

Vol. 03, No. 3 (2021) 247-254, doi: 10.24874/PES03.03.001

# **Proceedings on Engineering Sciences**



www.pesjournal.net

# CHANGING BUSINESS PATTERN OF E-COMMERCE INDUSTRY OF INDIA: A COVID 19 EFFECT

Sulabh Agarwal<sup>1</sup> Shekhar Srivastava

#### Keywords:

Covid 19; parameters; customer expectations; technology; digitalization; pre and post covid.





#### ABSTRACT

E commerce has transformed the way of doing business globally. But still offline businesses have majority stake in the major economies of the world. With the arrival of covid 19, things have changes tremendously. E commerce companies have seen an exponential growth rate in these times due to government guidelines, health concerns and technological changes. This paper discusses, recent trends in e-commerce industry in India, the positive and negative impact of Covid 19 on ecommerce activities. Also, opportunities grabbed by e commerce players due to covid 19's impact on its consumers and business scenario. The paper also critically analyses pre and post covid scenario in Indian e commerce industry on various parameters. It also discusses how the business organizations have transformed their business models as per the new normal conditions and customer expectations.

© 2021 Published by Faculty of Engineering

#### 1. INTRODUCTION

Indian E-commerce industry is having highest growth rate in commercial transactions. Big national and global brands got an easy reach to Indian customers and still emerging as a fastest growing trade channel available for inter and intra country trading of goods and services. Nature of doing business has been transformed by ecommerce in India. The E-commerce market of India is likely to grow to US\$ 200 billion. Mostly the growth for the industry has been picked up by an increase in internet speed and smartphone penetration. As of August 2020, the internet connections in India raised significantly to about 760 million, driven by the 'Digital India' initiative by GoI.

The Coronavirus immensely changed the global trends. It is a global challenging situation and it effects the ecommerce trends (Nakhate & Jain, 2020). A clear and fast change has occurred in every business. (Thakare, 2020) It has changed the behaviour of consumer, trading nature, business and even the way of living life. People start avoiding contact with each other, which changes the format of every business. E-commerce has become a substitute to the traditional style of business for buying goods people prefer to buy offline. Coronavirus transformed the whole e-commerce.

Overall sale of e-commerce increases because of this virus, people avoiding to go out, keeping social distance and buying from home, COVID-19 has significant impact on e-commerce of the world and in some cases negative impact but overall e-commerce is growing rapidly because of virus. many challenges facing by

<sup>&</sup>lt;sup>1</sup> Corresponding author: Mr. Sulabh Agarwal Email: <a href="mailto:sulabh.agarwal1985@gmail.com">sulabh.agarwal1985@gmail.com</a>

retailers in e-commerce, such as extend the delivery time, difficulty face during movement control, social distance and lockdown (Hasanat et al., 2020).

#### 2. LITERATURE REVIEW

(Bhatti et al, 2020) Covid-19 is leaving a negative impact all over the world, but the E-commerce business is growing. This situation is forcing people to use the internet, making it a habit and plays a vital role in their daily routine.

(Financial Express, 2020) According to Rajat Wahi, partner, Deloitte India 'Out-of-home consumption will be slow', As restrictions are eased on both offline and online retail, we are likely to follow what's happening in markets like China and Germany, where life is slowly coming back to normal: focus on health and hygiene products is likely to sustain for the short to medium term; retaliatory or 'revenge' shopping across non-essential and premium categories that consumers have been starved of, focus on contactless deliveries and in-store pick-up; and social distancing in stores with fewer customers and footfall per store in the short term. This will likely put more pressure on retailers' productivity and margins. The role of offline stores may change to focus on experience and collection, as people choose to 'buy online, pick up in store'. There could be an increase of online purchases across categories, including essentials and food products. The return to out-of-home consumption and restaurant dining is expected to be slow, with take-away and home delivery becoming a larger part of the restaurant business. As consumers look to stock up and reduce visits to outlets in the short term, we will see larger pack size consumption in urban areas. In rural areas, consumption will veer towards sachets and smaller sizes to conserve cash.

(Economic Times, 2020), According to Dr. Deepak Halan, Associate Professor, School of Management Sciences, Apeejay Stya University," Despite the boom in B2C e-commerce sector in India, majority of Indians continue to have more faith in the neighbourhood brick & mortar stores for shopping" but eventually he concluded that the spike in e commerce sales is not only due to regular online buyers but also due to first time buyers who are shopping online.

(India Infoline Securities, 2020) According to Mr. Akshay Hegde, Co-founder & MD, ShakeDeal, "The uncertainty about this global health crisis is alarming as no one can predict when this catastrophe will die down. Businesses need to be intuitive, agile and reimagine their business models to tide over this crisis."

(The Hindu: Business Line, 2020) Mr. Aneesh Reddy, co-founder and CEO of Capillary Technologies, stressed to improve online visibility at a reduced cost, brands should also capitalize on their existing customer data to drive traffic to their own online website. This involves

using robust retail CRM and marketing automation systems to take control of existing customer data.

(Mint, 2020) Ravi Sharma, banking and payments lead analyst, GlobalData, gave his thoughts about consumer behaviour during lockdown, "While the current lockdown in the country has led to the overall decline in consumer spending, this is being partially offset by a rise in online spending, as wary consumers stay at home and use online channels to purchase goods. The market is anticipated to continue its growth exceeding the previous forecast levels to reach \$98.4 billion in next four years."

According to **Ernst & Young** perspective on the key retailer issues and the resilience strategies, to mitigate the disruption caused by this crisis, Indian retailers will need to devise strategies for the "now", "next" and "beyond". While they need to manage their costs through operational improvement and by valuating the store portfolio, they should also invest in service, experience, and omni-channel to serve the new consumer.

#### 3. RESEARCH METHODOLOGY

Considering the nature of the research, it is based on the secondary data of national and international journals, government reports, articles, books, newspapers and magazines, covering the wide collection of academic literature on impact of covid 19 in Indian perspective.

Considering the research objectives, we have used descriptive research design to ensure rigorous analysis of research study. Available secondary data was extensively used for academic research only. Scope of the paper is limited to Indian e-commerce scenario considering certain parameters.

### 3.1 Research Objectives

- 1. To understand the recent trends in e-commerce industry in India considering the impact of covid 19.
- 2. To identify the major opportunities and challenges in the e-commerce industry due to covid 19.
- 3. To do a comparative analysis for before, during and after covid scenario in e-commerce in India.
- 4. To give some recommendations to e commerce companies to adapt as per changing scenario in India.

#### 4. E-COMMERCE

(Toppr.com, 2020) Ecommerce or Electronic Commerce is buying and selling of goods or services over an electronic medium; like, internet. Money and data transactions also come under ecommerce. Amazon, Flipkart, Myntra, Quikr, Olx are some examples of Ecommerce companies. Today, ecommerce industry is one of the fastest growing sectors globally.

Some major e commerce categories are (Toppr.com 2020):

- B2B: In Business-to-Business transactions, companies do business among themselves and end consumer is not incorporated. Thus, only manufacturers, wholesalers, retailers etc business parties are involved for trading. e.g., Alibaba.com
- **B2C**: In Business to Consumer, organizations trade their goods or services directly with the consumers. The consumer after surfing their websites/apps for the products, services and reading user reviews, place their orders and the company delivers the product directly to them. Examples includes Amazon, Flipkart, etc.
- C2C: In consumer to consumer, the consumers are in direct contact with each other. People trade their personal goods directly to an interested party. Usually, 2<sup>nd</sup> hand goods are traded like, cars, bikes, furniture etc. OLX, Quikr etc are some examples.
- C2B: This model is the reverse of B2C model.
   In consumer to business, consumers provide goods or some service to the company. E.g.: a freelancer software developer trades a software developed by him to a tech. company.
- **B2A**: In business to administration/government e commerce model, a company sells its products or services to government. E.g., Government e marketplace (GeM).
- C2A: In consumer to administration/government e commerce model, consumers do transactions with the government.
   E.g., Income tax filing, train ticket booking etc.

Covid 19 has impacted all the models of e commerce in one way or the other. Major hits were to the revenues of government where B 2 A and C 2 A models were adopted. But this pandemic has an altogether positive impact over e commerce business as consumers were not having much choices during lockdown to adhere to.

#### 5. IMPACT OF COVID 19

(Moneycontrol.com, 2020) India is among the most affected countries in the world, from covid 19 pandemic. The Indian government imposed countrywide lockdown in March to control the spread of the virus. But, even after six months, India experienced the second highest number of covid cases in the world with more than 5.73 million affected cases. Restriction during lockdown stopped most economic activities and led to job loss of millions of people and revenues. The government lifted lockdown restrictions in a phased manner while the shutdown took a toll on the country's economy. (Priyanka Roshan, sub editor, moneycontrol.com)

In the first quarter of the fiscal year 2021 India's Gross Domestic Product collapsed by 23.9 percent amid the coronavirus lockdown. According to the Centre for Monitoring Indian Economy (CMIE) approximately 21 million salaried employees become jobless during April-August. From 86 million salaried jobs number came down to 65 million in April to august 2019-20 time period. Most job loss occur among the industrial and white-collar workers, as per the CMIE. Amid the coronavirus crisis Railways had suspended all passenger services from March to May. The pandemic has disturbed the education sector as teachers and students have to stay at home. The schools and colleges closed ever since the nationwide lockdown was declared.

#### 6. GOVERNMENT INITIATIVES

(Privacy Shield framework, 2020) Various initiatives by the Government of India, namely Digital India, make in India, Start-up India, Skill India and their timely and effective implementation have encouraged growth of Ecommerce in India. (Indian Brand Equity foundation, 2021) Some of the major initiatives are:

- Government e-Marketplace (GeM) and Union Bank of India signed a Memorandum of Understanding (MoU) to facilitate a transparent payment system which is cashless and paperless in October 2019.
- To boost digitisation and to encourage online businesses, under the Digital India movement, Government launched initiatives like Umang, Start-up India Portal, BHIM etc.
- In October 2020, Minister of Commerce and Industry, Mr. Piyush Goyal invited start-ups to register at public procurement portal, GeM, and offer goods and services to government organisations and PSUs.
- In October 2020, government of India decided to impose a 2% tax in the 2021 budget on the sale and delivery of goods or services through a non-resident ecommerce player.
- In order to increase the foreign direct investment in E-commerce, Indian Government raise the limit of FDI in E-commerce B2B model to up to 100%.
- Huge investment in fibre networks for 5G by the GoI will help boost Indian E-commerce industry.

# 7. LOGISTICS MANAGEMENT IN COVID 19

Although e commerce companies sales got boosted exponentially during this pandemic but one area which was of great concern poses serious challenges to online business giants as well as local retailers and wholesalers of essential goods during lockdown. As per certain government restrictions over the movement of private vehicles and non-essential commodities, it was very difficult for these organizations to replenish their inventory using their regular supply chain network. They

have to undergo certain obligations of documentations and permissions for the logistic services as implemented by the government. Even the employee strength was reduced due to government guidelines and reverse movement of worker to their home due to fear of covid. There was shortage of drivers and unskilled workers which are required for managing and transporting goods.

Movement, storage and flow of goods have been directly impacted by the pandemic. It is important to understand that the supply chain disruptions will impact competitiveness, economic growth and job creation along with facilitating trade and commerce. B2C came out as a winner during the pandemic, surging the online sales of daily use commodities. As the demand of buying channel shifted online as compared to offline retail causing the logistics sector to change their working techniques. A national level logistics and distribution database is build (refer Figure. 1.) for effecting last mile delivery to the customer.

(Manufacturing Today, 2020) Availability of labour, capacity challenges, manufacturing slowdown, order delays, stuck shipments along with demand and supply gaps have adversely affected the logistics segment to the core. In a post-covid scenario logistics and supply chain sector will be completely different and the new normal will test supply chain stress every time. India's supply chain networks will immensely transform to challenge the demand and supply frameworks in future. The most important change will be the rise of domestic sourcing to make supply chains more local. large suppliers and logistics operators in the supply chain industry must prepare for major catastrophic events in future like, natural calamities, another dangerous pandemic outbreaks, social unrest and associated disturbances. In reference to the Figure. 1., Fast digital transformation of the industry can be observed. To survive and succeed in post covid scenario main focus will be on localization of supply chain business partners.

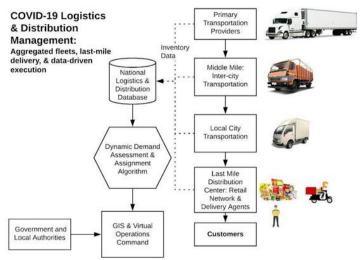


Figure 1. Logistics and distribution management (Source: Indian Council of World Affairs, 2020)

#### 8. RECENT TRENDS

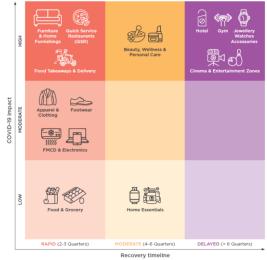
- (Indian Brand Equity foundation, 2021) In November 2020, Amazon India had a tie up with Hindustan Petroleum Corporation Limited (HPCL) for allowing customers to book and pay for LPG cylinders on its website/app.
- In November 2020, Reliance Retail Ventures Ltd. (RRVL), purchased a stake in Urban Ladder Home Decor Solutions Pvt. Ltd. for Rs. 182.12 crore.
- In November 2020, Flipkart takeover Scapic, an Augmented Reality (AR) firm, to provide "deeper camera experiences, virtual storefronts and new opportunities for brand advertising" on its website/app.
- In November 2020, in accordance with the government's 'Atmanirbhar Bharat' vision, Amazon India has opened 'Made in India' toy store, that will allow thousands of local manufacturers and vendors to sell toys driven by

- the Indian culture, folk tales to promote creative.
- In October 2020, Amazon India tie up with the Indian Railway Catering and Tourism Corporation (IRCTC) for train reservations on Amazon.
- In October 2020, considering the post covid demand Flipkart established their largest fulfilment centre of Asia in Manesar, Gurugram at Rs. 432 cr.
- In October 2020, Amazon India invested over Rs. 700 crores into Amazon Pay for promoting digital payments.

As you can see in the Table 1., A comparative analysis is conducted by us on pre and post covid situation over changing business pattern, as per new normal, in retail industry, especially e-commerce industry in India. This analysis analyses the impact over e-commerce industry due to covid lockdown in India.

 Table 1. Comparative analysis (Pre covid Vs Post covid scenario comparison)

Parameter	Before lockdown	During lockdown	After lockdown
Sales volume	E commerce industry was growing but major share was of unorganised retail	Huge surge in the demand in e commerce due to non-availability of goods and a great setback in unorganised retail.  Offline businesses started shifting to online.	Lower rate of growth in e commerce compared to, during the lockdown but still growing. Unorganised retail firms started using online modes of business.
Delivery time window	1-7 days depending upon the product and delivery location	Not fixed but in most cases more than a week	Again 1-7 days
Nature of commodities available	All commodities i.e., essential as well as non-essential.	(The week, 2020) Only essential commodities as per the capacity and employee strength, as per govt. guidelines to deliver essentials only	All commodities but in accordance to the govt. guidelines of safety, precaution and social distancing.
Logistics and supply chain management	Free movement of goods. Hubs and warehouses are functioning as per demand.	Restrictive movements as per govt. guidelines. Warehouses and processing centres are functioning at low employee strength (50% strength)	Free movement but in accordance to govt. guidelines.
Served locations	Delivery at all locations (urban as well most of rural areas)	Delivery at selective locations (within cities and towns)	Delivery at all locations but restricted in red zones (only essential commodities were allowed)
Start-ups	Online as well as offline start-ups are booming	High surge in online start-ups as compared to offline ones as per government guideline no offline business were able to do business.	(The week, 2020) Again, increase in the rates of online as well as offline start-ups but offline start-ups are focusing more on online modes of doing business as an alternative.
Reasons for shopping online	Discounts, offers, time saving, free delivery, product comparison	Availability of goods, last mile delivery, safety,	Home delivery, safety, discounts, offers
Payment modes	Cash on delivery(major), card payments and net banking	Online modes are preferred more	Major increase in online mode of payments but Cash on delivery still have majority share.
Meeting supply with demand	Yes, actually supply was more than demand.	Supply was restricted but demand rises exponentially	Again, demand and supply are coming back to normal slowly but economy needs time to recover.
Customer service	Accepting customer complaints and resolution within 3-5 days	Accepting customer complaints through emails and apps/website but resolution takes more than usual time.	Complaints resolution is now taking less time but still way to go before reaching pre lockdown condition.
Impact on product categories. (refer to <b>Figure 2</b> )	Demand for all product categories were going normally.	Hotels, gyms, restaurants, beauty parlours, shopping malls and cinema halls were badly affected and thus their online counterparts like yatra.com, bookmyshow, etc were hit adversely.	As per government guidelines, hotels, beauty parlours and cinema halls are started offering services with some restriction in place.



**Figure 2.** Sectors affected by covid 19. (Source: Anarock Retail Report ,2020, September)

## 9. MAJOR FINDINGS

- Sales volume have seen huge surges during lockdown compared to normal conditions.
- During lockdown, whole ecommerce industry was delivering only essential commodities as per government guidelines initially but later on easing the restrictions some non-essentials were also seen a surge in online demand. (refer Figure 2.)
- Supply chain of non-essential commodities were badly affected during lockdown as there was restrictions on their movement in the country. ((refer Figure 2.)
- Earlier, before lockdown online shoppers use to but goods online due to discounts, offers and due to competitive pricing, but, during lockdown reasons for online shopping shifted to

health concern, home delivery and availability. (refer Table 1.)

- Gap between demand and supply increases during lockdown with demand being on the higher side as compared to before lockdown when supply was more than demand.
- During lockdown majority of customers migrated from offline modes to online modes of payment more as compared to normal conditions.
- Customer service provided by e commerce companies were adversely affected due less staff availability and safety reasons as per government guidelines.
- Cinema halls, shopping malls and hotels were severely impacted during lockdown, thus it downsizes the business of their online counterparts.
- More online start-ups are coming into existence since lockdown, even offline businesses are using some online medium for doing business.
- Under the guidance of central government most of the logistics companies form alliances and are using coordinated efforts to restore the supply chain of sectors like pharmaceuticals, agriculture, e commerce, manufacturing etc.
- Technology and digitalization has now become the new driving force in logistics and supply chain management.
- Major e commerce giants have identified new channel partners in local neighborhood stores for last mile delivery of goods and services.

### 10. CONCLUSION

Due to covid 19, there is a paradigm shift in the business activities in all the formats of doing business. But the ecommerce industry is witnessing some eye grossing events. Government guidelines and safety concerns, have compelled the business organizations to revisit their existing models and redesign them considering the present scenario.

Online retail sector has observed major fluctuations in the sales volume of the essential and non-essential commodities as unorganised retail has lost its shine during lockdown. An area of serious concern was the major gap between demand and supply of commodities. Although, most of the sectors which were adversely

affected in this phase, it created an opportunity for OTT platforms in entertainment industry as most of the movies released on these platforms only.

A concept of new normal has emerged to conduct business activities now. In the new normal scenario in order to fulfil the customer expectations, business organizations are adopting multifaceted technologies and digitalisation of their logistics and supply chain activities. As it is the need of the hour for all the online players to train their workforce to impart satisfactory customer services as this area was badly affected during lockdown. Many e commerce giants have tapped the opportunity to form alliance with local neighbourhood stores for sa delivery, this is fostering the economy's revival. Government is also encouraging the private player in the online space by providing infrastructure and financial support.

#### 11. RECOMMENDATIONS

- In order to ensure the easy availability of commodities as per customer expectations, organizations should lay more emphasis on use of technology and digitalization in their business processes.
- Organizations should redesign their customer care service processes to handle more complaints in the online mode effectively, considering the challenges faced by organization in covid 19 scenario.
- For bridging the gap between demand and supply and to shorten the delivery time window, e commerce companies should collaborate more with the local sellers and retailers. This move will boost the economy and generate employment in especially tier 2 and 3 cities.
- Government should provide some incentives in the form tax rebate, subsidies and infrastructure facilities to offline retailers to encourage them to evaluate online mode of doing business also.
- Employees of brick-and-mortar model of business should be trained to use technological tools, in order to provide better experience to the customer.
- Top management of e commerce companies must understand and take responsibility to prepare the organization for any future event of similar nature.

### **References:**

Anarock Retail (2020, September). Indian Retail: Certainty Despite Headwinds. Retrieved from Retailers Association of India database.

Bhatti, A., Akram, H., Basit, H. M., Khan, A. U., Raza, S. M., & Naqvi, M. B. (2020). E-commerce trends during COVID-19 Pandemic. *International Journal of Future Generation Communication and Networking*, *13*(2), 1449-1452.

Economic Times (2020). Impact of COVID-19 on online shopping in India. Retrieved from https://retail.economictimes.indiatimes.com/re-tales/impact-of-covid-19-on-online-shopping-in-india/4115

# Agarwal & Srivastava, Proceedings on Engineering Sciences, Vol. 03, No. 3 (2021) 247-254, doi: 10.24874/PES03.03.001

- Financial Express (2020). Coronavirus Impact: How consumer behaviour will change post lockdown. Retrieved from https://www.financialexpress.com/brandwagon/coronavirus-impact-how-consumer-behaviour-will-change-post-lockdown/1954443
- Hasanat, M. W., Hoque, A., Shikha, F. A., Anwar, M., Hamid, A. B. A., & Tat, H. H. (2020). The impact of coronavirus (COVID-19) on e-business in Malaysia. *Asian Journal of Multidisciplinary Studies*, 3(1), 85-90.
- India Infoline Securities (2020). The impact of COVID-19 on Indian e-commerce sector. Retrieved from https://www.indiainfoline.com/article/general-editors-choice/the-impact-of-covid-19-on-indian-e-commerce-sector-120040700090\_1.html
- Indian Brand Equity Foundation (2021). Indian E-commerce industry report. Retrieved from https://www.ibef.org/industry/ecommerce.aspx
- Indian Council of World Affairs (2020). Re-defining National Logistics Post Covid-19 India and Global Supply Chains: Opportunity amidst Crisis. Retrieved from Indian Council of world affairs official site.
- Manufacturing Today (2020). Changing scenario of the logistics industry post Covid-19. Retrieved from https://www.manufacturingtodayindia.com/people/8935-changing-scenario-of-the-logistics-industry-post-covid-19
- Mint (2020). Lockdown impact: India e-commerce market picks pace, may touch Rs 7 trln by 2023. Retrieved from https://www.livemint.com/industry/retail/lockdown-impact-india-e-commerce-market-picks-pace-may-touch-rs-7-trln-by-2023-11589530943145.html
- Moneycontrol.com (2020). COVID-19 impact on India | Multiple sectors affected in six months of lockdown. Retrieved from https://www.moneycontrol.com/news/photos/india/covid-19-impact-on-india-multiple-sectors-affected-in-six-months-of-lockdown-5882081.html
- Nakhate, S. B., & Jain, N. (2020). The Effect of Coronavirus on E Commerce. Studies in Indian Place Names, 40(68), 516-518
- Privacy shield framework (2020). India eCommerce. Retrieved from https://www.privacyshield.gov/article?id=India-e-Commerce
- Raj Sharadchandra Thakare (2020). A Study on Consumer's Buying Behavior after COVID 19 Lockdown. *International Journal of creative Research Thoughts*, 8(5), 3619-3632. ISSN: 2320-2882.3
- The Hindu: Business Line (2020). Covid-19 impact: Consumers move more towards digital. Retrieved from https://www.thehindubusinessline.com/opinion/covid-19-impact-consumers-move-more-towards-digital/article31337127.ece
- The Week (2020). How will e-commerce change in India post COVID-19?. Retrieved from https://www.theweek.in/news/biz-tech/2020/06/17/how-will-e-commerce-change-in-india-post-covid-19.html
- Toppr.com (2020). Electronic Commerce. Retrievd from https://www.toppr.com/guides/business-environment/emerging-trends-in-business/electronic-commerce/

Mr. Sulabh Agarwal<sup>1</sup> Babu Banarasi Das University, Lucknow, India

sulabh.agarwal1985@gmail.com

Dr. Shekhar Srivastava

Babu Banarasi Das University,

Lucknow, India

managementgurushekhar@yahoo.co.in