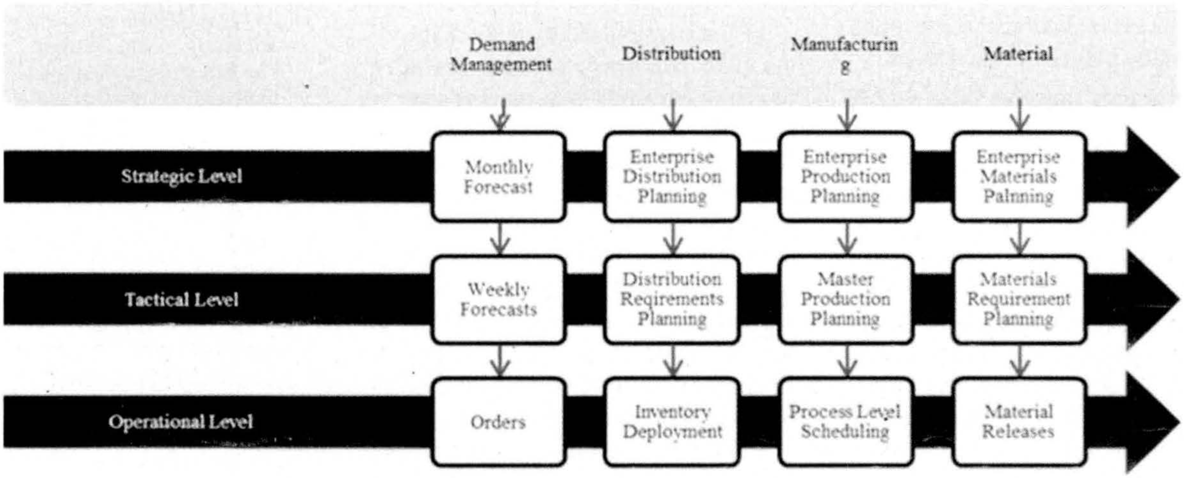
Indian companies should improve their capabilities to take this opportunity and emerge as a new global giant. It is only possible only if the major challenges are addressed properly. A major challenge for an enterprise to stay competitive in today's highly competitive market environment is to capture and handle the dynamics of its entire supply chain (Puigjaner & Laínez, 2008). Indian industry, in response to competitive pressure from other big exporting countries and giant e-commerce networks, is focusing on reengineering operations. As a part of this reengineering, the processes are being streamlined to be more useful and automated, and the workforce is reorganized and redeployed for higher productivity. Companies are also looking for new avenues to plan and control their operations much better than they were managed earlier. The process featured agility to react and be appropriate to changes rather than rigid and preplanned activities. The supply chain is a set of activities that include ordering and receiving raw materials, manufacturing products, and distributing and delivering products to customers. All these functions must operate together to bring optimal efficiency. Coordinating these multiple functions across the enterprise should ensure a rapid and quality supply chain response.

Supply-Chain Management Functions

The three main levels of supply chain management are strategic, tactical, and operational. The amount of time that each decision takes and the level of details involved define each stage. The strategic level focuses on big-picture questions like how to source products and where to deploy manufacturing. The tactical level of operations management deals with short-term concerns that have an impact on production, such as forecasting and scheduling. The operational level, meanwhile, deals with more long-term concerns that involve the wider deployment of resources, like inventory management and scheduling.

FIGURE 1

Supply-Chain Management Function



SCOR & SCPR APPROACHES

The SCOR model is a cross-industry framework for measuring and improving enterprise-wide supply chain performance. SCOR is structured in four levels, based on a plan, source, make, and deliver framework. The SCOR model can be used to assess and improve supply chain operations in any organization or industry (Stewart, 1997). SCOR is the result of work by 70 global manufacturers to develop standard process definitions, terminology and metrics. SCOR enables companies to compare themselves to others, anticipate future applications and ensure their fitness for purposes in relation to the needs of manufacturers. The supply-chain process reference model (SCPR) is the logical extension of business process reengineering and other process improvement efforts.

NEW PARADIGM SHIFT

Businesses have had to adapt to a lot of change in the supply chain recently. This is because of the Covid-19 pandemic, which has led to the rise of quick commerce. Quick commerce is a business model where goods and services are delivered within 10-30 minutes of being ordered. E-commerce has been on the rise for a while now, but it has really taken off in the last few years because of things like "Cash on Delivery" and, more recently, the pandemic. E-shopping offers various benefits to customers. Some of these are faster and flexible buying processes with no requirement of travelling to a shop, detailed and systematic listing of products, ability to compare costs and availability of several payment modes. For sellers, it offers an affordable advertising avenue, provides a large customer base as the internet has penetrated the length & breadth of this country, and better inventory management.

A big gap between ordering and delivery was the time lag it took to fulfil orders. This lag was a major inconvenience, especially in respect of perishable goods like groceries or items required for immediate use. Due to this shortfall, customers often preferred to go to an offline shop and pick up items they require quickly.

The 'quick commerce' concept arose to bridge this gap so that customers could be provided with great quality items in the shortest possible time.

Quick commerce is a business model that brands are adopting to make visible and significant forays in consumer homes by improving the shopping experience for customers. This unique business model promises the delivery of goods and services in under 2 hours.

WHY THE BIG PLAYERS ARE NOW ON THE FORAY

The market for quick commerce has become a crucial differentiator which has propelled brands into higher acceptance by customers. Deliveries which could take days are now completed in a matter of minutes. Advances in technologies coupled with the sharpening in the quality of the last mile delivery systems have allowed brands to strengthen their customer acquisitions further.

CHALLENGES OF INTEGRATED SUPPLY CHAIN MANAGEMENT IN THE CURRENT SCENARIO

Certain challenges in developing an efficient supply chain for these operations exist. Orders of these kinds are usually small value orders and hence costs for customer acquisition, customer retention, and delivery cannot be too high. The perishable nature of most of these items makes it necessary to develop a sturdy supply chain from farm to fork. Costs can only be minimized by direct farm sourcing, excellent razor-sharp supply chain management, accurate demand forecasts and timely last mile delivery. An amalgamation of these areas can provide brands with substantial profit margins if handled correctly. Therefore, brands invest heavily in these structures to increase their brand retention values. It is difficult to keep customers loyal due to the increased cutthroat competition with many players in the market.

The brands improve their supply chains to improve their inventory management systems. They use resources like dark stores to minimize real estate costs and optimize deliveries in high-demand locations. Dark stores are stores which need not have expensive storefronts. To tighten and streamline supply chains, sellers have shifted focus from traditional warehouses on the outskirts to micro-warehouses near the delivery point inside the city with a stock of high-demand items. They are commonly known as 'Dark Stores'. Goods are stocked as per demand, resulting in shorter storage cycles. Companies use data insights to predict future trends in demand and proportionately source fresh produce to minimize wastage and satisfy customer demand efficiently. This works particularly well for products like groceries which are required to remain as fresh as possible.

Executing on-demand delivery is an operationally and technically complex endeavour. Consumer e-commerce today is largely driven by price, quality and convenience: great deals on optimum quality products with timely deliveries.

CONCLUSION

As an extension of the supply chain, the quick commerce sector in India, which is currently at a market size of $700 million and is likely to grow exponentially at 15 per cent to reach a $5.5 billion market value by 2025, is here to stay as on demand deliveries have now become the norm, rather than an occasional requirement. Customers have benefited from lower costs and swift order fulfilments with optimum quality products; however, the mechanisms to enable this business model have given benefits to sellers as well by using cutting-edge technologies for inventory management to be able to track, manage and deliver products in real-time, thus reducing costs and expensive storage spaces.

The next few years are going to be rough for anyone trying to establish a new e-commerce platform. With so many platforms already in existence and more springing up every day, the competition is only going to get fiercer. The platforms that are likely to survive are the ones that customers already know and trust, the ones with a strong and reliable behind-the-scenes supply chain, or the ones with a lot of financial backing. MA

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