Impact of Covid-19 on Change in Customer Buying Behaviour in the E-Commerce Sector

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Abstract: In the past two years, the COVID-19 has spread all over the world, which has had a huge impact on the world economy. At the same time, consumers’ buying behavior is slowly changing. The study looked into the alterations, which were observed in the buying behaviour of the customers during the times of the COVID-19 pandemic. The chapter introduction introduced the core topic and the research objectives and questions to be answered by the end of the study. The literature review provided the study with input from past studies on such a topic and exemplified the various e-commerce transactions seen. It provides a certain theoretical basis and research ideas for this research. The chapter on methodology illustrated the methods to be incorporated. This article mainly uses ATLAS.ti, and interviewed three respondents, and drew the interview results into a table, while the topic of data analysis, findings and discussions demonstrated the major deductions from the interview conducted. And the conclusion is shown in the article in the form of figure. The last chapter expounds the main points of this paper, puts forward corresponding suggestions for future development, and ends the research of this paper in a constructive way.

Keywords: Covid-19, Customer buying behaviour, E-commerce, Customer intention

1. Introduction

1.1 Background of the study

According to the findings by Sharma & Jhamb (2020), there has been a steady growth in the industrialised sector of the world until the COVID-19 pandemic hit the human population in December 2019. Originating in the marketplace of Wuhan, China, the pandemic had shifted not only the course of mortality but also the economic, political and social aspects of life (Gu et al. 2021). The industries had been severely affected; many of them had shut down their business, while others have shifted from an offline mode of selling goods and services to an online platform. Deepening the knowledge in relation to such a concept is severely necessary for the formulation of needed steps for the expansion of the e-commerce sector in the future.

1.2 Background of industry

There has been a drastic change observed in the business platform in local, national and international sectors. As opined by Veeragandham et al. (2020), due to the fact that the consumers were unable to buy goods from a physical store, the expansion of the industries occurred into the digitalised world.

It can be seen from Figure 1,a drastic increase of about 42% was noticed in the behaviour of the consumers of China towards the e-commerce platforms during the COVID-19 pandemic. Hence, the inculcation of a large monetary segment from the capital had been towards the betterment of the online and e-commerce stores. It has been reported that there was an increase in online shopping consumerism, and the online retail trade had increased from 14% to 17% in 2020.
1.3 Problem statement

The study would address the issues, which have been observed in the industrial paradigm with respect to the provision of e-commerce to the population around the globe. According to the findings by Jo, Shin & Kim (2020), the shift of the commercial sector from an offline to an online mode has drastically increased due to the long periods of lockdown and social distancing. In such a manner, the requirement of the industries to utilise the Internet for the promotion of their respective firms has increased several folds. Hence, the study would look into the effects of the COVID-19 pandemic on alterations observed in the buying behaviour of consumers in the e-commerce sector.

1.4 Purpose of the study

The study would look into the buying behaviour of the customers, especially in the e-commerce sector. This is necessary for the industries to gather acute information from the customers to formulate necessary ways to deal with the native impacts of the pandemic.

1.5 Research questions and research objectives

The research questions to be answered from the dissertation are as follows:

Q1. What are the various impacts of the COVID-19 pandemic in relation to the customer's buying behaviour in the e-commerce sector?
Q2. What have been the different issues faced by the industries due to the COVID-19 pandemic?
Q3. What are the numerous changes observed in the buying behaviour of the customers due to the COVID-19 pandemic?
Q4. What are the strategies applied by the industries to proliferate their business after the COVID-19 pandemic?

The objectives to be accomplished after the completion of the study are as follows:

O1. To analyse the impact of the COVID-19 pandemic in relation to the customer buying behaviour in the e-commerce sector
O2. To inspect the issues faced by the industries due to the COVID-19 pandemic
O3. To examine the changes seen in the buying behaviour of the customers
O4. To provide an accurate strategy to the industries to proliferate their business after the COVID-19 pandemic
1.6 Scope of the study

The study would be able to provide an in-depth analysis of the buying behaviour of the customers, relying on the e-commerce sector in relation to the situation of the COVID-19 pandemic. The introduction would allow the researcher to introduce the topic, while the chapter on literature review would look into the previous data and information gathered by the authors on such a core segment of the topic.

Proceeding with the methodology of the study would aid the researcher to formulate acute ways to form a streamlined structure of the study, whereas the topic of data analysis would include the pathway taken for the interpretation of the data. The chapter of findings and discussions would interpret the obtained data, and the last chapter of the conclusion would expand on the implications which were gathered from the industry.

1.7 Significance of the study

There is a need for the formulation of acute data and statistical information for the industries to expand their business after the COVID-19 pandemic. Not only would this increase the employment sector of the world, but also decrease economic inflation. The research would be able to mitigate such issues by analysing the changes observed in the buying behaviour of the consumers due to the pandemic. The massive shift that had been noticed in the buying behaviour of the consumers also encompassed the speed of decision making by the users and similar reflex characteristics.

1.8 Limitations of the study

One of the major limitations which would be present in the study is due to the fact that there would be no secondary analysis done for gathering the data and information as secondary resources. Hence, looking into the previous study performed by other authors and researchers would not be included in the research.

1.9 Definition of terms

The sector of e-commerce revolves around the techniques of buying and selling goods and services on the online platform. Such deeds are done using electrical tools such as PCs, laptops and tablets, smartphones and other devices on which the Internet can be availed.

Buying behaviour of the consumers focuses on the psychological and analytical approaches taken by the users for obtaining a certain product. The ability to acquire a product after the interpretation and also dispose of it after a designated time span, falls under the nature of "buying behaviour".

2. Literature Review

2.1 Preamble

The chapter literature review will look into the theories and models which can be incorporated into the study for understanding the alterations in the buying behaviour of the consumers amidst the COVID-19 pandemic. Certain previous works of literature which have expanded on such a topic would also be integrated into the research for inculcating in-depth literary data. A research framework would be illustrated at the end for forming a streamlined nature of the study.

2.2 Research paradigm

As opined by Huseynov & Özkan Yıldırım (2019), four segments are involved in e-commerce marketing. These are "business-to-business", "business-to-consumer", "consumer-to-consumer", and "consumer-to-business". All such relations involve the trading of the products, along with the establishment of efficient channels for distribution. The "business-to-business" or B2B transaction allows the direct selling of goods and services between two or more businesses.

The "business-to-consumer" or B2C relationship allows businesses to trade with customers. The theme of "consumer-to-consumer" or C2C allows the consumers to sell and buy goods between themselves through the utilisation of third party applications such as eBay (Wei et al. 2018). Lastly, the
concept of a "consumer-to-business" or B2C relationship revolves around selling items or products from individuals to varied businesses or industries.

2.3 Theories and models related to the study

There are several theories and models, which align with the system of e-commerce (Abdelrhim & Elsayed, 2020). Most of them revolve around the concept of the correct utilisation of finance, the buying behaviour of the individuals and the nature of selling by the industries. One of the major theories is the transaction cost theory.

It can be seen from Figure 2, according to the findings by Qi et al. (2020), in such a theory, the vital elements essential for the regulation of the system of e-commerce are uncertainties related to the product and behaviour of the citizens. In such a manner, the behaviour of the population is altered due to the specificity of the involved assets.

![Figure 2: The different elements of the transaction cost theory](Source: Qi et al. 2020)

On the other hand, the strategic networking theory illustrates the collaboration of the various businesses for the expansion of the same in varied directions. Not only can such a method increase the customer base for both firms, but it also allows the financial restrictions to get mitigated (Obeng, 2018). Even though the shared profits get divided amongst the involved companies, the generated profit remains greater.

2.4 Relevant past to current studies

2.4.1 Definition

According to the findings by Štefko et al. (2019), the core of the theme of e-commerce revolves around the usage of electronics for buying and selling goods and products. It has been noticed that such a form of trading is beneficial as it cuts down the time required to search through the items to localise the ones required. Cost reduction is seen due to the mitigation of travelling costs and the number of middlemen decreasing.

2.4.2 Conceptualisation

The model of business which involves the companies and the sellers trading within the Internet, with the association of buyers and sellers, is the main concept of e-commerce. Financial trading might also involve the buying and selling movie tickets, investing in stock and banking through the respective online services (Maxwell & Khan, 2018).

2.4.3 Past studies

A drastic change is also seen in the number of products and advertisement costs, which is useful for the seller (Gao et al. 2020). On the other hand, the issues revolving around the demands for the items
can also be thoroughly decreased if the seller responds faster to such shortcomings.

### 2.4.4 Overview

Hence, the main aim of the concept of e-commerce and the buying behaviour of the buyers is in relation to the supply and demand relationship formed between both (Beckers et al. 2021). The involvement of the psychological approach to align with the theme of trading falls to be a major element that allows the sellers to predict the kinds of items to be bought by an individual or a community (Bhatti et al. 2020). However, the COVID-19 pandemic has altered the way of trading and allowed the expansion of the e-commerce system in digitalisation.

### 2.5 Research framework

![Research framework for the study](Source: Developed by the researcher)

**Figure 3: Research framework for the study**

The research framework of this paper is shown in Figure 3, using the transaction cost theory and the strategic networking theory to study the impact of COVID-19 on change in customer buying behavior in the e-commerce sector.

### 2.6 Chapter summary

Hence, the chapter literature review revolved around the previous literature found with respect to the core topic. The research paradigm explained the numerous findings along with the core topic from the experiences of researchers, whereas the theories and models illustrated the different inputs in such a respect. The past studies were jotted down as acutely as possible, with the illustration of the gist of the chapter through the research framework.

### 3. Methodology

#### 3.1 Preamble

The chapter on methodology revolves around the main approaches taken by the researcher for the formulation of the study in a defined manner to reach its aims and objectives of such. The research
design illustrates the topic, whereas the subtopic of participants and setting would jot down the particular respondents approached by the researcher for gathering the required data. The technique of data collection would portray the method taken for obtaining the required data for the study, whereas the data analysis would involve the methods taken for inspecting the gathered data. Ethical consideration takes into account the varied rules and regulations which were maintained while the study was being conducted.

3.2 Research design

The research design, which is implemented in the study, is a descriptive research design. The usage of such a method of design is necessary for aligning the themes and concepts of the study with its objectives of such (Dougherty, Slevc & Grand, 2019). Gathering the required data from a pool of information to specifically examine the phenomenon, situation, or the involved population is a vital task that can be obtained from following such a type of research design.

3.3 Participant and setting

There were 3 participants who were taken for conducting the interview by the researcher. The interview transcript was laid down, and the interviewee was allowed to answer the questions along with their own opinions. In such a manner, the exact unbiased data related to their past experiences were jotted down.

3.4 Data collection technique

The method of data collection would involve the incorporation of information from the conduction of the interview among the 3 participants. Related data regarding the core topic would be gathered that way, without the inoculation of any irrelevant and vague data. The primary qualitative method was utilised for gathering unbiased data, which would be further proceeded with for regulating the study.

3.5 Data analysis

As opined by Polanin & Terzian (2019), the method of data analysis is needed for interpreting the gathered data by the researcher. It involves the various processes and steps which are necessary for screening the data and organising it to achieve the aims and objectives of the study.

3.5.1 Data organisation

The organisation of the data was done by running the gathered data through Atlast.ti, which arranged the data in the requisite format.

3.5.2 Analysing the data

Analysis of the data was performed by running the input information by the software of ATLAS.ti, which provided the researcher with acute visual codes and diagrams.

3.5.3 Coding process

The process of data coding involved the researcher assigning phrases or "codes" to link the data in a specific pattern. The codes were thus run with the aid of the software, and the obtained output was jotted down in the report.

3.5.4 Theme constructing

The construction of the theme was based on the formation of related concepts on the basis of the information gathered from the interviewees. The codes involved in the coding process in ATLAS.ti aided the researcher to form conceptualised themes for regulating the information in the study.

3.5.5 Translation of data

The translation of data using ATLAS.ti was done for obtaining the information in a sophisticated manner. The creativity of the researcher could be seen by the visualised images portrayed from the output data while maintaining the authenticity of the information. Such a systematic manner aided the study to proceed in a streamlined way.
3.6 Ethical considerations

There is the maintenance of a detailed reference list at the end of the study for paying heed to the authors and co-authors from whom the data and information have been gathered. On the other hand, anonymity is to be maintained while collecting data from the interview, especially regarding the ones who do not want their personal information to be revealed amongst public sources. Plagiarism is to be absolutely avoided in the study, as the concept of stealing works and ideas from other researchers is a grievous crime. The copyright and similar legal issues could be, hence avoided by the researcher.

3.7 Chapter summary

Therefore, the chapter on methodology encompassed the different approaches and methods, which would be applied by the researcher for proceeding with the study. The precipitants and the settings from whom the data were incorporated would thus be run through the method of qualitative analysis of the data. The subtopic of ethical consideration contained the various methods, which were applied for preserving the originality of the data and for paying respect to the researchers from whom secondary information was collected.

4. Data Analysis

4.1 Preamble

The interview was conducted amongst the Chinese consumers of the e-commerce sector, during the ongoing COVID-19 pandemic.

The gathered data from the interviewees were run through the software of ATLAS.ti, which provided the researcher with accurate data visualisation and the creation of network diagrams (Smit & Scherman, 2021). The responses were inputted into the software, and qualitative coding was performed. The following results can be obtained.

4.2 Findings.

Respondents believe that consumers' purchasing behavior has changed, which is related to the behavioral nature of e-commerce platforms. Respondents observed a change in the behavior of purchasing goods and services on the online paradigm during the COVID-19 pandemic. During the pandemic, consumer buying behavior has changed in the nature of e-commerce. Affected by the epidemic, customers' purchasing behavior has undergone some changes. Customers can observe some changes in purchasing behavior related to the consumer base during the COVID-19 pandemic. It was observed that the purchasing behavior of customers did not change based on the responses of the particular respondents. Respondents indicated that customer buying behavior has changed during the COVID-19 pandemic. Respondent responses related to changes in the financial structure of interviews during the COVID-19 pandemic. Respondents do not see changes in financial structure during the COVID-19 pandemic. Respondents agree with the idea that industry deals with the nature and structure of work in an efficient manner. Respondents indicated that the industry has moved away from skilled workers, which has helped them maintain the company's profit margins and thus handle the financial structure. Respondents indicated that many industries did not effectively deal with the financial structures of the companies involved, causing them to collapse on a large scale. The nature of transactions will normalize once restrictions related to the COVID-19 pandemic lift. Even if the norm disappears, the nature of buying and selling will not normalize as customers will get used to online transactions. The nature of buying will not normalize after COVID-19 restrictions are lifted. Respondents who prefer not to buy products online due to the inability to see the product in person, prefer the online transaction method as it saves time, cost and effort. Online transactions and e-commerce methods are more popular because you can read product reviews and the prices are cheaper. Get discounts and cash back.

4.3 Discussion.

It can be seen from Figure 4 that coronavirus disease has undergone great changes in the field of e-commerce in 2019, which has also had a certain impact on customers' purchase behavior. The investment of e-commerce Department has increased, online incentives have been increased and the
scale has been expanded. The purchasing behavior of respondents has shifted from online to offline, but some respondents are keen on offline transactions. Although they use the form of e-commerce to understand products, they do not turn their attention to online transactions.

**Figure 4: Connection of codes**

### 5. Conclusion

#### 5.1 Preamble

The chapter conclusion would be used for coming to a constructive deduction from the whole research. The subtopic of the conclusion would contain all the necessary information which the researcher would utilise to reach the aims and objectives of the study. On the other hand, the implications would contain the different dilemmas and contradictions which could be present in the study.

#### 5.2 Conclusion

E-commerce has seen a drastic change in recent times due to the COVID-19 pandemic. This has been in relation to the buying behaviour of the customers, the financial and the modes of trading. It has been noted that the majority of the respondents believed that there had been a drastic change in the buying and selling paradigm of the products and goods during these restricted times, and most of the industries had changed their method of customer attraction. However, a particular percentage of respondents believed that some of the firms had not handled these issues quite actually, and hence, these have been closed down due to bankruptcy.

#### 5.3 Implications to knowledge and industry

The methods, which have been implemented by the various industries for the promotion of the techniques to deal with the COVID-19 pandemic, have altered from one firm to another. However, the basic approach has been the same, which is in relation to the growth of the industries even during times of financial crisis. According to Ketchen & Craighead (2020), this has been possible due to the mitigation of the risks associated with the previous analysis of the statistical data. In such a manner, the strategic management of the approaches utilised in the firms could be altered (Guo et al. 2020).

On the other hand, as commented by Bentley, Kehoe & Chung (2021), the reduction in the number of employees has aided the firm to cut down on the financial drainage of the capital. Hence, understanding the behavioural approach of the customers in e-commerce is necessary to be thoroughly analysed by the firms to the formation of acute methods to regulate their supply and demands management.

#### 5.4 Recommendation and future research

It can be recommended that for the retention of effective competitive advantage the organisations
that are experiencing the negative effects due to the change of customer buying behaviour can use the effective pricing strategy. Therefore, in the context of future research it can be suggested that to focus over the strategies used by the business firms for the effective retention of competitive advantage.

5.5 Chapter summary

The respective chapter has showed the overall conclusion of the study and summarised the results that are evaluated from the research. Besides, it has also provided recommendations that can be implemented by the firms for the retention of their competitive advantage and it has also showed a light in the path towards its future research.

References
