

# Impacts of Pandemic on E-commerce

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**Abstract—** The year 2020 brought upon many challenges globally, the Covid-19 pandemic outbreak being one of the major among it. The pandemic changed every little aspect of our life significantly in some or the other way. E-commerce played a vital role in this situation where people were unable to get out of their homes even for buying essentials as it posed a major risk to their health. We aim to understand and analyze the impacts of the pandemic that affected or helped to flourish the E-commerce and online marketplaces during this worldwide crisis.

**Keywords—** Covid-19, E-commerce, Pandemic, Business, Digitization, Essentials, Online Shopping.

## I. INTRODUCTION

The year 2020 marked a significant change in the entire decade with the Novel Coronavirus, originating in Wuhan, spreading all over the world within a very short span of time and bringing over a worldwide situation of emergency. With the virus spreading worldwide at a rapid rate, and no known cure for it, the situation worsened day-by-day. A large number of countries had to face a severe lockdown in order to control the spread of the deadly virus from person to person. In this global crisis, there emerged a state of panic among the citizens as this was a very rare scenario that hadn't occurred since a very long time. The changing conditions of the world demanded a change in human behavior and market trends. The lockdown phase resulted in a temporary, yet a long time, closure of several businesses, stores and services except for a few essential ones. However, this could not be sustained for a longer period of time as the business owners had to incur severe monetary losses, as also it was impractical to neglect the need for these goods and services for a longer time. This situation gradually resulted in the extensive use of E-commerce platforms as they were comparatively safer to use during this phase.

E-commerce (electronic commerce) can be simply described as the buying, selling, trading or renting of goods and services through the means of internet. In other words, it can be referred to as digitization of businesses so as to provide functionality to a wide audience over the internet. The E-commerce websites and organizations generally tend to attract a larger number of customers as they get exposure to a greater area through the internet than they would get if they followed a traditional commercial method which restricts them to a certain

geographical location. However, a large number of customers are skeptical about ordering their goods online as they do not get to see the actual product eye-to-eye, or due to the fear of getting scammed among many other reasons.

The lockdown brought upon by the Governments in their specific regions throughout the world gave a positive nudge to the E-commerce platforms, as they had the advantage of giving customers what they need at the convenience of not leaving their houses. Most of the stores and businesses had to be kept shut during the lockdown to avoid the spread of the virus through any possible contact that may occur if people gathered at any certain place. The severity of the pandemic was realized by the masses which resulted in many innovative and reformative ideas and trends. Companies and offices started to function with their employees "Work from Home"; schools, colleges and educational institutes started conducting online classes and even examinations; and even small-scale business owners shifted to digitization of their businesses.

It would not be an exaggeration to say that the pandemic brought a digital era in true sense. The people who would usually get out of their houses for shopping, now developed a positive attitude towards buying goods online. The restrictions imposed by the Government led to the prohibition of mass gathering of people as it imposed a severe health risk to everybody. The paranoia brought upon by the pandemic resulted in contactless exchange of any and all items as far as possible. Hence, the best way for this was online shopping, which people realized over a period of time and have developed a liking towards it ever since.

The change in market trends brought upon by the pandemic and the lockdown is tremendous and the flourishing of the E-commerce industry is one of the major among it. The e-commerce platforms noticed a great hike in online sales of various goods and services over the period of lockdown. The common people used E-commerce extensively for fulfilling their shopping needs conveniently and safely at the ease of being at their home. Not only the consumers, but even the business owners and vendors saw this as an opportunity to go digital and increase their exposure to the consumers and thus during the

lockdown even the small-scale vendors and business owners started providing their services through the E-commerce platforms.

Safety was one of the major concerns during this period. The consumers were worried about the spread of the virus through the delivery of goods and/or through the touch or contact with the delivery personnel. However, to overcome this issue, the E-commerce providers came up with the idea of “No-contact delivery” which made it mandatory for the consumer to make the payment digitally, without the involvement of cash that could eliminate the risk of transmission of the virus, and the delivery personnel would leave your package at the consumer’s door which they can collect later. Also, they made sure that the general safety protocols like sanitization of the products and possible areas of contact were followed rigorously. This established a sense of safety and trust among the minds of the consumers, which worked in the favor of the E-commerce platforms.

## II. DATA AND METHODOLOGY.

The lockdown implemented by the Government in several countries brought almost all businesses to a temporary yet undefined halt. Many business owners and entrepreneurs suffered from heavy losses due to closure of their businesses and/or services. The lockdown was not only harsh for the business owners but also for the E-commerce platforms as the orders and deliveries had to be stopped for safety reasons. This resulted in the losses of many E-commerce giants including Flipkart and Amazon as they were restricted to selling of only essentials like grocery during the initial phase of the lockdown with stricter norms and conditions. With the restrictions on selling non-essential goods and commodities, Amazon recorded a 28% decline in their profits for the first quarter of the fiscal year 2020. However, upon easing of the restrictions imposed on the businesses and e-commerce platforms after a period of time, the growth in sales can be observed. Flipkart India, demonstrated a significant 5.6% of growth in sales during the pandemic.

The opening up of local markets and shops after the lifting up of stricter lockdown norms, resulted in people going out of their homes for buying goods. This, however, imposed a great risk to their health as the chances of spread of virus through human contact and proximity increased. This resulted in a second wave of the pandemic spread throughout the country and the people realized online shopping was far safer than actually going out. This realization led to an increase of people’s likeness towards E-commerce platforms.

The pandemic and the lockdown affected every aspect of our life in a noticeable way. This can be seen in the change in trends of shopping of an average user. The changing conditions throughout the world had an impact on the conditions of an average user and the patterns can be noticed on surveying common people and after reviewing of existing surveys.

## III. RESULTS AND DISCUSSION.

A survey was conducted to review, evaluate and analyze the consumer behavior, approach and patterns towards online shopping and E-commerce during the Covid-19 pandemic. The survey consists of a sample of 80 people belonging to different age groups.

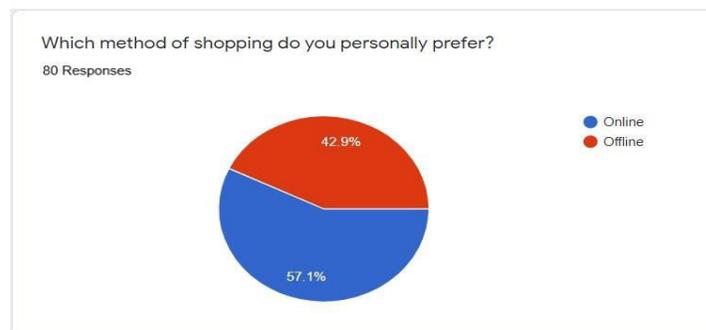


Fig 1. Shows the statistical representation of the number of people and their preferred shopping methods.

The above figure illustrates the preferred shopping methods of the sample of people on which the survey was conducted. We can see that approximately 57% of people already prefer online shopping. However, 42% of the people think offline methods are better than shopping online.

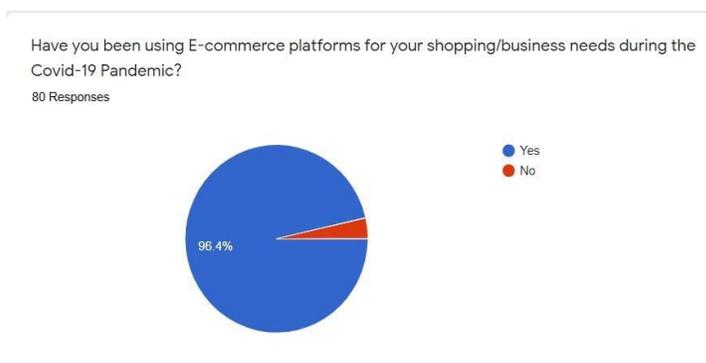


Fig 2. Shows the statistical representation of the number of people that used E-commerce platforms for online shopping during the pandemic.

The survey results show that around 96% of the people used the E-commerce platforms for fulfilling their shopping needs during the pandemic. Here we can notice how even the people who preferred offline shopping methods more than online ones, have also opted for online shopping due to the Covid-19 emergency. This was mainly due to the safety concerns that may arise when people went outside of their homes for shopping or any other such activity.

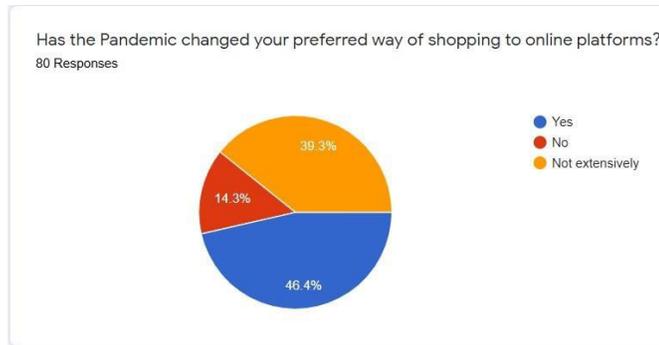


Fig 3. Shows the shift of preferred shopping methods during the pandemic.

Here, we can see that around 46% people say that the Covid-19 pandemic and the lockdown brought upon by it has resulted in change in their preferred way of shopping to online shopping. 14% of people still preferred offline shopping methods. The remaining ~40% of the people believe that there is not much of a change in their shopping methods may they be online or offline.

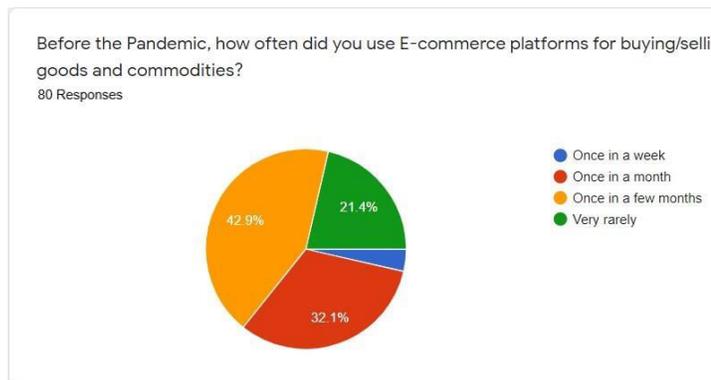


Fig 4a. Shows the frequency of using the E-commerce platforms “before” the

pandemic.

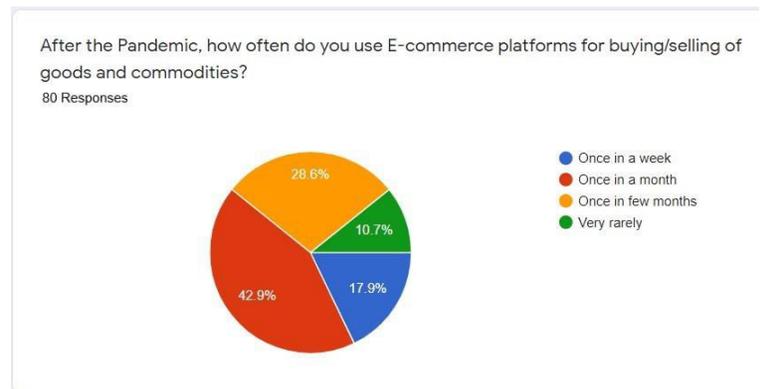


Fig 4b. Shows the frequency of using the E-commerce platforms “after” the pandemic.

Fig 4a and Fig 4b illustrate the frequency of use of E-commerce platforms by the people. We can observe a noticeable growth in demand of products by these consumers on a greater frequency after the pandemic started. Comparing both figures, we can see that 21% of people who very rarely used E-commerce sites for shopping before lockdown, decreased to a significant 10% after the pandemic. Only 3% of people used E-commerce sites for buying items once in a week before the pandemic, which can be seen to rise up to ~18% after the pandemic. This growth can be traced to buying of home essentials and grocery that people usually bought from stores rather than opting for online means.



Fig 5. Represents the likelihood of people recommending the use of E-commerce on a daily basis.

The chart represented in Fig 5. Shows that a large number of people are likely to recommend the use of E-commerce on a daily basis. However, majority of them do not select the “most likely” option as a number of drawbacks and problems still persist in the E-commerce and online shopping scenario.

#### IV.CONCLUSION

The impacts of pandemic on E-commerce can be observed in negative as well as positive aspects. The E-commerce platforms, along with other businesses, suffered great financial loss during the state of complete lockdown. However, after the restrictions were imposed, the E-commerce industry marked a never-before sales and profit increase. The pandemic situation drastically changed a lot of human habits and trends over a period of time which included the shopping methods of people. The people found it convenient and safer to shop online and therefore chose the E-commerce platforms extensively for fulfilling their needs at the ease and comfort of being at their homes. Even the standalone business and enterprise owners found it feasible to offer their products and services online as it gave them exposure to a wider

range of audience thereby extending their services or products availability to a greater market.

Therefore, we can say that the Covid-19 pandemic helped us to adapt greatly to a digital era. The people all over the world chose digital alternatives to almost each and every thing including shopping. This helped greatly in the flourishing of the E-commerce market and digitization of businesses. E-commerce helped us get through these tough times of social distancing without compromising on our needs and wants.

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