



# A Study on the Impact of Covid-19 on E-Commerce in India

<sup>1</sup>Ankita Talukdar, <sup>2</sup>Amisha Parnami, <sup>3</sup>Palak Jaitly, <sup>4</sup>Jennifer Fernandes

<sup>1,2,3</sup>II year Student, MA Economics, JAIN (Deemed-to-be University), Bangalore, India

<sup>1,2,3</sup>MA Economics, JAIN (Deemed-to-be University), Bangalore, India

Email – <sup>1</sup>ankitalukdar5567@gmail.com, <sup>2</sup>Amishaparnami123@gmail.com, <sup>3</sup>Palakjaitly97@gmail.com

<sup>4</sup>f.jennifer@jainuniversity.ac.in

**Abstract:** *The COVID-19 pandemic originated from the city of Wuhan in the people's Republic of China Crippled the world Economy which caused an unimaginable billion dollars revenue losses to Government and businesses yet it presents an opportunity to the ecommerce industry to benefit from the lockdowns caused by the pandemic. The present study examines the consumers purchase through e-commerce and also to analyze the growth of E-Commerce due to the impact of pandemic and also analyzes the impact of Covid-19 on E-commerce sector. Correlation analysis is used to test the hypothesis. Percentage method is to analyze the data. The study finds that due to Covid-19, there was growth in e-commerce revenue since during the pandemic, people shop online because it's convenient and safe.*

**Key Words:** *Covid-19, Revenue, Lockdowns, E-commerce & Online Shopping.*

## 1. INTRODUCTION:

The COVID-19 pandemic, which struck in late 2019, severely disrupted human activity and the economy, leading to a worldwide lockdown. Internet-based commerce, or e-commerce, is not immune to disruptions caused by government restrictions on the delivery of essential items during the pandemic's peak. But as the pandemic subsided and restrictions relaxed, e-commerce became the most secure way for people and businesses to transact business. Before the pandemic, e-commerce was beginning to take off as businesses advertised their products on specialized websites and social media sites like Facebook, Twitter, Instagram, and YouTube. But the pandemic has also brought about a digital revolution that emphasizes how important e-commerce is to daily life, not just in India but throughout the world. With digital platforms providing an efficient way to avoid crowds, many retail establishments that had not previously used them for their operations have followed suit. This is because it seems to be the easiest way for businesses to survive the pandemic and maintain social distance orders. India is the third-largest online market with 140 million shoppers. Nonetheless, there is still a huge unexplored market, and there is an immediate chance to target the estimated 625–675 million internet users in India. More and more companies have started to offer delivery services and curb side pickups to reduce in-store contact. Even then, three out of four (76 percent) of consumers still prefer to make advanced payments online than when receiving their purchases (Retail Dive, 2020). COVID-19 has speed up the shift to online shopping by as many as five years (Tech Crunch, 2020).

## 2. LITERATURE REVIEW:

The negative impacts are obstructions in logistics and delivery services, disruption of supply chain and cross border transaction, decreased demand for non-essential items while on the other hand shift of the customers from traditional way of shopping to online shopping to avoid overcrowding and to be safe, the e-commerce industry revenue have increased drastically are some of the positive impacts Uba and Khamisu (2020). Discounts and offers, seller ratings, use comfort level in sharing personal information, effect of bandwidth with online shopping are the factors affecting online shopping; purchase of e-commerce products like health and beauty products have increased. Male have increased shopping online during covid-19 (Ghose et.al, 2021) The study examines the growth of e-commerce due to covid-19 and the study finds that sectors such as electronics and home appliances, fashion and accessories, health and pharma, and fast-moving consumer goods (FMCG) did particularly well, with an average growth of 133 per cent in sales. Delhi-NCR, Maharashtra and Karnataka constituted 65 percent to the consumer demand in the country. Smart phones followed by television and other white goods are brought in maximum revenue; electronics saw a growth of 22 percent till June (Sharma, 2020). The study examines the online sales during the pandemic and investigate that whether pandemic-related shocks accelerated the long term growth of online retail; using time series data the study finds that pandemic induced a



shift into long-term growth trend of the online retail sector in the majority of countries; the pandemic shock opened opportunity for online retail to exponentially grow and increase the share significantly against the traditional retail channels (Szas et.al.2022). The study examines that e-commerce grew due to Coronavirus. The study finds that there was rapid change in terms of behavior of human, nature of trading, business and even the way of life. Though the shipment and supply was slow, people still buy because they do not have any alternative; more and more people are moving towards technology due to virus. The demand of products like hand sanitizers, toilet papers, disposable gloves, grocery and dairy products are too high and on the other hand, negative effect of covid-19 on tourism, flights are in loss, international trade is very slow (Bhatti,2020). The study focuses on the main components to determine the behaviour of customer towards online shopping from various ecommerce companies during pandemic. Linear regression was used to assess the effects of online shopping on customer purchase behaviour. The study finds that social media, product quality, return and exchange policy, product descriptions and seller information significantly influence the customer purchase during the pandemic. Product quality followed by return and exchange policy are the most influential variables of the customer purchase (Ranjan, 2021).The study investigate the effects of the spread of covid 19 on global ecommerce companies like Amazon, Alibaba, Rakuten, Zalando, ASOS. The result finds that the returns of the e-commerce companies showed that the companies achieve positive daily returns. Amazon and ASOS were the cumulative cases of infection are the most influential, Alibaba and Rakuten corona virus cases were the most influential in their share price returns, Zalando was the most influential variable cumulative deaths (Abdelrhim, 2020).

**3. OBJECTIVES:**

- To understand the consumers’ purchase through E-commerce
- To analyse the impact of COVID-19 on the growth of E- Commerce

**4. METHOD:** The present study is conceptual and descriptive in nature. Secondary data is used in the study. The data is collected from the Statista, journals and articles. Correlation is used to test the hypothesis. Percentage method is used to analyze the data. Bar graph is used to present the findings of the study.

**HYPOTHESIS:**

- There is no association between E-Commerce growth and Covid-19
- There is an association between E-Commerce growth and Covid-19

**5. ANALYSIS:**

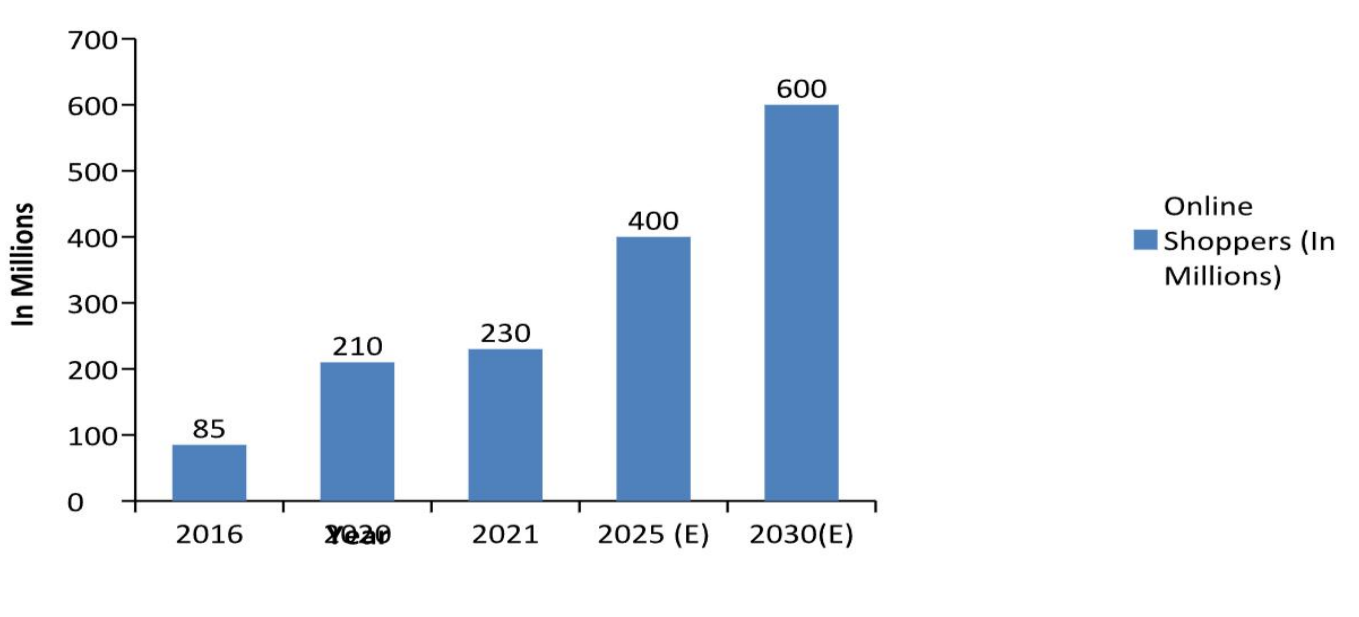


Figure 1: Online Shoppers in India (in Millions).

Source: BCG analysis.



The data also shows that COVID-19 cases in India have increased significantly in recent years, with the number of cases per million people increasing from 85 in 2016 to 230 in 2021 and the increase is drastic by 145 million. This increase in cases has likely contributed to the acceleration of e-commerce revenue growth in India, as more people have turned to online shopping to avoid crowded stores and public places.

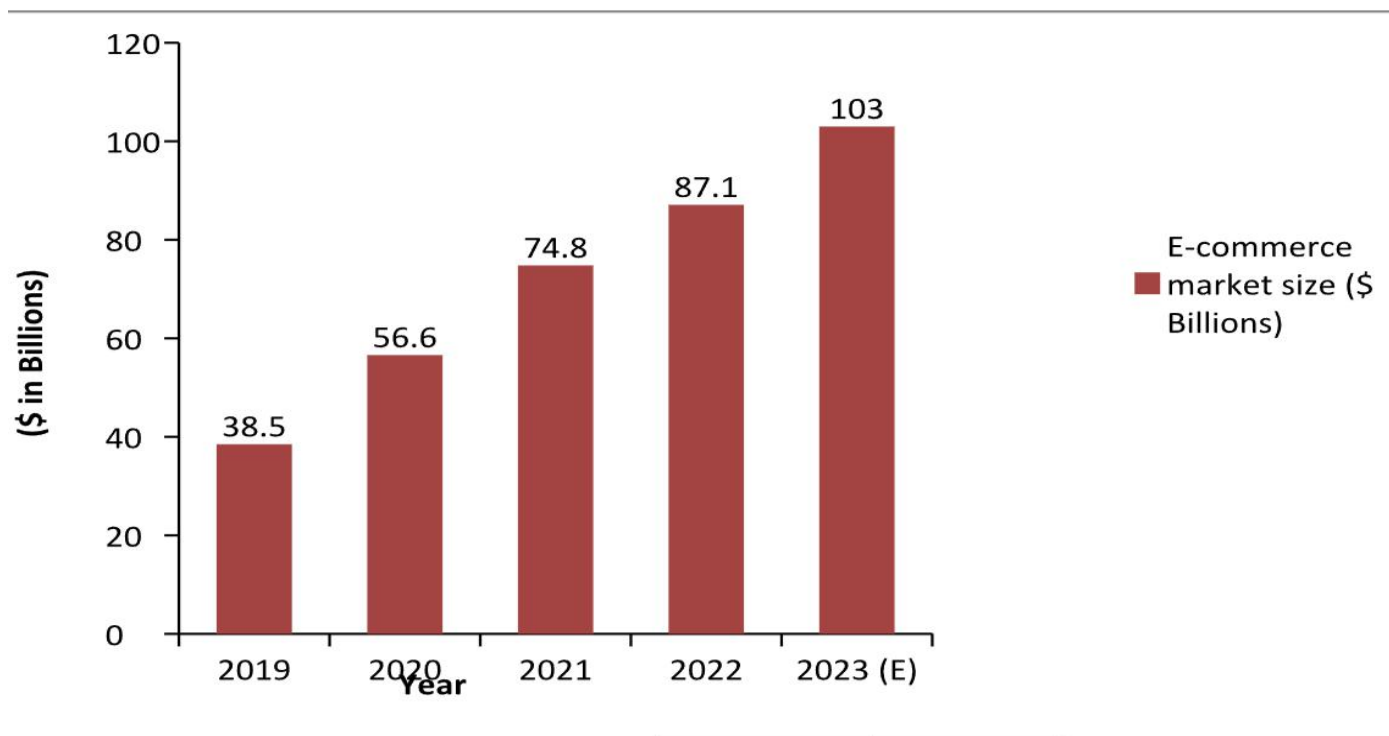


Figure 2 : E-Commerce Market Size (\$ Billions)

Source: Statista, 2023.

The above figure shows that the E-commerce market size has increased drastically from \$ 38.5 billion in 2019 to \$ 87.1 billion in 2022 since more people turned to online shopping to avoid crowded stores and public places. The adoption of E-commerce is likely to continue in future as well.

Table.1. Correlation Analysis between E-commerce Revenue Growth in India and COVID-19 Cases in India

	E-commerce revenue growth in India	COVID-19 cases in India
E-commerce revenue growth in India	1	0.79
COVID-19 cases in India	0.79	1

Source: Microsoft Excel

The correlation coefficient between e-commerce revenue growth in India and COVID-19 cases in India is 0.79, which is a strong positive correlation. Due to Covid-19, there was growth in e-commerce revenue. During the COVID-19 pandemic, people shop online because it's convenient and safe. During the pandemic, brick-and-mortar stores frequently had limited hours or were closed, and many people were reluctant to visit them for fear of contracting



COVID-19. To fulfill their demands, a lot of people started shopping online. Spending habits of consumers changed as a result of the COVID-19 pandemic. There is a greater need for products and services that can be used or consumed at home because more people are working from home and spending more time there. E-commerce businesses, which provide a large selection of goods and services that can be delivered to clients' homes, profited from this. India adopted digital payments more quickly as a result of the COVID-19 pandemic. People found it easier and more convenient to shop online as a result, which increased the growth of e-commerce revenue.

## 6. FINDINGS:

The key findings of the analysis are that COVID-19 have a positive impact on customers online shopping. Additionally, the study shows that COVID-19 have increased the dependency on e-commerce where usage of virtual education platforms and the purchase of e-commerce products. Customers have become more familiar with e-commerce services and more likely to continue shopping online after lockdown. The pandemic has created a digital surge which makes customers more inclined to patronage ecommerce than prior to the pandemic. According to the Secondary data available on various sites. More than 50% of consumers have ordered products online that they would normally purchase at the store.

**7. CONCLUSION:** The newest development that is revolutionizing the way business is done is e-commerce. In the upcoming years, it can expand at an exponential rate thanks to the widespread use of smart phones and the internet. Therefore, it becomes imperative to comprehend the diverse factors that impact customers' contentment with frequent shopping via these platforms, which are subject to frequent modifications in line with evolving needs and desires. Many e-commerce services have benefited from COVID-19 by being able to analyze the different growth sectors that they can target in order to continue growing and understanding the changing needs of their customers.

## REFERENCES:

1. Nura Sani Uba and Muhammad Sani Khamisu (2020), Impact of covid-19 on ecommerce in India, [https://www.researchgate.net/publication/358403496\\_Impact\\_of\\_COVID-19\\_on\\_E-commerce\\_in\\_India](https://www.researchgate.net/publication/358403496_Impact_of_COVID-19_on_E-commerce_in_India).
2. Ghose.et.al. (2021) E-Commerce in India and the impact f Covid 19, Indian Journal of Economics and Business Vol.20 No.2 (July- December,2021)
3. Sharma (2020), A surge in E-Commerce Market in India after Covid-19 Pandemic, A Global Journal of Social Sciences, ISSN-2581-5830, Impact factor: SJIF-4.998, IIFS- 4.375.
4. Levente Szász et.al. (2022) the impact of COVID-19 on the evolution of online retail: The pandemic as a window of opportunity, research gate publications.
5. Bhaitti( 2020) E-Commerce trends during covid-19 pandemic, International Journal of Future Generation Communication and Networking Vol. 13, No. 2, 2020 pp.1449-1452.
6. Amit Ranjan et.al. (2021), online shopping behaviour during covid-19 pandemic: An Indian perspective, Research gate publication, researchgate.net/publication/353057164.
7. Elrhim et.al. (2020), the effect of covid-19 spread on the e-commerce market: The case of the five largest e-commerce companies in the world.

## Web References:

- <https://www.oberlo.com/blog/covid-19-ecommerce-statistics>
- E-Commerce Sales Surged During the Pandemic (census.gov)
- E-Commerce Jumped 55% During Covid To Hit \$1.7 Trillion (forbes.com)
- Ecommerce growth news: Ecommerce growth slows in FY23 as Covid effect evaporates:

Report - The Economic Times (indiatimes.com)

- India: impact of COVID-19 on e-commerce spending 2020 | Statista
- The India Brand Equity Foundation (IBEF)



**APPENDIX:**

Table.1. Online Shoppers in India (In Millions)

<b>Year</b>	<b>Online Shoppers (In Millions)</b>
2016	85
2020	210
2021	230
2025 (E)	400
2030(E)	600

Source: BCG analysis.

Table.2.The growth of the Indian e-commerce market before, during, and after COVID-19

<b>Year</b>	<b>E-commerce market size (\$ Billions)</b>
2019	38.5
2020	56.6
2021	74.8
2022	87.1
2023 (E)	103.0

Source: Statista, 2023.

Table.3. E-commerce Revenue Growth in India and COVID-19 Cases in India.

<b>Year</b>	<b>E-Commerce Revenue Growth in India (% year-over- Year)</b>	<b>Covid-19 cases in India (Million)</b>
2018	25	1.3
2019	29	3.5
2020	53	10,317.7
2021	48	3,41,442.9
2022	27	22,300.6
2023	10(E)	4,848.4

Source: Statista